



Procurement of
Design, Supply, Installation, Commissioning, Operations and Maintenance
of Intelligent Transportation Systems
in Chennai Metropolitan Area

(8th March 2022)

RESPONSE TO PRE-BID QUERIES

Employer: Chennai Smart City Limited

Country: India

Project: Installation of Chennai Metropolitan Area Intelligent Transport Systems

JICA Loan No.: ID-P270

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1	Part-1	Section II Bid Data Sheet	BDS-2		General Query	We understand that the bidder needs to quote the price excluding taxes and evaluation shall also be done excluding GST only. Please confirm.	The rates and prices quoted in the bid shall include any duties/taxes/levies applicable/payable by Contractor if any. However GST, Customs Duty or levies for works shall be reimbursed as per actuals. The bid price quoted shall not include GST, Customs duty or levies for work.
2	Part-1	Section II Bid Data Sheet	BDS-3	ITB 21.1	ITB21.1 The amount and currency of the Bid Security shall be INR 10 Crores (Equivalent USD 1.35 Million)	Request you to remove the EMD from the bidding as per below clause ITB21.1 Seperate Bid security should be signed instead of EMD as per Govt schedule F.9/4/2020 PPD by Government of India Ministry of Finance	RFP condition prevails.
3	Part-1	Section II Bid Data Sheet	BDS-3	ITB 20.3 (b)	Preparation of Bids:- The fixed portion of the bid shall be adjusted by: Labour cost, Material cost, Exchange rate fluctuation, Equipement cost, CPI	Need clarity on what is the fixed portion and when the adjustment will be done i.e. at what rate of fluctuation or changes.	Fixed portion price is the total bid price submitted by bidder in the price bid. The fixed portion of the Bid Price shall be adjusted when the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity. Refer clause 20.3 of ITB-16 in RFP Part-1. The rate of fluctuations or changes will be done as per the details filled by bidder in Table A & Table B of Bidding Forms. Refer BF- 11 and BF-12 of Bidding Forms in RFP Part-1.
4	Part-1	Section II Bid Data Sheet	BDS-3	ITB Section-ii Page no- BDS-3 ITB 21.1	The amount and currency of the Bid Security shall be INR 10 Crores (equivalent - USD 1.35 million).	USD rates duly fluctuated,Hence Bid security of 10 cr May not be equivalent to USD 1.35 million. Kindly clarify.	Refer to Addendum-1, S.No: 05 dated 08-03-2022
5	Part-1	Section II Bid Data Sheet	BDS-3	II BDS-3-4.1	The amount and currency of the Bid Security shall be INR 10 Crores (equivalent -USD 1.35 million).	May be waived for central Public sector undertakings or corporate Guarantee may be submitted in lieu of Bid security of Rs. 10 Crores Remark : Request exemption for CPSUs as they are Govt. of India Undertakings	RFP condition prevails.
6	Part-1	Section II Bid Data Sheet	BDS-3	ITB 21.1 The amount and currency of the Bid Security shall be INR 10 Crores (equivalent - USD 1.35 million).	May be waived for central Public sector undertakings or corporate Guarantee may be submitted in lieu of Bid security of Rs. 10 Crores	Request exemption for CPSUs as they are Govt. of India Undertakings	RFP condition prevails.
7	Part-1	Section II Bid Data Sheet	BDS-4	Part 1- ITB 37.1 -Page BDS-4	The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid Prices expressed in various currencies into a single currency is: United States Dollar (USD) . The source of exchange rate shall be: The Reserve Bank of India . The date for the exchange rate shall be: Twenty-eight (28) days before the date for Technical Bid opening, as specified in ITB 27.1.	Our Understanding is that , excahnage rate mentioned in this clause is only for the evaluation of initial Bid . And during the period of execution if as per the requirement any need arises to convert intially bided item in Foreign currency into local currency then the prevailing Exchange rate at that time would be applicable. Please confirm whether our understanding s correct	The provisions of this Clause are for Bid evaluation purposes.
8	Part-1	Section IV. Bidding Forms	BF-1	RFP Part 1, Pg 65,Pt-f	Under letter of Technical Bid: We are not participating, as a Bidder or as a Subcontractor/ manufacturers, in more than one Bid in this bidding process in accordance with ITB 4.2 (c), other than alternative Bids submitted in accordance with ITB 13	We understand that Subcontractor can participate in Multiple Bids as subcontractor as per clause ITB 6, pt -c. Kindly confirm if our understanding is correct.	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
9	Part-1	Section IV. Bidding Forms	BF-10	Schedule No. 2: Supply of Plant/Equipment and spare parts including transportation.	210 Depot Management System (DMS) J3 Attendance Management System No 1	As per our understanding, authority have HRMS and attendance module (as mentioned in "Figure 2-3: Typical Integration of Depot Management System with other systems") bidder just need to integrate Mobile Application with HRMS portal and such operations can be done by crew in HRMS native application. Bidder just need to quote Integration services related over here. <u>Please confirm.</u>	There is no existing leave and attendance system. Leave and attendance are part of this tender document.
10	Part-1	Section IV. Bidding Forms	BF-10	Part 1, Section IV. Bidding Forms, BF-9 to BF-13	Schedule No. 1: Design Schedule No. 2: Supply of Plant/Equipment and spare parts including transportation Schedule No. 3: On site Installation, Training and Testing Schedule No. 4 – Comprehensive Operation and Maintenance Schedule No. 5 – Operation and Maintenance Manpower	Please clarify about the unit and quantity to be specified in all the mentioned schedules as line items mentioned in these schedules are subheadings which will not have definite quantity & unit. So, request you to kindly confirm whether we can mention quantity & unit as "1 Lot" (or) "1 year" as applicable.	Refer to Price schedule given in RFP Part-1 (from BF-7 to BF-43), any additional item proposed by the bidder to achieve the functional requirement may be added as provided in the BOQ
11	Part-1	Section IV. Bidding Forms	BF-10	Breakdown of Price Schedule No.2	201 Chennai Traffic Information & Management System Command Control Centre (TIMS-CCC) iii Furniture - A6 to A14 iv Building Utilities - A15 to A25 211 CBS Command Control Centre iii Furniture - K4 iv Building Utilities - K5 to K12	We understand that the bidder has to quote these line items strictly for the CCC size mentioned against line items of Interior works (A15 & K12) and any change in size of Interior works after award of contract will impact the prices quoted against these line items (A6 to A25 & K4 to K12) and any variation shall be paid based on the rates quoted in commercial bid. Please confirm.	Refer to Addendum-1, S.No: 103 dated 08-03-2022. Bidder to quote based on the layout provided.
12	Part-1	Section IV. Bidding Forms	BF-10	Breakdown of Price Schedule No.2	201 Chennai Traffic Information & Management System Command Control Centre (TIMS-CCC) iii Furniture - A6 to A14 - 1 Lot iv Building Utilities - A17 to A21, A23 to A25 - 1 lot 211 CBS Command Control Centre iii Furniture - K4 - 1 Lot iv Building Utilities - K5 to K8, K10 to K12 - 1 lot	To have a common understanding and assumption for all the bidders, we request you to kindly define specific quantities for the mentioned line items instead of "1 Lot".	Refer to Addendum-1, S.No: 103 dated 08-03-2022. Bidder to quote based on the layout provided.
13	Part-1	Section IV. Bidding Forms	BF-12	Part 1, Section IV. Bidding Forms, BF-12	Schedule No. 4 – Comprehensive Operation and Maintenance Note: Bidder shall Quote the Comprehensive operation and Maintenance cost including power supply, Communication charges, Equipment replacement, Maintenance vehicles, spare parts etc. excluding Manpower and related overhead. as defined in the Employer's requirement of this Bid Document.	As per TRAI, Bandwidth cannot be resold and a Tripartite agreement has to be signed by Employer, Contractor & ISP. So we request you to kindly provide us the draft Tripartite agreement. Also kindly provide a separate price schedule for bandwidth during O&M Period such that payment shall be made directly by the employer to the ISP.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
14	Part-1	Section IV. Bidding Forms	BF-14	Schedule No. 6 - Summary of Provisional Sums	Summary of provisional sum- price schedule:- Provisional Sum	Request clarity on provsional sum amounting to 4038000 USD whether this is separate amount considered for contingency, cost escalation etc.	It is combined amount of Provisional sum only be used as a part of Contingency, in whole or in part, in accordance with the Engineer's instructions, in accordance with Sub-Clause 13.5 of the General Conditions and Specific Provisional Sum be expended only for the provisional sum for the cost of the DB, in accordance with Sub-Clause 13.5 of the General Conditions. Refer Schedule No.6 - Summary of Provisional Sums.
15	Part-1	Section IV Bidding Forms	BF-16	Break down of price schedule no. 2	Control Center Room-TIMS -(CTP)	As the RFP is seeking the Command Control Centre software as part of (TIMS-ICCC) request to include the ICCC platform/ Software line item in the bill of material /Price Schedule.	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2
16	Part-1	Section IV. Bidding Forms	BF-16	Part 1, Section-1V Bidding Forms, Breakdown of Price Schedule No.2, BF-16 to 32	Breakdown of Price Schedule No.2	1. We understand that bidder has to quote strictly for the quantities specified in this schedule. Please confirm. 2. Also please confirm that any addition in quantities after award of contract shall be paid based on unit rates quoted in the price bid.	1. Bidder can quote additional items/ quantities based on the bidder's design. 2. RFP conditions prevails.
17	Part-1	Section IV. Bidding Forms	BF-16	Breakdown of Price Schedule No.2	A15 Interior works including fall ceiling, utility duct, Accessories as per requirement (Power Switch Boards, PVC Conduits, Power and Network cables, etc) (Approx. 7500 Sq. Ft) - 1 Lot K12 Interior works including fall ceiling, utility duct, Accessories as per requirement (Power Switch Boards, PVC Conduits, Power and Network cables, etc) (Approx. 2500 Sq.Ft) - 1 Lot	We understand that the bidder has to quote interior works strictly for the sq.ft mentioned agianst line items and any change in size of Interior works after award of contract shall be paid based on the rates quoted in commercial bid. Please confirm.	Refer to Addendum-1, S.No: 103 dated 08-03-2022. Bidder to quote based on the layout provided.
18	Part-1	Section IV. Bidding Forms	BF-2	RFP Volume 1, Letter of Technical Bid, Page number: 70	In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder	Kindly clarify, do you mean to form a separate JV company or can submit a bid as Consortium partners and to execute the Consortium agreement as per the RFP format.	Refer to Addendum-1, S.No: 03 dated 08-03-2022
19	Part-1	Section IV. Bidding Forms	BF-23	Break Down of Price Schedule No. 2	Speed Limit Violation Detection System (SLVD) UPS for 3 hrs Backup	For a UPS to give 3 hrs backup, more no. of batteries will be required which will increase the size of Junction box & increasing the commercial value of the project. Would request you to reconsider and rationalize this requirement. For other similar projects the requirements is generally for 30 mins back up	RFP condition prevails.
20	Part-1	Section IV. Bidding Forms	BF-24	Part 1,Page 92, Section IV, Break Down of Price Schedule No. 2	F1 RLVD System (Application Software) Lot 1, F2 ANPR Camera (One per lane) Nos 439 F3 IR Illuminator for ANPR Nos 439 F4 RLVD Camera Nos 165 F5 Local Software for ANPR Nos 439 F6 Local Software for RLVD Nos 165 F7 LPU for RLVD & ANPR Nos 165	As the deployment of total number of Cameras are less as per the RFP, the Traffic violation under law and order may not be captured to the optimum level of accuracy. Hence, we request you to kindly relook at the sizing and solution design for this project	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
21	Part-1	Section IV. Bidding Forms	BF-41	Breakdown of Price Schedule No.5	Breakdown of Price Schedule No.5	Request you to remove this minimum Monthly remuneration condition as basis this the project cost itself is exceeding budget. This minimum Remuneration is on the very higher side. This can be managed at a lesser cost. It is suggested that the bidder should be allowed to quote this price as per their understanding. In general such kind of projects do not define the minimum remuneration as part of the RFP.	RFP condition prevails.
22	Part-1	Section IV. Bidding Forms	BF-41	Breakdown of Price Schedule No.5	Breakdown of Price Schedule No.5	Since minimum monthly enumeration for manpower is already given by authority , same should not be considered for commercial evaluation	RFP condition prevails.
23	Part-1	Section IV. Bidding Forms	BF-41	Part 1, Section-1V Bidding Forms, Breakdown of Price Schedule No.5, BF-41	Minimum Monthly Renum Rate (INR)	We understand that monthly remuneration for each of the resources should necessarily be more than the minimum amount defined against each resource. Please confirm whether our understanding is correct.	Yes. Your understanding is correct.
24	Part-1	Section IV. Bidding Forms	BF-42	Breakdown of Price Schedule No.2	A3, B3, C3, D3, E3, F3, G3, H3, I3, J3, K3 Training - 1 Lot	We request you to kindly clarify on the scope of training to be considered. 1. Types of training (Functional/Administrative/etc) 2. Number of mandays or manhours per batch of training 3. Number of batches and number of persons in each batch	Refer to Addendum-1, S.No: 14 dated 08-03-2022
25	Part-1	Section IV. Bidding Forms	BF-44	Part 1, Section IV. Bidding Forms, BF-51	7. Plant and Equipment	We understand that this bidding form of "Plant and Equipment" shall not be applicable as per the clause 1.1.2 Equipment in EQC-6 of Part 1. So please confirm that this schedule is not applicable and need not be submitted.	RFP condition prevails. It is applicable.
26	Part-1	Section IV. Bidding Forms	BF-61	Part 1, Section IV. Bidding Forms, BF-61	Form SOG: Schedule of Guarantee	Please clarify about the details to be filled in this form as we do not find any Guarantee specified in Technical Requirements.	Bidder to fill performance/ specific guarantee description and corresponding value, which are given in technical requirements for each component.
27	Part-1	Section IV. Bidding Forms	BF-65	RFP Part 1, Pg 133, Form SUB	Form SUB --> The following Subcontractors and/or manufacturers are proposed for carrying out the item of the facilities indicated. Bidders are free to propose more than one for each item.	Request to Change - The following Subcontractors and/or manufacturers are proposed for carrying out the item of the facilities indicated. Bidders should propose only one eligible and most suited subcontractor for each item Reason for Change - Inclusion of multiple subcontractors will have impact both on solution and commercial perspective. This will also make confusion during the bid evaluation and finalising rightly fitted implementing party. Hence, keeping interest of this project, this is must that bidder should propose only one eligible subcontractor	RFP condition prevails.
28	Part-1	Section IV. Bidding Forms	BF-69	Part 1, Section IV. Bidding Forms, BF-69	Form ELI - 2: Bidder's Party Information	We understand that the proposed manufacturers/subcontractors meeting clause "2.5 Subcontractors/manufacturers" of Part 1 need not submit this bidding form. Please confirm whether our understanding is correct.	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
29	Part-1	Section IV. Bidding Forms	BF-79	Part 1, Form EXP - 2(a): Specific Experience Page no 147	[The following table shall be filled in for Contracts performed by the Bidder and by each member of a JV.] Role in Contract Prime Contractor Only	As per the eligibility criteria, Authority allowed "Joint Venture (existing or intended)" experience for participating in the Bid. Further, as per the Form EXP-2(a) " Specific Experience, it said [The following table shall be filled in for Contracts performed by the Bidder and by each member of a JV]. However, as per the information requested, it only allows the experience of " Prime Contractor" only, which is restrictive for other bidders to participate through JV. Hence we request authority to amend the same requirement as follow: "Role in Contract: Prime Contractor Only / Consortium / JV"	Prime Contractor here refers to "Single entity or JV member" to whom the Contract is awarded. The Contracts performed by Single entity or Consortium/JV members shall be considered.
30	Part-1	Section IV. Bidding Forms	BF-81	Part 1, Section IV. Bidding Forms, BF-81, Form ACK Acknowledgement of Compliance with Guidelines for Procurement under Japanese ODA Loans	C) I certify that the Bidder will not enter into a subcontract with a firm which has been debarred by the World Bank Group for a period more than one year, unless on the date of the subcontract at least three (3) years have passed since the date of such debarment decision. D) I certify, on behalf of the Bidder and its subcontractors, that if selected to undertake works and services in connection with the Contract, the Bidder and its subcontractors shall carry out such works and services in continuing compliance with the terms and conditions of the Contract. E) I further certify, on behalf of the Bidder and its subcontractors, that if the Bidder and any of its subcontractors is requested, directly or indirectly, to engage in any corrupt or fraudulent practice under any applicable law, such as the payment of a rebate, at any time or any stage of a process of procurement such as negotiations, execution or implementation of contract (including amendment thereof), the Bidder shall report all relevant facts regarding such request to the relevant section in JICA (details of which are specified below) in a timely manner.	We understand that this clause is applicable only to specialist subcontractors proposed by the contractor. Please confirm.	No. Form ACK (Acknowledgement of Compliance with Guidelines for Procurement under Japanese ODA Loans) is applicable to all members of JV/Consortium including sub-contractors.
31	Part-1	Section IV. Bidding Forms	BF-83	Form of Bid Security (Bank Guarantee)	Form of Bid Security (Bank Guarantee)	Kindly provide bank details	RFP condition prevails. Refer to clause 21.2 (a,b & c) of ITB-16 in RFP Part-1.
32	Part-1	Section IV. Bidding Forms	BF-83	Part 1, Section IV. Bidding Forms, BF-83 to BF-84	Form of Bid Security (Bank Guarantee) Form of Bid Security (Bid Bond)	We understand that bidder has to submit either Bank Guarantee as per Form of Bid Security (Bank Guarantee) OR Bid Bond as per Form of Bid Security (Bid Bond) from Nationalised/Scheduled bank. Kindly confirm whether our understanding is correct.	Yes. Your understanding is correct.
33	Part-1	Section IV. Bidding Forms	BF-85	Form of Bid Security (Bid Bond)	Form of Bid Security (Bid Bond)	Kindly confirm whether this bond is required as a part of EMD from Bank along with Form of Bid Security (Bank Guarantee))	Bidder to submit Form of Bid Security (Bank Guarantee) or Form of Bid Security (Bid Bond).

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
34	Part-1	Section IV. Bidding Forms	BF-87	Form of Power of Attorney for Lead Member of JV	Notes: • The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public. • Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.	Kindly amend the clause as below Notes: • The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common company seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public. • Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.	Refer to Addendum-1, S.No: 18 dated 08-03-2022
35	Part-1	Section IV. Bidding Forms	BF-87	Form of Power of Attorney for Lead Member of JV	The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarized by a notary public.	It is requested to kindly consider Company Rubber stamp instead of common seal. Affixing Common Seal for tendering purposes requires the approval from Board of Directors, which includes senior IAS officials from Delhi Government and apex officials from IDFC Foundation. It was consequently not practicable to arrange a Board Meeting and taking board approval for common seal in short notice We therefore, request waiver on affixing Company Rubber Stamp instead of common seal.	Refer to Addendum-1, S.No: 18 dated 08-03-2022
36	Part-1	Section IV. Bidding Forms	BF-88	Form of Power of Attorney for Authorised Representative"Authorised Representative), to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposal for Installation of Chennai Metropolitan Area Intelligent Transport Systems for [name of assignment],.....	We request you to kindly define the "Name of assignment" as mentioned here.	Refer to Addendum-1, S.No: 19 dated 08-03-2022
37	Part-1	Section IV. Bidding Forms	BF-90	Part 1 Section IV. Bidding Forms BF-93	Form of Joint Bidding Agreement for JV (To be executed on Stamp paper of appropriate value)	We understand that bidder can use INR 100/- non judicial stamp paper wherever applicable for the relevant forms. Please confirm whether our understanding is correct.	Yes. Your understanding is correct.
38	Part-1	Section IV. Bidding Forms	BF-90	Form of Joint Bidding Agreement for JV	Form of Joint Bidding Agreement for JV (To be executed on Stamp paper of appropriate value)	We understand that JV consist of one lead member and two JV members, thereby totalling to 3 members in a JV. Please confirm whether our understanding is correct.	Refer to Addendum-1, S.No: 3 dated 08-03-2022
39	Part-1	Section IV. Bidding Forms	BF-91	Form of Joint Bidding Agreement for JV	4. Role of the Parties The Parties hereby undertake to perform the roles and responsibilities as described below: (a) Party of the First Part shall be the Lead member of the Joint Venture and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Joint Venture during the Bidding Process and till the completion of Project as per Contract Agreement; (b) Party of the Second Part shall be {the ____ Member of the Joint Venture;} (c) Party of the Third Part shall be the ____ Member of the Joint Venture; and}	We understand 3 parties are allowed for consortium, please confirm	Refer to Addendum-1, S.No: 03 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
40	Part-1	Section IV. Bidding Forms	BF-91	Part 1 Bidding Procedures, Section IV. Bidding Forms, 2.4 Experience, BF-91	2. Joint Venture 2. 1 The Parties do hereby irrevocably constitute a JV/ (the "JV/ Consortium") for the purposes of jointly participating in the Bidding Process for the Project.	We understand consortium is allowed for this case, please confirm	Refer to Addendum-1, S.No: 03 dated 08-03-2022
41	Part-1	Section IV. Bidding Forms	BF-91	7. Representation of the Parties, Page-159	The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the JV Member is annexed to this Agreement, and will not, to the best of its knowledge	We already prepared General Board Resolution where we have taken blanket approval to submit Tender/ Bid/Response without prior approval of the Board. It is requested to kindly consider the General Board Resolution instead of project specific Board Resolution.	RFP condition prevails.
42	Part-1	Section IV. Bidding Forms	BF-91	RFP Part 1, Pg 159, pt-5	Joint and Several Liability The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP and the Contract Agreement, till such time as the completion of the Project is achieved under and in accordance with the Contract Agreement.	We request CSCL to limit liability of Joint Venture / Consortium upto the scope of the individual member while Lead bidder shall be liable for the entire project. In several recently floated RFPs, this clause is changed and limited to scope of consortium / Joint venture members (except Lead). Request to changes (Suggested clause) - We request to change as " Lead member shall be jointly & severally liable for the execution of the contract and other members will be severally liable in accordance with the contract terms" This will help in getting more bids and hence more competitive scenario will be there .	RFP condition prevails.
43	Part-1	Section IV. Bidding Forms	BF-93	Form of Joint Bidding Agreement for JV	Notes: 1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure. if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public. 2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member.	Kindly amend the clause as below Notes: 1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure. if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common company seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public. 2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member.	Refer to Addendum-1, S.No: 20 dated 08-03-2022
44	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	ATCS Controllers Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 7 years.	As it is one of the new technology to the field, Kindly remove this clause for healthy competition.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
45	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	ATCS Platform Manufacturer shall have implemented at least 2 similar projects in last 7years.	To encourage healthy competition, Kindly amend the condition as follows: ATCS Platform Manufacturer shall have implemented/ Ongoing at least 2 similar projects in last 7years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
46	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	Variable Message Signs Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	To encourage healthy competition, Kindly amend the condition as follows: Variable Message Signs Manufacturer shall have supplied/deployed at least 50 units of any size in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
47	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	Passenger Information System Manufacturer shall have supplied/deployed at least 100 similar outdoor units in last 7 years.	To encourage healthy competition, Kindly amend the condition as follows: Passenger Information System Manufacturer shall have supplied/ deployed/Ongoing at least 100 similar indoor & 30 Outdoor units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
48	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	AVL Devices Manufacturer shall have supplied/deployed at least 1500 similar units in last 7 years.	To encourage healthy competition, Kindly amend the condition as follows: Passenger Information System Manufacturer shall have supplied/ deployed/Ongoing at least 100 similar indoor & 30 Outdoor units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
49	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	2 ATCS Controllers Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 7 years.	As the number of junction is only 165, asked criteria is very high & favouring few OEMs.This criteria will limit make in India OEMs and Indian products which are designed for unique Indian conditions and have been successfully deployed. We request to change this criteria as below Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 10 years or Indian Manufacturer shall have at supplied/deployed the same for at least 165 intersections in last 10 years	Refer to Addendum-1, S.No: 13 dated 08-03-2022
50	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	7 Automatic Traffic Counter & Classifier Manufacturer shall have supplied/deployed at least 250 similar units in last 7 years.	Indian OEMs have successfully deployed & delivered ATCC across various parts of country & work for traffic conditions which are unique for India. However asked criteria will limit participation from Indian OEMs as they would have less quantity deployment. We request fair criteria for made in India solutions & change criteria as below: 7 Automatic Traffic Counter & Classifier/Vehicle Detector Manufacturer shall have supplied/deployed at least 250 similar units in last 10 years. Or Indian OEM shall have supplied/deployed at least 100 similar units in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
51	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Variable Message Signs Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	Variable Message Signs Manufacturer shall have supplied/deployed at least 50 units of any size in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
52	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Passenger Information System Manufacturer shall have supplied/deployed at least 100 similar outdoor units in last 7 years.	Passenger Information System Manufacturer shall have supplied/deployed/Ongoing at least 100 similar indoor & 30 Outdoor units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
53	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	AVL Devices Manufacturer shall have supplied/deployed at least 1500 similar units in last 7 years.	AVL Devices Manufacturer shall have supplied/deployed at least 150 similar units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
54	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	The similarity of Similar project or same shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Employer's Requirements. Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.	We would like to draw your attention that, Unlike west count part, India has adopted the latest technologies in the field of ATCS, Mobility etc in the past 5 years with the onset of the Smart City Mission. Hence, to encourage the participation of more Indian companies under Made in India Program, we request to remove the physical size from the OEM/Subcontractor criteria.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
55	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	The similarity of Similar project or same shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Employer's Requirements. Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.	We request to amend the experience as follow: "Description of Item - ATCS Platform Minimum Criteria to be met - Manufacturer shall have implemented at least <u>1 projects</u> in last 7 years."	Refer to Addendum-1, S.No: 12 &13 dated 08-03-2022
56	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least <u>1000 intersections in last 7 years.</u>	We would like to bring to your notice that the current RFP, states OEM selection criteria for certain products. These OEM qualification criteria and technical specifications are restricting participation of Indian OEMs. We suggest to reassess OEM criteria as it is actually increasing the procurement value at the cost of deviating MoHUA guidelines. The change in OEM criteria is not going to affect the product selection. Which will reduce the overall participation and competition for the scope. In addition, this clause(s) will contradict Government of India guidelines to promote "Make in India" initiative. Hence we request you to amend this clause as, "ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least <u>1000 25</u> intersections in last 7 years."	Refer to Addendum-1, S.No: 13 dated 08-03-2022
57	Part-1	Section III Evaluation and Qualification Criteria	BF-TOF1	2.5 Subcontractors/ manufacturers	AVL Devices: Manufacturer shall have supplied/deployed at least 1500 similar units in last 7 years.	We would like to bring to your notice that the current RFP, states OEM selection criteria for certain products. These OEM qualification criteria and technical specifications are restricting participation of Indian OEMs. We suggest to reassess OEM criteria as it is actually increasing the procurement value at the cost of deviating MoHUA guidelines. The change in OEM criteria is not going to affect the product selection. Which will reduce the overall participation and competition for the scope. In addition, this clause(s) will contradict Government of India guidelines to promote "Make in India" initiative. <u>We request authority to delete this clause.</u>	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
58	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	13. Operation and Maintenance of TIMS Sub-Contractor shall have experience at least 2 similar projects in last 7 years. 14. Operation and Maintenance of CBS Sub-Contractor shall have experience at least 2 similar projects in last 7 years.	Request to amend this clause 13. Operation and Maintenance of TIMS Sub-Contractor/ Manufacturer shall have experience at least 2 similar projects in last 7 years. 14. Operation and Maintenance of CBS Sub-Contractor/ Manufacturer shall have experience at least 2 similar projects in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
59	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	TIMS Platform: Manufacturer shall have implemented the same in at least 2 similar projects in last 7 years.	Since we have to qualify the OEM criteria Help us to understand the definition of the similar projects.	Refer to Addendum-1, S.No: 12 & 13 dated 08-03-2022 The similarity of Similar project or same shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Employer's Requirements. Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.
60	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Operation and Maintenance of TIMS :Sub-Contractor shall have experience at least 2 similar projects in last 7 years.	1. The Operation and Maintenance of TIMS is a broad term covering multiple items in this RFP. Kindly confirm the similar project criteria is applicable to all the sub systems qualified under TIMS. 2. In general O&M will be covered under MSI Scope of work. Kindly help us to understand if OEM can submit letter from MSI for O&M Experience.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
61	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Operation and Maintenance of CBS : Sub-Contractor shall have experience at least 2 similar projects in last 7 years.	1. The Operation and Maintenance of CBS is a broad term covering multiple items in this RFP. Kindly confirm the similar project criteria is applicable to all the sub systems qualified under CBS. 2. In general O&M will be covered under MSI Scope of work. Kindly help us to understand if OEM can submit letter from MSI for O&M Experience.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
62	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	13 Operation and Maintenance of TIMS 14 Operation and Maintenance of CBS	we understand that If subcontractor is not chosen by the contractor for TIMS & CBS for this tender, then these 2 criteria shall not be applicable and no documents are not required to be submitted against this criteria. Please confirm whether our understanding is correct.	RFP condition prevails.
63	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	2.5 Subcontractors/manufacturers 4. Variable Message Signs Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	Kindly make the following amendments: (1) in last 10 years (2) include those who have received PO and in implementation phase	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
64	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	5. Red Light Violation System: Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years.	<p>Since the system will be used for Intelligent Traffic Management System and in maintaining the law & order situation and these ITMS components such as TIDS, RLVD, SLVD, VDC/ATCC are also playing very critical role in the RFP. OEM experience with considerable lanes in the project should be incorporated for quality OEM participation.</p> <p>Hence, we request you to kindly amend the OEM criteria for ANPR, RLVD, SLVD & E-challan in the RFP.</p> <p>Some OEM criteria are mentioned below for your kind perusal.</p> <p>a. ITMS solution OEM should have completed minimum three projects each of 200 lanes/Licenses having ANPR with RLVD, SVD, No Helmet & Triple Riding use cases in city-wide implementation in Smart City/ ITMS projects.</p> <p>b. With reference to latest G.S.R and amendment in section 167 of Central Motor Vehicle Rule, 1989, the electronic enforcement device used for issuance of a challan shall have an approval certificate from nominated government agencies. Proposed Speed measurement system should have an accuracy of more than 220 Kmph +/- 2%, certified from an agency notified by Government under Rule 126 of Central Motor Vehicle Rules, 1989.</p> <p>c. OEM of ITMS & E-challan system should have successful integration of e-Challan system with Vaahan database of NIC to fulfill "One Nation, One Challan" requirement, in more than 5 Smart City/ ITMS projects in India. The OEM should provide an undertaking/ documentary evidence for the same, along with the bid.</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
65	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	7. Automatic Traffic Counter & Classifier: Manufacturer shall have supplied/deployed at least 250 similar units in last 7 years.	<p>Since the system will be used for Intelligent traffic management system and to increase the traffic signal efficiency. ATCC/Vehicle detection system plays an important role in the RFP to achieve better ride experience. VDC/ATCC OEM experience with considerable projects/numbers should be incorporated to ensure the quality OEM participation.</p> <p>Hence, We request you to kindly incorporate the below OEM criteria for Vehicle detectors/ATCC component.</p> <p>The OEM of ITMS system should have supplied min. 500 nos. of Vehicle Detection system in Smart Cities/ ITMS projects in India.</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
66	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have implemented at least 2 similar projects in last 7 years.	In order to maximise Indian OEM participation Kindly revise criteria as below Manufacturer shall have implemented at least 2 similar projects in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
67	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have implemented the same in at least 2 similar projects in last 7 years.	In order to maximise Indian OEM participation Kindly revise criteria as below Manufacturer shall have implemented the same in at least 2 similar projects in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
68	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	In order to maximise Indian OEM participation Kindly revise criteria as below Manufacturer shall have supplied/deployed at least 100 similar units in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
69	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Passenger Information System Manufacturer shall have supplied/deployed at least 100 similar outdoor units in last 7 years.	Please consider-Passenger Information System Manufacturer shall have supplied/deployed/Ongoing at least 100 similar indoor & 30 Outdoor units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
70	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed the same for at least 1000 intersections in last 7 years.	Manufacturer shall have supplied/deployed the same for at least 200 intersections in last 7 years in INDIA with at least 50 ATCS Controllers in a single project with network connectivity & control room application software for ATCS and minimum one project of 1 year of O&M completion. Preference shall be given to manufacturers with proven ATCS technology for heterogenous traffic conditions in INDIA	Refer to Addendum-1, S.No: 13 dated 08-03-2022
71	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	Manufacturer shall have supplied / deployed similar size of VMS atleast 100 Units, for any Government Project in India in last 7 years and with minimum one proejct having 40 such units with Netwrok connectivity and control room application software .	Refer to Addendum-1, S.No: 13 dated 08-03-2022
72	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years.	Manufacturer/SI shall have supplied at least 200 sets Internationally and minimum 100 Cameras for RLVDS(25 Junctions) in India in last 7 years with proven technology for Indian Road conditions.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
73	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years.	Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
74	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	6.Speed Limit Violation Detection System- Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years.	Radar being a latest technology and very few implementations done in India, and most of the OEM's not having past experience in Radar and they are capable enough to implement Radar based Speed violation detection system. Hence please consider Radar / Video based SLVD experience. It will make fair competition from many OEM's and Bidders.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
75	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	13. Operation and Maintenance of TIMS : Sub-Contractor shall have experience at least 2 similar projects in last 7 years. 14. Operation and Maintenance of CBS: Sub-Contractor shall have experience at least 2 similar projects in last 7 years.	We request the authority to delete these clauses under section 2.5.	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
76	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	<p>Subcontractors/manufacturers for the following major items of supply or services must meet the following minimum criteria, herein listed for that item:</p> <p>ATCS: Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 7 years</p> <p>Variable Message Signs: Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years</p> <p>Red Light Violation System: Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years</p> <p>Speed Limit Violation Detection System: Manufacturer shall have supplied/deployed at least 200 similar units in last 7 years</p>	<p>Subcontractors/manufacturers for the following major items of supply or services must meet the following minimum criteria, herein listed for that item:</p> <p>ATCS: Manufacturer shall have successfully commissioned / supplied at least 200 intersections in last 7 years in INDIA with at least 50 ATCS Controllers in ONE project with network connectivity & control room application software for ATCS and successfully done 1 year of O&M completion. Preference shall be given to manufacturers with proven ATCS technology for heterogenous traffic conditions in INDIA</p> <p>Variable Message Signs: Manufacturer shall have successfully commissioned / supplied VMS of atleast 100 Units, for any Central Govt / State Govt / PSU Project in India during last 7 years and with 40 such units commissioned in ONE single Project WORK ORDER including control room application software & network connectivity.</p> <p>Red Light Violation System: Manufacturer's / System Integrators should have successfully completed supplies for minimum 25 junctions (100 sets) in last 7 years. (Preferable to be proven in Indian Road conditions)</p> <p>Speed Limit Violation Detection System: Manufacturer shall have commissioned / supplied at least 100 similar units in last 7 years.</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
77	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	<p>ATCS Platform: Manufacturer shall have implemented at least 2 similar projects in last 7 years.</p>	<p>Our understanding with this is that city is okay to accept 2 ATCS software implementation with 40 or more junctions in India or globally.</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
78	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	<p>ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 7 years.</p>	<p>Requesting you to kindly modify the clause to the following:</p> <p>ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least 400 intersections in last 7 years.</p> <p>Justification: Given the size of the project, 400 intersections is a reasonable figure</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
79	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	TIMS Platform: Manufacturer shall have implemented the same in at least 2 similar projects in last 7 years.	<p>Requesting you to kindly modify the clause to the following:</p> <p>TIMS Platform: Manufacturer shall have implemented the same in at least 1 similar projects in last 7 years. "</p> <p>Justification: The TIMS/ITMS/TCCC platforms are relatively new in India and have been only if few cities. However, having a locally developed system will enable quicker integrations, customisations and developments as per the requirement. Hence, requesting you to make the requirement to 1 smiliar projects or alternatively allow the experience of deploying TIMS/ITMS/TCCC platforms on the highway projects such as HTMS/ATMS to be considered against this requirement.</p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
80	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	CAD /AVL Application- Manufacturer shall have implemented the same in at least 2 similar projects in last 7 years.	<p>Request for Change (Suggested clause)--> Manufacturer shall have implemented / Under O&M (also to be under use by the respective client at the time of bidding) the same in at least 2 similar projects in last 7 years.</p> <p>Reason for Change - We would like to bring into your kind attention that globally similar solutions are running with their respective clients for years due to their client's satisfaction. All updates and upgrades are regularly provided. Such solution ensure its robustness and more capability to achieve project success. <u>Hence, we have requested to allow projects which are under O&M but still under use by its respective client at the time of bidding.</u></p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
81	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Depot Management System--> Manufacturer/ Sub-Contractor shall have implemented the same in at least 2 similar projects with 100 buses each in last 7 years.	<p>Request for Change--> Manufacturer / Sub-Contractor shall have implemented / Under O&M (also to be under use by respective client at the time of bidding) the same in at least 2 similar projects with 100 buses each in last 7 years.</p> <p>Reason for Change - We would like to bring into your kind attention that globally similar solutions are running with their respective clients for years due to their client's satisfaction and solution maturity. All updates and upgrades are regularly provided. Such solution ensure its robustness and more capability to achieve project success. <u>Hence, we have requested to allow projects which are under O&M but still under use by its respective client at the time of bidding.</u></p>	Refer to Addendum-1, S.No: 13 dated 08-03-2022
82	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Failure to comply with this requirement will result in rejection of theSubcontractor/manufacturer.	<p>We understand that Failure to comply with this requirement will result in rejection of the Subcontractor/manufacturer along with bid rejection.</p> <p>Kindly confirm if our understanding is correct.</p>	Please refere clause 17. Technical Proposal, Subcontractors of RFP Part-1.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
83	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Depot Management System--> Manufacturer/ Sub-Contractor shall have implemented the same in at least 2 similar projects with 100 buses each in last 7 years.	As per the RFP requirements and Scope, we understand that similar project means each project should comprises Optimised Scheduling, timetable creation, crew rostering, dispatch, Dynamic scheduling of trips / routes; Along with integration with Maintenance Management System and Workshop Management System including inventory, store etc. Kindly confirm if our understanding is correct.	Please refer to "Chapter 3-4 Requirements of Depot Management System" for detailed scope of work.
84	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	2.5 Subcontractor / Manufacturers	We understand that Bidder has to submit subcontractor Teaming agreement copy for each items including CAD / AVLS, Depot Management System as part of technical bid, which will be accessed by CSCL during evaluation process and will further help ensuring project success. Kindly Confirm If our understanding is correct.	All subcontractor information must filled as per RFP conditions
85	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers		Please clarify OEM for speed sensor and solution should have some references and experience in india or abroad. We strongly reocmend that some basic referemces for speed sensor OEM and solution for RLVD & Speed for similar product is asked for (equivalent to project size) . Else people can go with non proven solution and technology. Therefore, we request you to consider the following : PQ for OEM . Speed detectors : it should have test reports in compliance to International legal metrology standards (OIML R 91) and should have sold atleast 2000 such sensors. Acuracy self decleration with certified firmware shouldl be provided. Speed System : The OEM of the speed enforcment should have proper test reports in compliance to legal metrology standars(OIML R 91,D11) and should have proper certificate for issuing fines . The propsted system should have atleass installtion base of 200 system india.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
86	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have implemented at least 2 similar projects in last 7years.	Manufacturer shall have implemented at least 2 similar projects in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
87	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have at supplied/deployed the same for at least 1000 intersections in last 7 years.	Manufacturer shall have at supplied/deployed the same for at least 100 intersections in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
88	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have implemented the same in at least 2 similar projects in last 7 years.	Manufacturer shall have implemented the same in at least 2 similar projects in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
89	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	Manufacturer shall have supplied/deployed at least 100 similar units in last 7 years.	Manufacturer shall have supplied/deployed at least 100 similar units in last 10 years.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
90	Part-1	Section IV Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	ATCS Platform - Manufacturer shall have implemented at least 2 similar projects in last 7 years	ATCS Platform - Manufacturer shall have implemented at least 1 similar project in last 10 years	Refer to Addendum-1, S.No: 13 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
91	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least <u>1000 intersections in last 7 years.</u>	To promote make in india initiative, kindly allow more of Indian OEMs by certain amendments. The current RFP is restricting Inidan OEM participation for some products. Hence we request you to amend this clause as, "ATCS Controllers: Manufacturer shall have at supplied/deployed the same for at least <u>1000 25</u> intersections in last 7 years."	Refer to Addendum-1, S.No: 13 dated 08-03-2022
92	Part-1	Section IV. Bidding Forms	BF-TOF1	2.5 Subcontractors/ manufacturers	2. ATCS controllers Manufacturer shall have at supplied / deployed the same for at least 1000 intersections in last 7 years.	We are CDAC partners (TOT) for ATCS Implementation. The CDAC ATCS system is a combination of smart traffic controller and CoSiCoSt / TraMM Engine. We manufacture smart traffic controllers from our outsourced agencies under contract manufacturing. These are as per BOQ and design supplied by CDAC for which we are paying royalty. As per CDAC contract and NDA signed, we can only install traffic controllers on our awarded projects only. Therefore, this clause may please be suitably revised and relaxed to allow an efficient ATCS product being designed by CDAC under MeITY, GOI in Make in India program for consideration in this prestigious project.	Refer to Addendum-1, S.No: 13 dated 08-03-2022
93	Part-1	Section IV. Bidding Forms	BF-TOF2	2.5 Subcontractors/ manufacturers	The similarity of Similar project or same shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Employer's Requirements. Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.	Request to amend this clause We understand ATCS/ ATCC/ ANPR/ RLVD/SVD /ITMS can be considered as TMS experience	RFP condition prevails.
94	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Project Director: Min Education and Experience : Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 20 years , -Experience in Similar ITS projects; 15 years - International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5.Command Control Centre	Request you to kindly relax this clause with the requiremet as: -Total Work Experience; 20 15 years , -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project Explanation: It is difficult to find such a resource with all the required capabilities. Therefore for a fair participation request you to please relax this clause for better participation	Refer to Addendum-1, S.No: 11 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
95	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Criteria for All Personnel	<p>Request you to please remove the clause of International Experience as an madatory cirtieria for all the project resources asked</p> <p>Explanation:</p> <p>1.) Since this is for a Project in India, Experience of india should be given more weightage as the personnel will have a better understanding and knowledge of implementation and Operations in the indian scenario.</p> <p>2.) THe requirement of International staff is not necessary for this project as there are lots of projects already executed in india in past few years and adding the international will only increase the cost of the project without any value addition</p> <p>2.) Arranging for a resource with such strict international at the time of bidding will be impossible</p> <p>Therefore, request you to kindly remove the requirement of International Experience</p>	Refer to Addendum-1, S.No: 11 dated 08-03-2022
96	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Criteria for All Personnel	<p>The Specific Experience of similar projects has been asked as min of 3 Projects for Personnels at Sr No. 1-9., and for Sr. No. 10-14 is min of 2 Projects. These clauses ae very stringent and would be diffcult to find such resources with such stringet cumulative criterias. Therefore, request you to kindly realx this clasue to minium of 1 project.</p> <p>Explanation: As you are aware, that such ITMS projects in india has been started in the last few years and finding resouces who have worked on multiple projects is bit limiting and would be difficult for the bidders to provide</p>	Refer to Addendum-1, S.No: 11 dated 08-03-2022
97	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Project Manager TIMS,CBS, ATCS expert,TIMS Expert, CBS Expert: Experience: -Total Work Experience; 15 years minimum	Request you to revise this as 12 Years as 15 years is too high for the bidders to propose	Refer to Addendum-1, S.No: 11 dated 08-03-2022
98	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	TIMS Expert - Local,CBS Expert - Local -Total Work Experience; 12 years,	Request you to revise this as 8 Years as 12 years is too high for the bidders to propose	Refer to Addendum-1, S.No: 11 dated 08-03-2022
99	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Project Director (to be Contractor's Representative under) Experience :-International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project	Experience in Traffic domain /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available in India and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
100	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Project Manager TIMS Experience :-International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project	Experience in Traffic domain /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available locally and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged.	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
101	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	1.1.1 Personnel	Asked resources are with high remuneration and hence not viable for any organisation to have these on regular payroll. Hence we request to accept bidder undertaking to provide asked resources after contract award.	RFP condition prevails.
102	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	Part1 Bidding Procedures, Section III Evaluation and Qualification Criteria, EQC-1 & EQC-9	1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements: 3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated.	We understand personnel can be on payroll of Lead Member/ Consortium Member/Manufacturer/ Sub-contractor, please confirm	Yes. Your understanding is correct.
103	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements Project Director (to be Contractor's Representative under GC 4.3) * -Experience in Similar ITS projects; 15 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements Project Director (to be Contractor's Representative under GC 4.3) * Education: -Experience in Similar ITS/ ICT/ Datacentre/Smart city/ Safe city projects; 15 years -International/ India Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project	Refer to Addendum-1, S.No: 08 dated 08-03-2022
104	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements Project Manager TIMS & Project Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent -Experience in Similar ITS projects and involved in end-to-end implementation; 10 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements Project Manager TIMS & Project Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent -Experience in Similar ITS / ICT/ Datacentre/Smart city/ Safe city projects and involved in end-to-end implementation; 10 years -International / India Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
105	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Project Director (to be Contractor's Representative under GC 4.3) * Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 20 years , -Experience in Similar ITS projects; 15 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5.Command Control Centre	Request you to kindly remove international experience requirement and Kindly amend the clause as below: Project Director (to be Contractor's Representative under GC 4.3) * Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 20 15 years , -Experience in Similar ITS/ICT projects; 45 10 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5.Command Control Centre	Refer to Addendum-1, S.No: 08 dated 08-03-2022
106	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:	Please confirm, if the desired criteria may be fulfilled by the respective OEM/sub contractor as well.	Yes. Your understanding is correct.
107	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	1. Project Director (to be Contractor's Representative under GC 4.3) * Experience: Total Work Experience; 20 years , -Experience in Similar ITS projects; 15 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5.Command Control Centre	We request the authority to change the following : Experience: -Total Work Experience; 15 years , -Experience in Similar ITS or ICT projects; 10 years -Deletion of International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5.Command Control Centre 6. ICT projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
108	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	<p>2. Project Manager TIMS Experience: Total Work Experience; 15 years , -Experience in Similar ITS projects and involved in end to end implementation ; 10 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre</p>	<p>We request the authority to change the following : 2. Project Manager TIMS Experience: Total Work Experience; 12 years , -Experience in Similar ITS projects and involved in end to end implementation ; 5 years - Deletion of International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre 5. ICT projects</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
109	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	<p>Project Director (to be Contractor's Representative under GC 4.3) *</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent</p> <p>Experience:</p> <p>-Total Work Experience; 20 years , -Experience in Similar ITS projects; 15 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 4.ITS Infrastructure or City / Campus wide System</p>	<p>Project Director (to be Contractor's Representative under GC 4.3) *</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent</p> <p>Experience:</p> <p>-Total Work Experience; 20 years , -Experience in Similar ITS/Security projects; 15 years -International/National Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government/PSU agencies in urban infrastructure/large industrial campus -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Information & Management System 3.CAD/AVL system 4.ITS Infrastructure or City / Campus wide System 5. Command and Control System</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
110	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	<p>Project Manager TIMS</p> <p>Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience -Total Work Experience; 15 years minimum -Experience in Similar ITS projects and involved in end-to end implementation; 10 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre</p>	<p>Project Manager TIMS</p> <p>Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience -Total Work Experience; 15 years minimum -Experience in Similar ITS/Security & Surveillance projects and involved in end-to end implementation; 10 years -International/<i>National</i>/ Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 2 Projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
111	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Personnel	May be met by any member of consortium Remark: Best available personnel can be identified and posted	Refer to Addendum-1, S.No: 08 dated 08-03-2022
112	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	May be met by any member of consortium	Best available personnel can be identified and posted	RFP condition prevails.
113	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	1.1.1 Personnel	Minimum Education & Experience	<p>Request you to kindly allow domestic experiences for the key staff rather than only the international experiences as this will allow the Indian expertise to participate, as the project will be implemented in India only.</p> <p>We can understand that international experts must have experience of international projects. However, domestic experts need not have international experience. India is fairly advanced in transport planning, traffic engineering and ITS solutions. India even possesses an indigenous ATCS software application like CDAC - CoSiCoSt Engine and TRAMM management software. We have ATCS systems being implemented in 100 smart cities in India. Therefore, request you to allow domestic only experience for domestic experts, especially for the key staff.</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
114	Part-1	Section III Evaluation and Qualification Criteria	EQC-1	(3) Evaluation of Key Staff	<p>1.1 Technical Evaluation</p> <p>Project Director -Total Work Experience; 20 years , -Experience in Similar ITS projects; 15 years</p>	Kindly request you to consider the total experience of 10-12 years with 5 years experience in handling govt Projects in India	Refer to Addendum-1, S.No: 11 dated 08-03-2022
115	Part-1	Section III Evaluation and Qualification Criteria	EQC-10	(3) Evaluation of Key Staff	<p>Operation Manager CBS - 1 Mark ≥10years & ≤ 12 years - 0.5 Mark ≥ 13 years or more - 1 Mark</p>	<p>Kindly amend the Evaluation of Key Staff clause as below:</p> <p>Operation Manager CBS - 1 Mark ≥40 5 years & ≤ 42 6 years - 0.5 Mark ≥ 43 7 years or more - 1 Mark</p>	Refer to Addendum-1, S.No: 11 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
116	Part-1	Section III Evaluation and Qualification Criteria	EQC-10	(3) Evaluation of Key Staff	Safety Infrastructure Specialist - 1 Mark ≥10years & ≤ 12 years - 0.5 Mark ≥ 13 years or more - 1 Mark	Kindly amend the Evaluation of Key Staff clause as below: Safety Infrastructure Specialist - 1 Mark ≥40 5 years & ≤ 42 6 years - 0.5 Mark ≥ 43 7 years or more - 1 Mark	Refer to Addendum-1, S.No: 11 dated 08-03-2022
117	Part-1	Section III Evaluation and Qualification Criteria	EQC-10	(3) Evaluation of Key Staff	Quality Control Engineer - 1 Mark ≥10years & ≤ 12 years - 0.5 Mark ≥ 13 years or more - 1 Mark	Kindly amend the Evaluation of Key Staff clause as below: Quality Control Engineer - 1 Mark ≥40 5 years & ≤ 42 6 years - 0.5 Mark ≥ 43 7 years or more - 1 Mark	Refer to Addendum-1, S.No: 11 dated 08-03-2022
118	Part-1	Section III Evaluation and Qualification Criteria	EQC-10	(3) Evaluation of Key Staff	Finance Manager - 1 Mark ≥12 years & ≤ 14 years - 0.5 Mark ≥ 15 years or more - 1 Mark	Kindly amend the Evaluation of Key Staff clause as below: Finance Manager - 1 Mark ≥42 7 years & ≤ 44 8 years - 0.5 Mark ≥ 45 9 years or more - 1 Mark	Refer to Addendum-1, S.No: 11 dated 08-03-2022
119	Part-1	Section III Evaluation and Qualification Criteria	EQC-10	(3) Evaluation of Key Staff	Traffic/Transportation Engineer/Planner - 1 Mark ≥10years & ≤ 12 years - 0.5 Mark ≥ 13 years or more - 1 Mark	Kindly amend the Evaluation of Key Staff clause as below: Traffic/Transportation Engineer/Planner - 1 Mark ≥40 5 years & ≤ 42 6 years - 0.5 Mark ≥ 43 7 years or more - 1 Mark	Refer to Addendum-1, S.No: 11 dated 08-03-2022
120	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	2. Qualification		As this is ICB- International Competive bidding,we request you to consider the global experiences from Parent/sister company as a part of Technical evaluation Scoring . Request you to add this clause as 1) Experience of the parent firm (in case bidder firm is a 100% subsidiary of the Ultimate parent firm) or experience of the 100% subsidiary firm (if Ultimate parent firm is applying for the bid) shall be considered. However, in such case the authorized signatory of corresponding firm(s), whose experience is being considered, should submit certificate to transfer knowhow to the bidder firm as and when required. (This note shall be also applicable for technical scoring of the bids for the section 2.4).	RFP condition prevails. Refer to clause 2 (i) in page EQC-11 of RFP Part-1.
121	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	2. Qualification	2. Qualification i) Qualification of the Applicant but not that of the Applicant's Affiliate It is the legal entity or entities comprising the applicant (which is/are to the party to the applicant under JV/Consortium or as subcontractor to be employed for the Key activities listed in this section), and not the including applicant's Parent Company(ies), group companies,subsidiaries, or other affiliates, that must satisfy the qualification criteria	As this is ICB- International Competive bidding, request you to consider the global experiences from Parent and sister company. Request you to add this clause as 2. Qualification i) Qualification of the Applicant but not that of the Applicant's Affiliate It is the legal entity or entities comprising the applicant (which is/are to the party to the applicant under JV/Consortium), including applicant's Parent Company(ies), group companies,subsidiaries that must satisfy the qualification criteria	RFP condition prevails.
122	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	Bidding Document Part 1 Bidding Procedures Nov 12th 2021 Section III. Evaluation and Qualification Criteria Page - 55, 56 2. Qualification	2. Qualification (i) Qualification of the Applicant but not that of the Applicant's Affiliate It is the legal entity or entities comprising the Applicant (which is/are party to the Applicant under a JV or as subcontractors to be employed for the key activities listed in this Section), and not the Applicant's parent company(ies), group companies, subsidiaries, or other affiliates, that must satisfy the qualification criteria	Considering multiple technologies & domain involved in this project, we request to allow experience/qualification of Applicant's parent company(ies), group companies, subsidiaries, or other affiliates that satisfies the qualification criteria.	RFP condition prevails. Refer to clause 2 (i) in EQC-11 in RFP Part-1.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
123	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	Part 1, Section III Evaluation and Qualification Criteria, 1.2 Economic Evaluation, EQC-11	1.2.2 Other Factors The Sum of Design Cost (as Quoted in Price Schedule No 1), Supply of Plant/Equipment and Spare Parts (as Quoted in Price Schedule No 2) and on-site Installation, Training and Testing (as Quoted in Price Schedule No. 3) as quoted by the Bidder shall not exceed more than 70% of the Total Bid price under Grand Total Summary Table under any circumstances. In case the Contractor Quotes higher than 70% for the above price Schedule, the bid shall be liable for rejection.	As this project is a Capex intensive project, we request you to kindly amend the clause as suggested below: The Sum of Design Cost (as Quoted in Price Schedule No 1), Supply of Plant/Equipment and Spare Parts (as Quoted in Price Schedule No 2) and on-site Installation, Training and Testing (as Quoted in Price Schedule No. 3) as quoted by the Bidder shall not exceed more than 80% 70% of the Total Bid price under Grand Total Summary Table under any circumstances. In case the Contractor Quotes higher than 80% 70% for the above price Schedule, the bid shall be liable for rejection.	RFP condition prevails.
124	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	2. Qualification	(i) Qualification of the Applicant but not that of the Applicant's Affiliate It is the legal entity or entities comprising the Applicant (which is/are party to the Applicant under a JV or as subcontractors to be employed for the key activities listed in this Section), and not the Applicant's parent company(ies), group companies, subsidiaries, or other affiliates, that must satisfy the qualification criteria.	Global companies may not have a direct presence in every country and work through subsidiary companies, This is a common practice and we recommended that qualifications of parent and subsidiary companies be accepted. OR It may be allowed through an agreement between global and Indian companies whereby the global company authorizes the Indian company to use the credentials and execute the project with a confirmation of support from the global company.	RFP condition prevails.
125	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	EQC-11 1.2.2	The Sum of Design Cost (as Quoted in Price Schedule No 1), Supply of Plant/Equipment and Spare Parts (as Quoted in Price Schedule No 2) and on-site Installation, Training and Testing (as Quoted in Price Schedule No. 3) as quoted by the Bidder shall not exceed more than 70% of the Total Bid price under Grand Total Summary Table under any circumstances. In case the Contractor Quotes higher than 70% for the above price Schedule, the bid shall be liable for rejection.	May be requested to amend as not more than 80% of the Total Bid Price. Kindly consider.	RFP condition prevails.
126	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	2. Qualification	2. Qualification (i) Qualification of the Applicant but not that of the Applicant's Affiliate It is the legal entity or entities comprising the Applicant (which is/are party to the Applicant under a JV or as subcontractors to be employed for the key activities listed in this Section), and not the Applicant's parent company(ies), group companies subsidiaries, or other affiliates, that must satisfy the qualification criteria.	As per our understanding credentials of subcontractors to be employed for the key activities listed in Section IV. Bidding Forms, BF-TOF1, 2.5 Subcontractors / manufacturers shall be considered for meeting the Eligibility and Qualification Criteria mentioned under 1.1.3 Detail Evaluation (EQC-6 to EQC-11). Kindly confirm whether our understanding is correct?	RFP condition prevails.
127	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	RFP Volume 1		Please clarify whether references / credentials of affiliate or parent company be considered for its Indian subsidiary to qualify as bidder	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
128	Part-1	Section III Evaluation and Qualification Criteria	EQC-11	1.2.2 Other Factors	1.2 Economic Evaluation 1.2.2 Other Factors The Sum of Design Cost (as Quoted in Price Schedule No 1), Supply of Plant/Equipment and Spare Parts (as Quoted in Price Schedule No 2) and on-site Installation, Training and Testing (as Quoted in Price Schedule No. 3) as quoted by the Bidder shall not exceed more than 70% of the Total Bid price under Grand Total Summary Table under any circumstances. In case the Contractor Quotes higher than 70% for the above price Schedule, the bid shall be liable for rejection	Considering long execution time it would not be viable for contractor to work on these terms. We request to change requirements as below : The Sum of Design Cost (as Quoted in Price Schedule No 1), Supply of Plant/Equipment and Spare Parts (as Quoted in Price Schedule No 2) and on-site Installation, Training and Testing (as Quoted in Price Schedule No. 3) as quoted by the Bidder shall not exceed more than 70% 80% of the Total Bid price under Grand Total Summary Table under any circumstances. In case the Contractor Quotes higher than 70% 80% for the above price Schedule, the bid shall be liable for rejection	RFP condition prevails.
129	Part-1	Section III Evaluation and Qualification Criteria	EQC-14	Part1 Bidding Procedures, Section III Evaluation and Qualification Criteria, EQC-14	2.2 Historical Contract Non-Performance	Request to allow details to be submitted as per Bidder company standard policy.	RFP condition prevails.
130	Part-1	Section III Evaluation and Qualification Criteria	EQC-14	Part 1 Section III Evaluation and Qualification Criteria EQC-14 & 15	Notes for the Bidder (i) Non-performance, as decided by the Employer, shall include all Contracts: (a) where non-performance was not challenged by the Contractor, including through referral to the dispute resolution mechanism under the respective Contract, and (b) that were so challenged but fully settled against the Contractor. Non-performance shall not include Contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective Contract and where all appeal instances available to the Applicant have been exhausted. (ii) This requirement also applies to Contracts executed by the Bidder as a JV member. (iii) The Bidder shall provide accurate information on the related Bidding Form about any litigation or arbitration resulting from Contracts completed or ongoing under its execution over the last five (5) years. A consistent history of awards against the Bidder or any member of a joint venture may result in rejection of the Bid.	Kindly amend the clause as below: Notes for the Bidder (i) Non-performance, as decided by the Employer, shall include all Contracts: (a) where non-performance was not challenged by the Contractor, including through referral to the dispute resolution mechanism under the respective Contract, and (b) that were so challenged but fully settled against the Contractor. Non-performance shall not include Contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective Contract and where all appeal instances available to the Applicant have been exhausted. (ii) This requirement shall not be also applies applicable to Contracts of Bidder where the non-performance is due to the executed by the Bidder as a JV member. (iii) The Bidder shall provide accurate information on the related Bidding Form about any litigation or arbitration resulting from Contracts completed or ongoing under its execution over the last five (5) years. A consistent history of awards against the Bidder or any member of a joint venture may result in rejection of the Bid.	RFP condition prevails.
131	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 Million equivalent, calculated as total certified payment received for contract in progress and/or completed , within the last 5 years divided by 5 years	Chennai ITMS Project is all about IT/ICT Initiative. So for qualifying better IT companies turnover should be from IT/ICT initiatives. Request you to change the clause as "Minimum average annual turnover of USD 50 Million equivalent from IT/ICT/ITES Business, calculated as total certified payment received for contract in progress and/or completed , within the last 5 years divided by 5 years"	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
132	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	Part 1, 2. Qualification, 2.3.1 Financial Performance, Page no 60	<p>The audited balance sheets or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last 5 years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and its prospective long term profitability .</p> <p>As the minimum requirement, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive.</p> <p>Submission Requirements -> Form FIN – 1 with attachments</p>	<p>Justification: 1. Currently the audit is in process for the Financial Year 2020-21, as per Govt. Norms the date for filing Audit report is 31st December, 2021 or as may be extended by the govt.</p> <p>Hence, we request authority to accept the provisional statement duly signed by CA for Financial Year 2021.</p> <p>2. We understand that the "Form FIN - 1: Financial Situation" format shared on page no 141, requires certification from CA in USD. Please confirm</p> <p>3. Based On above Change Request: The audited balance sheets or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last 5 <u>3</u> years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and its prospective long term profitability .</p> <p>As the minimum requirement, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive.</p> <p>Submission Requirements -> Form FIN – 1 with attachments</p>	<p>1. RFP condition prevails. Refer to clause 2 (d) in BF-57 in RFP Part-1.</p> <p>2. Your understanding is correct.</p> <p>3. RFP condition prevails.</p>
133	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	<p>Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.</p> <p>Submission Requirements -> Form FIN – 2</p>	<p>Justification: 1. Currently the audit is in process for the Financial Year 2020-21, as per Govt. Norms the date for filing Audit report is 31st December, 2021 or as may be extended by the govt.</p> <p>Hence, we request authority to accept the provisional statement duly signed by CA for Financial Year 2021.</p> <p>2. We understand that the "Form FIN - 1: Financial Situation" format shared on page no 141, requires certification from CA in USD. Please confirm</p> <p>3. Based On above Change Request: Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 <u>3</u> years divided by 5 <u>3</u> years.</p> <p>Submission Requirements -> Form FIN – 2</p>	<p>1. RFP condition prevails. Refer to clause 2 (d) in BF-57 in RFP Part-1.</p> <p>2. Your understanding is correct.</p> <p>3. RFP condition prevails.</p>
134	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.3 Financial Resources	<p>(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments.</p> <p>Submission Requirements -> Form FIR - 1</p> <p>ii) The Bidder shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>Submission Requirements -> Form FIR – 1 and Form FIR - 2</p>	<p>Please clarify "Form FIR - 1: Financial Resources" Format shared on page no 144 , requires certification from CA in USD ?</p>	<p>Yes, certification is required.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
135	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	Part1 Bidding Procedures, Section III Evaluation and Qualification Criteria, EQC-16	2.3 Financial Situation 2.3.2 Average Annual Turnover Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.	Request to confirm whether annual turnover can be calculated as total amount billed for Contracts in progress and/or completed,	RFP condition prevails.
136	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.	Request you to kindly reduce the average Turnover, for the maximum participation of relevant bidders.	RFP condition prevails.
137	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Each Member must meet twenty five percent (25%) of the Requirement Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.	Kindly request the removal of the clause for “Each Member” category We are a startup who are technically sound and have many innovative products, but we would not meet this criteria since it is too high. By adding such a clause, it makes it impossible for smaller companies to bid, even as part of a consortium – defeating the purpose of an Open Tender. The government itself is looking for ways to promote startups and Indian grown businesses. Requesting your support with the same We are looking to bid along with a Consortium partner. Hence, please make it such that the turnover condition is applicable only for the lead bidder	RFP condition prevails.
138	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.3 Financial Resources	Each Member must meet twenty five percent (25%) of the Requirement The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments	Kindly request the removal of the clause for “Each Member” category We are a startup who are technically sound and have many innovative products, but we would not meet this criteria since it is too high. By adding such a clause, it makes it impossible for smaller companies to bid, even as part of a consortium – defeating the purpose of an Open Tender. The government itself is looking for ways to promote startups and Indian grown businesses. Requesting your support with the same We are looking to bid along with a Consortium partner. Hence, please make it such that the turnover condition is applicable only for the lead bidder	RFP condition prevails.
139	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.	In case of consortium, the Lead Bidder must meet 80% of the average annual Turnover requirement while balance 20% by remaining 2 consortium partners, put together. Thus in case of consortium, Lead bidder to have minimum average annual turnover of USD 40 Million while remaining 2 consortium partners put together, to have minimum average annual turnover of USD 10 Million	RFP condition prevails.
140	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.3 Financial Resources	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments.	In case of consortium, the Lead Bidder must have the financial capability, sufficient to meet cashflow requirements estimated as USD 12.5 Million while each of the consortium members to have positive networth for the last 5 audited financial years	RFP condition prevails.
141	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years. Each Member Must meet twenty five percent (25%) of the requirement	Lead Bidders are the Prime system Integrators whereas consortium partners plays key roles to solution rather than turnover, hence allow consortium partner average annual turnover from 25% to 13% for last five years as mentioned below, Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years. Each Member (Consortium Partner/ JV partner) Must meet Thirteen percent (13%) of the requirement	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
142	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.3 Financial Resources	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments. Each Member Must meet twenty five percent (25%) of the requirement	Lead Bidders are the Prime system Integrators, Hence allow this clause to meet by Prime bidder or any one member of the consortium/JV	RFP condition prevails.
143	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	One Member Must meet forty percent (40%) of the requirement Each Member Must meet twenty five percent (25%) of the requirement	Please clarify that in even of total 4 members in a consortium. What should be % percent requirement from Lead Bidder and other member's of consortium.	RFP condition prevails.
144	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years	We request to kindly consider:- In case of consortium, the Lead Bidder must meet 80% of the average annual Turnover requirement while balance 20% by remaining 2 consortium partners, put together. Thus in case of consortium, Lead bidder to have minimum average annual turnover of USD 40 Million while remaining 2 consortium partners put together, to have minimum average annual turnover of USD 10 Million	RFP condition prevails.
145	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.1 - Financial Performance	The audited balance sheets or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last 5 years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and its prospective long term profitability. As the minimum requirement, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive.	Currently it is a must meet requirement for all the JV members. Can you please relax this condition for JV members, because if we are going with a research organization, this condition would be difficult to meet for them.	RFP condition prevails.
146	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Minimum average annual turnover of USD 50 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years.	Kindly request to modify the clause as " Minimum average annual turnover of USD 20 million equivalent, calculated as total certified payments received for Contracts in progress and/or completed, within the last 5 years divided by 5 years."	RFP condition prevails.
147	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.2 Average Annual Turnover	Joint Venture (existing or intended) Each Member - Must meet twenty five percent (25%) of the requirement	Kindly request you to consider 20% of the requirement	RFP condition prevails.
148	Part-1	Section III Evaluation and Qualification Criteria	EQC-16	2.3.3 Financial Resources	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments.	Kindly request you to modify the clause as " (i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 8 million for the subject Contract(s) net of the Bidder's other commitments. Kindly request you to consider 20% of the requirement	RFP condition prevails.
149	Part-1	Section III Evaluation and Qualification Criteria	EQC-17	2.3.3 Financial Resources	Financial Resources (i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 12.5 million for the subject Contract(s) net of the Bidder's other commitments.	The financial resources for the lead bidder being a sound financial partner should only be evaluated. For requirement of financial strength of consortium members, it is suggested to remove 25% clause and replace it with a requirement of positive net worth only in the respective balance sheets. This has been suggested in view of the fact that major portions of capex requirements are usually in the scope of lead bidder and the consortium (technical partners) will mostly bring in the solution parts, which will not involve substantial capex but bring forth the value addition to the project. Moreover, it also relevant with current COVID-19 economic scenario.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
150	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (Single Entity or JV Member) shall have successfully executed/ completed at least 2 projects in Transportation/ Transit/ Traffic/ ICT System with a minimum value of USD 20 Million per project in last 7 years starting 1st Jan 2014	Most of the ICT project values are in the range of 10M to 15M USD and for allowing more bidders to participate request you to amend the below clause as follow: The Bidder (Single Entity or JV Member) shall have successfully executed/ completed at least 2 projects in Transportation/ Transit/ Traffic/ ICT System with a minimum value of USD 15 Million per project in last 10 Years in India/ Global	Refer to Addendum-1, S.No: 12 dated 08-03-2022
151	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live of ATCS System with Automatic Subarea Formulation with at least 2 Customer/ Clients in last 7 years starting 1st Jan 2014 System should have been in operation (DLP/ AMC) for at least 1 year post completion/ Go Live with customer/ Client with each criteria mentioned below A bidder should have supplied and integrated Central ATCS Platform for each Customer/ Client i) At least 500 Adaptive Traffic Signals and ii) Shall be minimum value of USD 2 Million for each Customer/ Client OR A bidder should have supplied and implemented for each customer/ client i) at least 100 Adaptive Traffic Signal integrated with Central ATCS Platform and ii) Shall be of minimum value of USD 2 Million	Considering marking criteria & asked requirement, it requires bidder to have experience of 2500 Junctions for full marks. This is prohibitive criteria & restricting only few companies. We request to change as below : The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live of ATCS System with Automatic Subarea Formulation with at least 2 Customer/ Clients in last 10 years in India/ Global System should have been in operation (DLP/ AMC) for at least 3 months post completion/ Go Live with customer/ Client with each criteria mentioned below A bidder should have supplied and integrated Central ATCS Platform for each Customer/ Client i) At least 160 Adaptive Traffic Signals and ii) Shall be minimum value of USD 0.5 Million for each Customer/ Client OR A bidder should have supplied and implemented for each customer/ client i) at least 125 Adaptive Traffic Signal integrated with Central ATCS Platform and ii) Shall be of minimum value of USD 2 Million	Refer to Addendum-1, S.No: 12 dated 08-03-2022
152	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder should have experience of Operation and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 General Experience and shall be allocated marks as per below a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5	Request you to change the clause as The Bidder should have experience of Operation and Maintenance for minimum 3 consecutive months for the qualifying projects mentioned in 2.4.1 General Experience and shall be allocated marks as per below a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5 2 consecutive years as a qualifying criteria is too high and is restricting few of our similar projects which can be considered against this criteria.	Refer to Addendum-1, S.No: 10 dated 08-03-2022
153	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4 Experience	Eligibility and Qualification Criteria 2.4: Experience for 2.4.1, 2.4.2 (a1, a2, a3) : last seven (7) years starting 1st Jan 2014.	Projects of this nature are specialised with very few deployments in India. Existing criteria will allow only International companies to participate & restrict good Indian companies to compete. We request to allow past experience of last 10 Years to maximise participation of bidders	Refer to Addendum-1, S.No: 12 dated 08-03-2022
154	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4 Experience	2.4 Experience ;2.4.1 General Experience The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Considering marking criteria & asked project experience, it requires bidder to have experience of USD 100 million to score full marks. This is prohibitive criteria & favouring few companies. We request to change as below: "The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation /transit/traffic/ICT systems with a minimum value of USD 10 million per project in last Ten (10) years starting 1st Jan 2011."	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
155	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Considering marking criteria & asked requirement, it requires bidder to have experience of 2500 Junctions for full marks. This is prohibitive criteria & favouring few companies. Additionally this will restrict Indian solution providers as very few projects of asked value are implemented in India. You also need to consider experience of proposed OEM since they are major part of solution architechure.We request to change as below A. Bidder/proposed OEM should have supplied /integrated Central ATCS Platform for each Customer/Client of: (i) at least 160 Adaptive Traffic Signals and (ii) shall be of minimum value of USD half (0.5) million for each Customer/Client. OR B. The bidder/proposed OEM should have Supplied/Implemented for each Customer/Client of: (i) at least 40 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD half (0.5) million.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
156	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/ transit/traffic/ ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Justification: 1. Ideally there are very limited players in India who have executed this type of big projects. So, we request you to reduce the no. of projects required in the prequalification to one projects. Also, we request you to reduce the value of the project. Changes Request: The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) one (1) projects in transportation/ transit/traffic/ ICT systems with a minimum value of USD 20 8 million per project in last seven (7) years starting 1st Jan 2014.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
157	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4 Experience	Joint Venture (existing or intended) All Parties Combined - N/A Each Member - N/A One Member- Must meet requirement	As per the eligibility criteria, Authority allowed "Joint Venture (existing or intended)" for participating. However the Authority has ask experience from Only One Member. Hence We request to amend the clause and ask the experience from either " All Parties combined" or " One Member" for evaluation	Refer to Addendum-1, S.No: 12 dated 08-03-2022
158	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/ Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least <u>500 Adaptive Traffic Signals</u> and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 <u>Adaptive Traffic Signals</u> integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	We understand that Adaptive traffic signal means signals which has been installed on one arm of particular junction. So, it means if one junction have 4 arms then it will be considered as 4 adaptive traffic signals. Please confirm if our understanding is correct.	Refer to Addendum-1, S.No: 12 dated 08-03-2022 ATCS qualification specifies considering 1 junction with ATCS controller and all arms as a ATCS Traffic Signal. Each arm will not be considered as ATCS junction.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
159	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/ Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of:</p> <p>(i) at least 500 Adaptive Traffic Signals and</p> <p>(ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of:</p> <p>(i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and</p> <p>(ii) shall be of minimum value of USD two (2) million.</p>	<p>Justification: The said clause seems to be restrict the participation across the prospective bidders, considering the fact that very few Bidder will have such credential, ultimately authority will not have competition across the bidder. So, our request is to relax the qualification in this criteria.</p> <p>Change Request: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least One Customer/ Client in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least <u>30</u> Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
160	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>2.4.1 General Experience The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p> <p>Submission Requirements- Form EXP - 1</p>	<p>We understand smart cities & city surveillance references are acceptable for this category: transportation/transit/traffic/ICT systems, please confirm</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
161	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>2.4.2 (a1) Specific Experience for ATCS with Automatic Subarea Formulation The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>1. Request to modify as follows: 2.4.2 (a1) Specific Experience for ATCS with Automatic Subarea Formulation The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live/ completed for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 20 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p> <p>2. We understand for complying "operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client", client Go-live letter shall be acceptable, please confirm</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
162	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Please amend the clause as below: The Bidder (single entity or JV member) shall have successfully executed/completed/On going at least two (2) projects in transportation/transit/traffic/ICT /EPC systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
163	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	2.4.2 (a1) Specific Experience for ATCS with Automatic Subarea Formulation: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Kindly amend the clause as below: 2.4.2 (a1) Specific Experience for ATCS with Automatic Subarea Formulation: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should be have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 50 Adaptive Traffic Signals and (ii) shall be of minimum project value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 10 400 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum project value of USD two (2) million.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
164	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	2.4.1 General Experience The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Kindly make the following amendments: (1) in last 10 years (2) include those who have received PO and in implementation phase	Refer to Addendum-1, S.No: 12 dated 08-03-2022
165	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Request you to kindly ammend the experience requirement by 1 Customer/Client rather than 2 Customers/Client of 500 ATCS traffic Signals for having experience of supplying and integrated Central ATCS Platform.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
166	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	In order to maximise Indian bidder participation Kindly revise criteria as below The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 10 million per project in last ten (10) years starting 1st Jan 2011.	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
167	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	We request the authority to kindly reduce the minimum project value to 10 Million USD and cumulatively more than 20 Million USD.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
168	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.	We request the authority to kindly modify the clause as follows: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems in the last 7 years starting 1st Jan 2014. The systems should be completed/Go-Live with the criteria mentioned below: Bidder should have supplied and integrated Central ATCS Platform with at least 50 Adaptive Traffic Signals in One project or at least 20 Adaptive Traffic signals in Two projects and minimum cumulative value of USD two (2) million.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
169	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems/IT/Telecom/Digital Infrastructure/ with a minimum value of USD 10 million per project in last seven (7) years starting 1st Jan 2014. Kindly consider.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
170	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Bidder should have completed integration of Central ATCS Platform (i) at least 100 Adaptive Traffic Signals and (ii) shall be the cumulative value of USD Two (2) million, in last 5 years. Out of this, at least 1 project with minimum 50 Intersections of ATCS Command Control Centre & Network connectivity with project having order value of USD 1 Million and with 1 year O&M completion as on the date of the submission, executed in last 5 years for any Government Department in India . Kindly consider	Refer to Addendum-1, S.No: 12 dated 08-03-2022
171	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of Network Infrastructure/Surveillance System with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Kindly consider.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
172	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR	A. Bidder (single entity or JV member) should have supplied and integrated Central CCC/NOC Platform for each Customer/Client of: (i) at least 1000 Nodes and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. (INR 14.98 Crore each) OR Kindly consider	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
173	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million. OR (i) at least 500 PoPs integrated with Central NOC Platform and (ii) shall be of minimum value of USD two (2) million.	B. The bidder (single entity or JV member) should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million. OR (i) at least 500 PoPs integrated with Central NOC Platform and (ii) shall be of minimum value of USD two (2) million. Kindly consider	Refer to Addendum-1, S.No: 12 dated 08-03-2022
174	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	The Bidder (single entity or JV member) shall have successfully commissioned /Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform OR NOC/NMS/DC Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The platform for each Customer/Client should have been integrated with at least 500 Nodes value of USD five (5) million (INR 3.5 Crore) and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live Please consider	Refer to Addendum-1, S.No: 12 dated 08-03-2022
175	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	Minimum 3 projects having cumulative project value of USD 5 Million with experience of atleast 3 out of the 5 mentioned below Components : - 1) City/Campus Surveillance with at least 500 cameras 2) VMD with at least 40 Variable Message Signs 3) Red Light Enforcement System with at least 80 Stop line violation detection cameras coupled with license plate recognition 4) Speed Enforcement System with at least 50 speed detection devices coupled with license plate recognition 5) Automatic Traffic Counters & Classification devices with at least 200 equipment. Kindly consider	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
176	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Para A and B are contradictory in terms of number ATCS Junctions and cost of the project. The intro given in Para A & Para B indicates that bidder should have ATCS experience of 2 completed projects. The min value of 500 traffic signals and 100 signals are again contradicting with each other. Since, ATCS scope as per RFP is about 165 signals therefore, a firm with running 150 traffic signals with adaptive control will be reasonable for this criterion. ITS applications in India are very recent and therefore, these criteria will be sufficient to prove the efficiency of system integrator in the project. It is also important to consider those projects in this criterion, which are 80% complete with at least one year of convened AMC & ATCS Operations. Our suggestions to amend this clause are: "Bidder should have completed SITC of cumulative 500 Traffic Signals Pan India during last Seven (7) years. Out of these 150 traffic signals should be with adaptive traffic control & operational / Go Live from Integrated Command & Control Centre (ICCC), with successful completion of 80% of the project. <u>THIS WILL BE THE THRESHOLD EXPERIENCE IN ATCS APPLICATIONS FOR INDIAN SYSTEM INTEGRATORS & IS A REASONABLE CONDITION.</u> "The project value (opex plus capex should be minimum USD 1.5 million each in at least 2 (two) projects with minimum 50 adaptive signals operational from ICCC"	Refer to Addendum-1, S.No: 12 dated 08-03-2022
177	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/ transit/ traffic/ ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT/Security and Surveillance systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
178	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	2.4 Experience 2.4.2 (a1) - Specific Experience for ATCS with Automatic Subarea Formulation The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million. Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement	We would like to highlight that ATCS system is still in preliminary stage of adoption in India and the quantum of ATCS experience required is quite huge compared to ATCS implementations. We request CSCL to exclude the requirement of "in operations (DLP/AMC) for at least One (1) year post completion/Go-Live" and modify the clause as under 2.4 Experience 2.4.2 (a1) - Specific Experience for ATCS with Automatic Subarea Formulation The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million. Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
179	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>Para A and B are contradictory in terms of number ATCS Junctions and cost of the project.</p> <p>The intro given in Para A & Para B indicates that bidder should have ATCS experience of 2 completed projects. The min value of 500 traffic signals and 100 signals are again contradicting with each other.</p> <p>Since, ATCS scope as per RFP is about 165 signals therefore, a firm with running 150 traffic signals with adaptive control will be reasonable for this criterion. ITS applications in India are very recent and therefore, these criteria will be sufficient to prove the efficiency of system integrator in the project. It is also important to consider those projects in this criterion, which are 80% complete with at least one year of convened AMC & ATCS Operations. Our suggestions to amend this clause are:</p> <p>"Bidder should have completed SITC of cumulative 500 Traffic Signals Pan India during last Seven (7) years. Out of these 150 traffic signals should be with adaptive traffic control & operational / Go Live from Integrated Command & Control Centre (ICCC), with successful completion of 80% of the project.</p> <p>THIS WILL BE THE THRESHOLD EXPERIENCE IN ATCS APPLICATIONS FOR INDIAN SYSTEM INTEGRATORS & IS A REASONABLE CONDITION.</p> <p>"The project value (opex plus capex should be minimum USD 1.5 million each in at least 2 (two) projects with minimum 50 adaptive signals operational from ICCC"</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
180	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p>	<p>We would request to amend the clause as below i.e</p> <p>The Bidder (single entity or JV/ Consortium) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic /ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
181	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>We would request to amend the clause as below i.e</p> <p>The Bidder (single entity or JV/ Consortium) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
182	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	We would request to amend the clause as below i.e The Bidder (single entity or JV/ Consortium) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	Refer to Addendum-1, S.No: 12 dated 08-03-2022
183	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:	The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:	Refer to Addendum-1, S.No: 12 dated 08-03-2022
184	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4 Experience	Experience	Request to consider the following, 1. Projects implemented in Past 15 years 2. Projects under Operation and Maintenance 3. Experience in more than 3-4 projects instead of only 2	Refer to Addendum-1, S.No: 12 dated 08-03-2022
185	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:	Consortium may be allowed and the criteria may be allowed to be met by any member of consortium	Refer to Addendum-1, S.No: 12 dated 08-03-2022
186	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/ transit/ traffic/ ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	This Clause will only favours specific bidders and hinders the potential bidders from the participation thus we request you to please change the clause to The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/ transit/ traffic/ ICT systems with a minimum value of (INR. 100 Crore) per project in last seven (7) years starting 1st Jan 2014.	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
187	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems <u>with Automatic Subarea Formulation</u> with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million (INR 15,14,35,000/- Rs. 15 crore) for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million. (INR 15,14,35,000/- Rs. 15 crore)</p>	<p>As the ATCS system is new technology being deployed in India and due to Covid most of the projects got delayed which has resulted into delay in execution and go-live hence to increase the participation we request you to please change the clause to</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million (INR 15,14,35,000/- Rs. 15 crore) for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 75 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of . (INR 12 crore)</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
188	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>General Experience - The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014</p>	<p>Request for Change - The Bidder (single entity or JV member) shall have successfully executed/completed / <u>Under O&M (also to be under use by respective clients at the time of bidding)</u> at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2015.</p> <p>Reason for Change - We would like to bring into your kind attention that globally similar solutions are running with their respective clients for years due to their client's satisfaction. All updates and upgrades are regularly provided. Such solution ensure its robustness and more capability to achieve project success. <u>Hence, we have requested to allow projects which are under O&M but still under use by its respective client at the time of bidding.</u></p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
189	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p>	<p>Being very prestigious and high value tender, the floated tender will be an opportunity for many of the OEMs and Consortium partners for participation. But considering the projects which are in Operation and Maintenance will restrict many SI's since many of the smart city tenders are being floated only last two years and the awarded bidders will be under execution. For this reason, the other Smart City/ Safe City projects floated in PAN India in last one year consider the projects which has 80% CAPEX completion and this will also allow number of bidders to participate the tender and make a competitive bid as well. Hence we request to consider 80% CAPEX completed projects in Qualification and Technical Evaluation criteria.</p> <p>Since the Pandemic situation has made the project implementation delay for most of the MSI to get the approvals and execution in time, we request you to consider the projects executed as on bid submission date. Also, the projects executed as on the date of bid submission is also equally qualifies as an experience</p> <p>we request you to allow the project experience with 80% CAPEX completion and the project executed as on the date of bid submission</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
190	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>Being very prestigious and high value tender, the floated tender will be an opportunity for many of the OEMs and Consortium partners for participation. But considering the projects which are in Operation and Maintenance will restrict many SI's since many of the smart city tenders are being floated only last two years and the awarded bidders will be under execution. For this reason, the other Smart City/ Safe City projects floated in PAN India in last one year consider the projects which has 80% CAPEX completion and this will also allow number of bidders to participate the tender and make a competitive bid as well. Hence we request to consider 80% CAPEX completed projects in Qualification and Technical Evalutaion criteria.</p> <p>Since the Pandemic situation has made the project implementation delay for most of the MSI to get the approvals and execution in time, we request you to consider the projects executed as on bid submission date. Also, the projects executed as on the date of bid submission is also equally qualifies as an experience</p> <p>we request you to allow the project experience with 80% CAPEX completion and the project executed as on the date of bid submission</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
191	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	RFP Volume 1		Please clarify whether rail projects can be considered as transportation projects for qualification purpose	RFP condition prevails.
192	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p>	<p>Being very prestigious and high value tender, the floated tender will be an opportunity for many of the OEMs and Consortium partners for participation. But considering the projects which are in Operation and Maintenance will restrict many SI's since many of the smart city tenders are being floated only last two years and the awarded bidders will be under execution. For this reason, the other Smart City/ Safe City projects floated in PAN India in last one year consider the projects which has 80% CAPEX completion and this will also allow number of bidders to participate the tender and make a competitive bid as well. Hence we request to consider 80% CAPEX completed projects in Qualification and Technical Evalutaion criteria.</p> <p>Since the Pandemic situation has made the project implementation delay for most of the MSI to get the approvals and execution in time, we request you to consider the projects executed as on bid submission date. Also, the projects executed as on the date of bid submission is also equally qualifies as an experience</p> <p>we request you to allow the project experience with 80% CAPEX completion and the project executed as on the date of bid submission</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
193	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>Being very prestigious and high value tender, the floated tender will be an opportunity for many of the OEMs and Consortium partners for participation. But considering the projects which are in Operation and Maintenance will restrict many SI's since many of the smart city tenders are being floated only last two years and the awarded bidders will be under execution. For this reason, the other Smart City/ Safe City projects floated in PAN India in last one year consider the projects which has 80% CAPEX completion and this will also allow number of bidders to participate the tender and make a competitive bid as well. Hence we request to consider 80% CAPEX completed projects in Qualification and Technical Evalutaion criteria.</p> <p>Since the Pandemic situation has made the project implementation delay for most of the MSI to get the approvals and execution in time, we request you to consider the projects executed as on bid submission date. Also, the projects executed as on the date of bid submission is also equally qualifies as an experience</p> <p>we request you to allow the project experience with 80% CAPEX completion and the project executed as on the date of bid submission</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
194	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	<p>The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.</p>	<p>It is known fact that Indian sensitivities are unique & any contractor for large project needs to have understanding of same. Considering this it is would be advisable that bidder has experience of implementation in India especially in field of Traffic mangement which is public facing .Hence we request to change criteria as below</p> <p>The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 10 million per project in last ten (10) years starting 1st Jan 2011.</p> <p>And</p> <p>Experience of Urban Traffic Management including implementation and operations for a large Indian city / metro having more than 30million vehicles ,with no down time during transition/up gradation phase.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
195	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>The Bidder (single entity or JV member) / OEM shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 10 years starting 1st Jan 2011. The systems should have achieved been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 40 Adaptive Traffic Signals and (ii) shall be of minimum value of USD half (0.5) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 20 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD half (0.5) million.</p> <p>OR</p> <p>C. OEM should have supplied Minimum 300 ATCS Traffic controllers integrated to Central ATCS Platform. In this case OEM and its affiliates shall confirm support to single bidder only.OEM support undertaking shall be submitted at the time of bid.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
196	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	General Experience The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014.	Our suggestion is to amend this clause for wider participation of MSI – Technical Partners as follows: i. The bidder should have executed at least one project of 20 million USD ii. Or, 2 projects with 10 million USD iii. Or, 3 projects with 7 million USD	Refer to Addendum-1, S.No: 12 dated 08-03-2022
197	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 7 years starting 1st Jan 2014. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.	Para A and B are contradictory in terms of number ATCS Junctions and cost of the project. The intro given in Para A & Para B indicates that bidder should have ATCS experience of 2 completed projects. The min value of 500 traffic signals and 100 signals are again contradicting with each other. Since, ATCS scope as per RFP is about 165 signals therefore, a firm with running 150 traffic signals with adaptive control will be reasonable for this criterion. ITS applications in India are very recent and therefore, these criteria will be sufficient to prove the efficiency of system integrator in the project. It is also important to consider those projects in this criterion, which are 80% complete with at least one year of convened AMC & ATCS Operations. <i>Our suggestions to amend this clause are:</i> "Bidder should have completed SITC of cumulative 500 Traffic Signals Pan India during last Seven (7) years. Out of these 150 traffic signals should be with adaptive traffic control & operational / Go Live from Integrated Command & Control Centre (ICCC), with successful completion of 80% of the project. THIS WILL BE THE THRESHOLD EXPERIENCE IN ATCS APPLICATIONS FOR INDIAN SYSTEM INTEGRATORS & IS A REASONABLE CONDITION. "The project value (opex plus capex should be minimum USD 1.5 million each in at least 2 (two) projects with minimum 50 adaptive signals operational from ICCC" THIS IS VITAL BECAUSE ITS IMPLEMENTATION BEING IN INCEPTION IN INDIA, NOT MANY CITIES HAVE ACHIEVED 100 ATCS JUNCTIONS, SO FAR.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
198	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	Part 1 Bidding Procedures EQC-18	A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client. OR		No query provided.
199	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	Part 1 Bidding Procedures EQC-18	B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.		No query provided.
200	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.1 - General Experience	The Bidder (single entity or JV member) shall have successfully executed/completed at least two (2) projects in transportation/transit/traffic/ICT systems with a minimum value of USD 20 million per project in last seven (7) years starting 1st Jan 2014	Please change the criteria to "at least one (1) project in transportation/transit/traffic/ICT systems with a minimum value of USD 10 million in last seven (7) years starting from 1st Jan 2014	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
201	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/ Clients in the last 7 years starting 1st Jan 2014.</p> <p>The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD two (2) million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD two (2) million.</p>	<p>Please change the criteria to "The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live of ATCS Systems with Automatic Subarea Formulation with at least two Customers/Clients in the last 10 years starting 1st Jan 2010. The systems should have been in operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>A. Bidder should have supplied and integrated Central ATCS Platform for each Customer/Client of: (i) at least 500 Adaptive Traffic Signals and (ii) shall be of minimum value of USD 1.5 million for each Customer/Client.</p> <p>OR</p> <p>B. The bidder should have Supplied and Implemented for each Customer/Client of: (i) at least 100 Adaptive Traffic Signals integrated with Central ATCS Platform and (ii) shall be of minimum value of USD 1.5 million.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
202	Part-1	Section III Evaluation and Qualification Criteria	EQC-18	2.4.2 (a1) - Specific Experience for ATCS	<p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live of ATCS System with Automatic Subarea Formulation with at least 2 Customer/ Clients in last 7 years starting 1st Jan 2014</p> <p>System should have been in operation (DLP/ AMC) for at least 1 year post completion/ Go Live with customer/ Client with each criteria mentioned below</p> <p>A bidder should have supplied and integrated Central ATCS Platform for each Customer/ Client</p> <p>i) At least 500 Adaptive Traffic Signals and</p> <p>ii) Shall be minimum value of USD 2 Million for each Customer/ Client</p> <p>OR</p> <p>A bidder should have supplied and implemented for each customer/ client</p> <p>i) at least 100 Adaptive Traffic Signal integrated with Central ATCS Platform and</p> <p>ii) Shall be of minimum value of USD 2 Million</p>	<p>Considering marking criteria & asked requirement, it requires bidder to have experience of 2500 Junctions for full marks. This is prohibitive criteria & restricting only few companies. We request to change as below :</p> <p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live of ATCS System with Automatic Subarea Formulation with at least 2 Customer/ Clients in last 10 years in India/ Global</p> <p>System should have been in operation (DLP/ AMC) for at least 3 months post completion/ Go Live with customer/ Client with each criteria mentioned below</p> <p>A bidder should have supplied and integrated Central ATCS Platform for each Customer/ Client</p> <p>i) At least 160 Adaptive Traffic Signals and</p> <p>ii) Shall be minimum value of USD 0.5 Million for each Customer/ Client</p> <p>OR</p> <p>A bidder should have supplied and implemented for each customer/ client</p> <p>i) at least 125 Adaptive Traffic Signal integrated with Central ATCS Platform and</p> <p>ii) Shall be of minimum value of USD 2 Million</p> <p>OR</p> <p>i) Please consider each city in place of each customer/client as the ATCS supplier may have worked with different system integrators(customer or client)</p> <p>ii) Please consider cumulative number of 2500 junctions (500x5) across maximum of 05 cities instead of 500+ for each city for scoring maximum marks.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
203	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live Central Integrated Traffic Information & Management System (TIMS) platform with at least 2 Customer/ Clients in last 7 years starting 1st Jan 2014. The TIMS platform for each customer/ client should have been integrated with at least three (3) of the following sub areas for a city wide/ campus wide deployments having minimum value of USD 5 Million and in operation (DLP/AMC) for at least 1 year post completion/ Go live</p> <p>1) City/ Campus surveillance with at least 100 camera 2) Information dissemination with at least 20 Variable Message signs 3) Red Light Enforcement System with at least 100 Stop Line violation detection cameras coupled with license plate recognition 4) Automatic Traffic Counters & Classification devices with at least 50 equipments</p>	<p>Request you to bifurcate the ANPR and RLVD experience as in some projects ANPR is there and in some RLVD is there. Also Analytics are major part of the projects in Traffic. Request you to modify the clause as</p> <p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live Central Integrated Traffic Information & Management System (TIMS) platform with at least 2 Customer/ Clients in last 10 Years in India/Global . The TIMS platform for each customer/ client should have been integrated with at least three (3) of the following sub areas for a city wide/ campus wide deployments having minimum value of USD 5 Million and in operation (DLP/AMC) for at least 3 months post completion/ Go live</p> <p>1) City/ Campus surveillance with at least 100 camera 2) Information dissemination with at least 15 Variable Message signs 3) Red Light Enforcement System with at least 75 Stop Line violation detection cameras 4) License Plate Recognition for at least 75 Camera 5) Automatic Traffic Counters & Classification devices with at least 50 equipments 6) Video Analytics 7) Integration with VMS 8) More than 200 nodes connected in across a city.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
204	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (Single entity or JV member) shall have successfully commissioned/ Go Live with at least 2 customer/clients in last 7 years starting 1st Jan 2014 with minimum value of USD 2 Million each and the system should have been in operation (DLP/ AMC) for at least one (1) Year post completion/ go live for each customer/ client for criteria mentioned below</p> <p>Bidder shall have successfully commissioned/ Go Live intra city CAD/AVL system integrated with real time passenger information system (PIS). Each CAD/ AVL implementation should be controlling the fleet of at least 500 public transit vehicles</p>	<p>Most of the Projects in Transportation does not have huge quantity of buses in single project. Request you to modify the clause as</p> <p>The Bidder (Single entity or JV member) shall have successfully commissioned/ Go Live with at least 2 customer/clients in last 10 Years in India/ Global with minimum value of USD 2 Million each and the system should have been in operation (DLP/ AMC) for at least 3 months post completion/ go live for each customer/ client for criteria mentioned below</p> <p>Bidder shall have successfully commissioned/ Go Live intra city CAD/AVL system integrated with real time passenger information system (PIS). Each CAD/ AVL implementation should be controlling the fleet of at least 200 public transit vehicles</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
205	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>Qualifying Projects as per 2.4.2 (a3)- City Bus System</p> <p>a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5</p>	<p>As in most of the public transportation Projects, fleets of the Transport operator is small. Each project with 500 bus will be very difficult with most of the MSI/Bidders So request you to amend the clause & the scores to be given as follow:</p> <p>Minimum Bus count in one/Multiple projects:</p> <p>1. 200 Buses - 2 2. 300 Buses- 3 3. 400 Buses- 4 4. 500 Buses- 5</p>	Refer to Addendum-1, S.No: 10 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
206	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>2.4.2 (a2) Specific Experience for Traffic Information & Management System</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live</p>	<p>Considering connectivity is a critical component of solution , we request to consider connectivity as component as subareas .Kindly change as below</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform/Security operation Centre with at least two Customers/Clients in last the Ten (10) years starting 1st Jan 2011. The TIMS platform for each Customer/Client should have been integrated with at least two(2) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices/Vehicle counters/detection device with at least 50 equipment • More than 200 nodes connected in across a city. 	Refer to Addendum-1, S.No: 12 dated 08-03-2022
207	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	<p>Justification: The said clause seems to be restrict the participation across the prospective bidders, considering the fact that very few Bidder will have such credential, ultimately authority will not have competition across the bidder. So, our request is to relax the qualification in this criteria.</p> <p>Change Request: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least <u>one Customer/Client</u> in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least <u>two(2)</u> of the following subareas for a city-wide / campus-wide deployment. having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition <u>and integration with e-challan system</u> • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment <p>* <u>Public Address system for 10 Locations</u></p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
208	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles</p>	<p>Justification:</p> <p>1. Ideally in India only three or four cities have more than 500 bus fleet size and some of these cities do not have AVL implemented. Currently Intra city word is restricting the other players to Participate in the RFP though the same solution has been implemented for a larger fleet size at Intercity level. So, we request you to allow inter city experience also in the same criteria.</p> <p>2. Value is not important in this type of criteria as there is already number of buses has been mentioned for the experience</p> <p>Change Request:</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>Bidder shall have successfully commissioned/Go-Live Intra-city/<u>Intercity</u> CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least <u>300</u> public transit vehicles</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
209	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>2.4.2 (a2) Specific Experience for Traffic Information & Management System</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	<p>1. Request to modify as follows:</p> <p>2.4.2 (a2) Specific Experience for Traffic Information & Management System</p> <p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least two (2) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 400 50 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment <p>2. We understand for complying "operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client", client Go-live letter shall be acceptable, please confirm</p> <p>3. We understand ITMS/ ICCC solution shall be acceptable as TIMS, please confirm</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
210	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	2.4.2 (a3) Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1 st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	1. Request to modify as follows: 2.4.2 (a3) Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully integrated/ commissioned/Go-Live with at least two one Customers/Clients in last seven (7) years starting 1 st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully integrated/ commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles. 2. We understand for complying "operations (DLP/AMC) for at least One (1) year post completion/Go-Live for each Customer/Client", client Go-live letter shall be acceptable, please confirm	Refer to Addendum-1, S.No: 12 dated 08-03-2022
211	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	2.4.2 (a2) Specific Experience for Traffic Information & Management System: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1 st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	Kindly amend the clause as below: 2.4.2 (a2) Specific Experience for Traffic Information & Management System: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1 st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum project value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 10 Variable Message Signs • Red Light Enforcement System with at least 10 400 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 10 20 speed detection camera devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment • Echallan system • Command Control Center	Refer to Addendum-1, S.No: 12 dated 08-03-2022
212	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	2.4.2 (a3) Specific Experience for City Bus System: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1 st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	Kindly amend the clause as below: 2.4.2 (a3) Specific Experience for City Bus System: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1 st Jan 2014 with minimum project value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementations of 2 projects meeting the above requirement should be controlling a fleet cumulative of at least 500 public transit vehicles.	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
213	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	1. Please allow traffic management experience of Tunnels & expressways along with City/campus. 2. Please also consider "Automatic Incident Detection/Traffic Incident Detection System (TIDS)" , "Traffic Signalling" as an integration sub systems. 3. Project value asked for TIMS software integration project is high and may be please be revised to reflect the scope of integration only related to traffic management scope. you may consider TIMS platform integration value not less than 150000 USD in each project. 4. Please consider upgrade projects also as large project gets upgraded with more subsystem during a span of time. 5. Please allow the projects completion period of 10 years.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
214	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	Form of Power of Attorney for Lead Member of JV	The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public.	It is requested to kindly consider Company Rubber stamp instead of common seal. Affixing Common Seal for tendering purposes requires the approval from Board of Directors, which includes senior IAS officials from Delhi Government and apex officials from IDFC Foundation. It was consequently not practicable to arrange a Board Meeting and taking board approval for common seal in short notice We therefore, request waiver on affixing Company Rubber Stamp instead of common seal	Refer to Addendum-1, S.No: 18 dated 08-03-2022
215	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	In order to maximise Indian bidder participation Kindly revise criteria as below The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the ten (10) years starting 1st Jan 2011. The TIMS platform for each Customer/Client should have been integrated with at least two (2) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD one (1) million and achieved in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 50 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices / Vehicle counters / detection devices with at least 50 equipment • Atleast 200 active nodes in a city with area of 100 sq km. 	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
216	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	<p>We request the authority to kindly modify the clause as follows: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with atleast ONE project in last the seven (7) years starting 1st Jan 2014. The TIMS platform should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million :</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment • Smart City platform 	Refer to Addendum-1, S.No: 12 dated 08-03-2022
217	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra- city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles</p>	<p>We request the authority to kindly modify the clause as follows: The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least ONE project in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 100 public transit vehicles</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
218	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p>	<p>Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS) controlling a fleet of at least 500 public transit vehicles. OR Go-Live ICT / Telecom Infrastructure Nodes with EMS, live monitoring/automation controlling atleast 500 Nodes</p> <p>Please clarify</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
219	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	Bidder or any of the consortium member is not debarred or blacklisted by any Central / State / PSU or Private Entity in India in last 10 years, from the date of publishing of this tender. Please clarify.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
220	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:- Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
221	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	2.4 Experience 2.4.2 (a2) Specific Experience for Traffic Information & Management System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement	We would like to highlight that there aren't many projects with the required quantity of subsystem implemented in a single project as compared to the experience required under the said clause. We request CSCL to consider any two subareas instead of three and modify the clause as under: 2.4 Experience 2.4.2 (a2) Specific Experience for Traffic Information & Management System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) two (2) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
222	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>2.4 Experience 2.4.2 (a3) Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p> <p>Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement</p>	<p>We would like to highlight that CAD/AVL Projects do not comprise of Project values close to USD two (2) million. Hence we request CSCL to kindly exclude the project value requirement. Further we also request to accept non public transit vehicles project experience as AVL technology, functionality & complexities remains same irrespective of type of vehicle. We suggest to modify the clause as under:</p> <p>2.4 Experience 2.4.2 (a3) Specific Experience for City Bus System The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p> <p>Single Entity: Must meet requirement All Parties Combined: N/A Each Member: N/A One member: Must meet requirement</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
223	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p>	<p>We would request to amend the clause as below i.e The Bidder (single entity Or JV/ Consortium) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
224	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p>	<p>The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <p>Remark : Consortitum may be allowed and the criteria may be allowed to be met by any member of consortium</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
225	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each</p>	<p>The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each</p> <p>Remark : Consortitum may be allowed and the criteria may be allowed to be met by any member of consortium</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
226	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:	Consortium may be allowed and the criteria may be allowed to be met by any member of consortium	Refer to Addendum-1, S.No: 12 dated 08-03-2022
227	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	The Bidder (single entity / Consortium or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each	Consortium may be allowed and the criteria may be allowed to be met by any member of consortium	Refer to Addendum-1, S.No: 12 dated 08-03-2022
228	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million (INR 37,85,87,500/- Rs. 37 Crore) and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	As the ITMS system is new technology being deployed in India and due to Covid most of the projects got delayed which has resulted into delay in execution and go-live hence to increase the participation, also Echallan System is the most fundamental and essential feature of ITMS system hence we request you to please change the clause to The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million (INR 20 Crore) and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 400 80 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment • E-challan with Vahan integration in ITMS System 	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
229	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles</p>	<p>Request for Change--> The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live / Under O&M (also to be under use by the respective client at the time of bidding) with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below:</p> <p>Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.</p> <p>Reason for Change - We would like to bring into your kind attention that globally similar solutions are running with their respective clients for years due to their client's satisfaction. All updates and upgrades are regularly provided. Such solution ensure its robustness and more capability to achieve project success. <u>Hence, we have requested to allow projects which are under O&M but still under use by its respective client at the time of bidding.</u></p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
230	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live:</p> <ul style="list-style-type: none"> • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment 	<p>Being very prestigious and high value tender, the floated tender will be an opportunity for many of the OEMs and Consortium partners for participation. But considering the projects which are in Operation and Maintenance will restrict many SI's since many of the smart city tenders are being floated only last two years and the awarded bidders will be under execution. For this reason, the other Smart City/ Safe City projects floated in PAN India in last one year consider the projects which has 80% CAPEX completion and this will also allow number of bidders to participate the tender and make a competitive bid as well. Hence we request to consider 80% CAPEX completed projects in Qualification and Technical Evalutaion criteria.</p> <p>Since the Pandemic situation has made the project implementation delay for most of the MSI to get the approvals and execution in time, we request you to consider the projects executed as on bid submission date. Also, the projects executed as on the date of bid submission is also equally qualifies as an experience</p> <p>we request you to allow the project experience with 80% CAPEX completion and the project executed as on the date of bid submission</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
231	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles.	As per the BOM, they have requested for PIS displays of 616 numbers and you have requested for 500 numbers and as per Technical criteria, you have requested to five project completion as well where the numbers crosses for more than 2500 numbers. Hence we request you to minimize the criteria as 300 numbers of AVL implementation. Also some of the projects might be executed for SWM vehicles where the works for buses/ vehicles will be same and so we request you to accept the credentials executed for SWM vehicles as well. The requested criteria is, "The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of atleast 300 public transit vehicles/ SWM vehicles"	Refer to Addendum-1, S.No: 12 dated 08-03-2022
232	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the seven (7) years starting 1st Jan 2014. The TIMS platform for each Customer/Client should have been integrated with at least three (3) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD five (5) million and in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 100 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices with at least 50 equipment	The Bidder (single entity or JV member) shall have successfully commissioned/Go-Live Central Integrated Traffic Information & Management System (TIMS) Platform with at least two Customers/Clients in last the ten (10) years starting 1st Jan 2011. The TIMS platform for each Customer/Client should have been integrated with at least two (2) of the following subareas for a city-wide / campus-wide deployment having minimum value of USD one (1) million and achieved in operations (DLP/AMC) for at least one (1) year post completion/Go-Live: • City/Campus Surveillance with at least 100 cameras • Information Dissemination with at least 20 Variable Message Signs • Red Light Enforcement System with at least 50 Stop line violation detection cameras coupled with license plate recognition • Speed Enforcement System with at least 20 speed detection devices coupled with license plate recognition • Automatic Traffic Counters & Classification devices / Vehicle counters / detection devices with at least 50 equipment • Atleast 200 active nodes in a city with area of 100 sq km.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
233	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a3) - Specific Experience for City Bus System	The Bidder (single entity or JV member) shall have successfully commissioned/ Go-Live with at least two Customers/Clients in last seven (7) years starting 1st Jan 2014 with minimum value of USD two (2) million each and the systems should have been in operations (DLP/AMC) for at least one (1) year post completion/Go-Live for each Customer/Client with the criteria mentioned below: Bidder shall have successfully commissioned/Go-Live Intra-city CAD/AVL Systems integrated with real time Passenger Information System (PIS). Each CAD/AVL implementation should be controlling a fleet of at least 500 public transit vehicles	We kindly request to consider "intercity" experience too in this clause. Also kindly reduce to public transit vehicles number from 500 to 300.	Refer to Addendum-1, S.No: 12 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
234	Part-1	Section III Evaluation and Qualification Criteria	EQC-19	2.4.2 (a2) - Specific Experience for Traffic Information & Management System	<p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live Central Integrated Traffic Information & Management System (TIMS) platform with at least 2 Customer/ Clients in last 7 years starting 1st Jan 2014. The TIMS platform for each customer/ client should have been integrated with at least three (3) of the following sub areas for a city wide/ campus wide deployments having minimum value of USD 5 Million and in operation (DLP/AMC) for at least 1 year post completion/ Go live</p> <p>1) City/ Campus surveillance with at least 100 camera 2) Information dissemination with at least 20 Variable Message signs 3) Red Light Enforcement System with at least 100 Stop Line violation detection cameras coupled with license plate recognition 4) Automatic Traffic Counters & Classification devices with at least 50 equipments</p>	<p>Request you to bifurcate the ANPR and RLVD experience as in some projects ANPR is there and in some RLVD is there. Also Analytics are major part of the projects in Traffic. Request you to modify the clause as</p> <p>The Bidder (Single Entity or JV Member) shall have successfully commissioned/ Go Live Central Integrated Traffic Information & Management System (TIMS) platform with at least 2 Customer/ Clients in last 10 Years in India/Global . The TIMS platform for each customer/ client should have been integrated with at least three (3) of the following sub areas for a city wide/ campus wide deployments having minimum value of USD 5 Million and in operation (DLP/AMC) for at least 3 months post completion/ Go live</p> <p>1) City/ Campus/ Tunnels & expressways surveillance with at least 100 camera 2) Information dissemination with at least 15 Variable Message signs 3) Red Light Enforcement System with at least 75 Stop Line violation detection cameras 4) License Plate Recognition for at least 75 Camera 5) Automatic Traffic Counters & Classification devices with at least 50 equipments 6) Video Analytics 7) Integration with VMS 8) More than 200 nodes connected in across a city. 9) "Automatic Incident Detection/Traffic Incident Detection</p> <p>Also .please consider upgrade projects also as large project gets upgrded with more subsystem during a span of time.</p>	Refer to Addendum-1, S.No: 12 dated 08-03-2022
235	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	<p>Project Manager CBS</p> <p>-International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project</p>	<p>Experience in Traffic domain /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available locally and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged.</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
236	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	<p>Project Manager CBS</p> <p>Experience: Experience in Similar ITS projects and involved in end-to-end implementation; 10 years</p> <p>International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project</p>	<p>The said criteria restricting the participating across the bidder who have resources with vast experience in large scale project implementation in India.</p> <p>Apart from the same, Implementation methodology / project dynamics of International project and Indian Domestic project have vast differences including the local language and way of working with Officials in India.</p> <p>Hence we request to amend the said clause and allow Indian Project execution experience as well.</p> <p>Change Request:</p> <p><u>Domestic /</u> International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
237	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	Project Manager TIMS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 15 years minimum -Experience in Similar ITS projects and involved in end-to-end implementation; 10 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre	Request you to kindly remove international experience and Kindly amend the clause as below: Project Manager TIMS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 45 10 years minimum -Experience in Similar ITS/ICT projects and involved in end-to-end implementation; 40 7 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre	Refer to Addendum-1, S.No: 08 dated 08-03-2022
238	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	Project Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 15 years minimum -Experience in Similar ITS projects and involved in end-to-end implementation; 10 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.CAD/AVL system 2.Public Transit Infrastructure 3.Command Control Centre 4. Depot Management 5. PIS System	Request you to kindly remove international experience and Kindly amend the clause as below: Project Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or Equivalent Experience: -Total Work Experience; 45 10 years minimum -Experience in Similar ITS/ICT projects and involved in end-to-end implementation; 7 40 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.CAD/AVL system 2.Public Transit Infrastructure 3.Command Control Centre 4. Depot Management 5. PIS System	Refer to Addendum-1, S.No: 08 dated 08-03-2022
239	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	3.Project Manager CBS Experience: Total Work Experience; 15 years , -Experience in Similar ITS projects and involved in end to end implementation ; 10 years -International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.CAD/AVL system 2.Public Transit Infrastructure 3.Command Control Centre 4. Depot Management 5. PIS System	We request the authority to change the following : 3. Project Manager CBS Experience: Total Work Experience; 12 years , -Experience in Similar ITS projects and involved in end to end implementation ; 5 years - Deletion of International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in similar project which includes any of the below mentioned systems in each project; 2 projects 1.Area Traffic Signal Control System 2.Traffic Management & Traveller Information System 3.ITS Infrastructure or City / Campus wide System 4.Command Control Centre 5. ICT projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
240	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	<p>Project Manager CBS</p> <p>Education: -Graduate in Civil/Electronics/Computer Science/or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or EquivalentExperience -Total Work Experience; 15 years minimum -Experience in Similar ITS projects and involved in end-to end implementation; 10 years -International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 3 projects 1.CAD/AVL system 2.Public Transit Infrastructure 3.Command Control Centre 4. Depot Management 5. PIS System</p>	<p>Project Manager CBS</p> <p>Education: -Graduate in Civil/Electronics/Computer Science/ or equivalent - Post-Graduation in Management/ Civil/ Electronics/ or EquivalentExperience -Total Work Experience; 15 years minimum -Experience in Similar ITS/Security and surveillance projects and involved in end-to end implementation; 10 years -International/National Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project -Experience in coordinating with Central/ State/ Local Government agencies in urban infrastructure -Experience in similar project which includes any of the below mentioned systems in each project; 2 projects 1.CAD/AVL system 2.Public Transit Infrastructure 3.Command Control Centre 4. Depot Management 5. PIS System</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
241	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	1.1.1 Personnel	<p>Project Manager CBS</p> <p>Experience: Experience in Similar ITS projects and involved in end-toend implementation; 10 years</p> <p>International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project</p>	We kindly request to consider Domestic experience / International experience.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
242	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	(3) Evaluation of Key Staff	<p>Project Manager TIMS</p> <p>-Total Work Experience; 15 years , -Experience in Similar ITS projects; 10 years</p>	Kindly request you to consider the total experience of 8 years with 4 years experience in handling govt Projects In India	Refer to Addendum-1, S.No: 11 dated 08-03-2022
243	Part-1	Section III Evaluation and Qualification Criteria	EQC-2	(3) Evaluation of Key Staff	<p>Project Manager CBS</p> <p>-Total Work Experience; 15 years minimum -Experience in Similar ITS projects and involved in end-to-end implementation; 10 years</p>	Kindly request you to consider the total experience of 8-10 years with 4 years experience in handling govt Projects In India	Refer to Addendum-1, S.No: 11 dated 08-03-2022
244	Part-1	Section III Evaluation and Qualification Criteria	EQC-20	Part 1, 2.4 Experience, Page no 64	<p>Notes for the Bidder</p> <p>(i) Subcontractor experience or qualifications shall not be allowed for any criterion as defined under 2.4</p>	<p>We request to amend the clause as follow:</p> <p>"Notes for the Bidder (i) Subcontractor experience or qualifications shall not be allowed for any criterion as defined under 2.4"</p>	RFP condition prevails.
245	Part-1	Section III Evaluation and Qualification Criteria	EQC-20	2.4 Experience	<p>EQC-18 to EQC-20 Eligibility and Qualification Criteria</p> <p>Notes for the Bidder (i) Subcontractor experience or qualifications shall not be allowed for any criterion as defined under 2.4</p>	<p>As per our understanding Projects executed by bidder in the capacity of Subcontractor shall be considered for meeting the Eligibility and Qualification Criteria. Kindly confirm whether our understanding is correct?</p>	No. RFP condition prevails.
246	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert -International* Experience :-International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p>	<p>Experience in Traffic domain/ATCS /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available locally and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged.</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
247	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert – International</p> <p>Experience: -</p> <p>Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 15 years</p> <p>International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p>	<p>The said criteria restricting the participating across the bidder who have resources with vast experience in large scale project implementation in India.</p> <p>Apart from the same, Implementation methodology / project dynamics of International project and Indian Domestic project have vast differences including the local language and way of working with Officials in India.</p> <p>Hence we request to amend the said clause and allow Indian Project execution experience as well.</p> <p>Change Request:</p> <p><u>Domestic / International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</u></p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
248	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>CBS Expert – International</p> <p>Experience:</p> <p>-Experience in CAD/AVL projects; 15 years</p> <p>-International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project</p>	<p>The said criteria restricting the participating across the bidder who have resources with vast experience in large scale project implementation in India.</p> <p>Apart from the same, Implementation methodology / project dynamics of International project and Indian Domestic project have vast differences including the local language and way of working with Officials in India.</p> <p>Hence we request to amend the said clause and allow Indian Project execution experience as well.</p> <p>Change Request:</p> <p><u>Domestic / International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project</u></p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
249	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert – Local</p> <p>Experience: '</p> <p>-International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years</p> <p>Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project</p>	<p>The said criteria restricting the participating across the bidder who have resources with vast experience in large scale project implementation in India.</p> <p>Apart from the same, Implementation methodology / project dynamics of International project and Indian Domestic project have vast differences including the local language and way of working with Officials in India.</p> <p>Hence we request to amend the said clause and allow Indian Project execution experience as well.</p> <p>Change Request:</p> <p><u>Domestic / International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years</u></p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
250	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert -International*</p> <p>-Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 15 years</p> <p>-International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 3 projects</p>	<p>Request to modify as below:</p> <p>1.1.1 Personnel</p> <p>The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements</p> <p>ATCS Expert -International*</p> <p>-Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 5 years</p> <p>-International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 1 projects</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
251	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	TIMS Expert – International* Experience in designing, implementing, and integrating multiple Traffic Information & Management systems; 15years -International Experience in TIMS project of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects.; 3 projects.	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements TIMS Expert – International* Experience in designing, implementing, and integrating multiple Traffic Information & Management systems/ ITMS/ITS/ICCC; 5years -International/ India Experience in TIMS/ ITMS/ ICC project of at least total project value 1 million USD covering end to end installations; 1 Project -Experience in TIMS/ ITMS/ITS/ICCC;projects.; 3 projects.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
252	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	CBS Expert – International* -Experience in CAD/AVL projects; 15 years -International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project -Experience in CAD/AVL projects; 3 projects	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements CBS Expert – International* -Experience in CAD/AVL/ PIS projects; 5 years -International/ India Experience in CAD/AVL/ PIS project of at least total project value 1 million USD covering end to end installations; 1 Project -Experience in CAD/AVL/ PIS projects; 1 project	Refer to Addendum-1, S.No: 08 dated 08-03-2022
253	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	ATCS Expert - Local -International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years -Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects; 3 projects	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements ATCS Expert - Local -International/ India experience in traffic signalling projects with adaptive traffic signalling/ ATCC projects; 5 years -Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects; 3 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
254	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	ATCS Expert -International* Education: Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 15 years minimum -Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 15 years -International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 3 projects	Request you to kindly remove international experience and Kindly amend the clause as below: ATCS Expert - International* Education: Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 7 45 years minimum -Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 45 5 years -International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 3 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
255	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	TIMS Expert – International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 15 years minimum -Experience in designing, implementing, and integrating multiple Traffic Information & Management systems; 15years -International Experience in TIMS project of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects.; 3 projects.	Request you to kindly remove international experience and Kindly amend the clause as below: TIMS Expert – International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 45 7 years minimum -Experience in designing, implementing, and integrating multiple Traffic Information & Management systems; 45 5 years -International Experience in TIMS project of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects.; 3 projects.	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
256	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	CBS Expert – International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 15 years minimum -Experience in CAD/AVL projects; 15 years -International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project -Experience in CAD/AVL projects; 3 projects	Request you to kindly remove international experience and Kindly amend the clause as below: CBS Expert – International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 15 7 years minimum -Experience in CAD/AVL projects; 15 5 years International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project -Experience in CAD/AVL projects; 3 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
257	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	7. ATCS Expert - Local 8. TMS Expert - Local 9. CBS Expert - Local	We request you to kindly delete the requirement of these experts (S. No. 7, 8 & 9) as it is already covered above: 7. ATCS Expert - Local 8. TMS Expert - Local 9. CBS Expert - Local	Refer to Addendum-1, S.No: 08 dated 08-03-2022
258	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	4. ATCS Expert -International, 5.TIMS Expert –International, 6.CBS Expert –International,	The local experts are suffice the requirement of this tender. Hence, We request the authority to kindly delete the requirement of International experts.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
259	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	7.ATCS Expert - Local Experience: -Total Work Experience; 12 years -International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years -Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects; 3 projects	We request the authority to change the following : Experience: -Total Work Experience; 10 years - Local experience in traffic signalling projects with adaptive traffic signalling projects; 5 years -Deletion of this clause: Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects; 2 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
260	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	ATCS Expert - International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent -Total Work Experience; 15 years minimum -Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 15 years -International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 3 projects	ATCS Expert - International* Education: -Graduate in Civil/Electronics/Computer Science/or equivalent -Total Work Experience; 10 years minimum -Experience in traffic signalling/ projects, preferably adaptive traffic signalling projects; 15 years -International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project -Experience in Adaptive Area Traffic Signal Control projects with automatic subarea formulation; 3 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
261	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>TIMS Expert – International*</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent</p> <p>-Total Work Experience; 15 years minimum</p> <p>-Experience in designing, implementing, and integrating multiple Traffic Information & Management systems; 15years</p> <p>-International Experience in TIMS project of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in TIMS projects.; 3 projects.</p>	<p>TIMS Expert – International*</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent</p> <p>-Total Work Experience; 12 years minimum</p> <p>-Experience in designing, implementing, and integrating multiple Traffic Information & Management systems; 15years</p> <p>-International Experience in TIMS project of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in TIMS projects.; 3 projects.</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
262	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>CBS Expert – International*</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent</p> <p>Experience</p> <p>-Total Work Experience; 15 years minimum</p> <p>-Experience in CAD/AVL projects; 15 years</p> <p>-International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in CAD/AVL projects; 3 projects</p>	<p>CBS Expert – International*</p> <p>Education:</p> <p>-Graduate in Civil/Electronics/Computer Science/or equivalent</p> <p>Experience</p> <p>-Total Work Experience; 10 years minimum</p> <p>-Experience in CAD/AVL projects; 15 years</p> <p>-International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project</p> <p>-Experience in CAD/AVL projects; 3 projects</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
263	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	RFP Part 1, Page 47	CBS Expert - International	<p>As per the requirement, it seems that CBS International is mandatory for this project keeping objectives of CSCL into consideration including incorporating international best practices etc.</p> <p>Kindly Confirm if our understanding is correct.</p>	Yes. Your understanding is correct.
264	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert -International*</p> <p>Experience :-International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p>	<p>Experience in Traffic domain /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available in India and don't see any value add on international experience which needs to be deleted . Insisting on international resource is not adding value to project ,instead adding costs to project .Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022
265	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	<p>ATCS Expert – International</p> <p>Experience: -</p> <p>Experience in traffic signalling projects, preferably adaptive traffic signalling projects; 15 years</p> <p>International Experience in Area Traffic Signal Control with automatic subarea formulation of at least 1 million USD covering end to end installations; 1 Project</p>	<p>We kindly request to consider Domestic experience / International experience.</p>	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
266	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	1.1.1 Personnel	CBS Expert – International Experience: -Experience in CAD/AVL projects; 15 years -International Experience in CAD/AVL project of at least 1 million USD covering end to end installations; 1 Project	We kindly request to consider Domestic experience / International experience.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
267	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	(3) Evaluation of Key Staff	ATCS Expert -International* -Total Work Experience; 15 years minimum	Kindly request you to consider total experience of 8 years in India	Refer to Addendum-1, S.No: 11 dated 08-03-2022
268	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	(3) Evaluation of Key Staff	TIMS Expert – International* -Total Work Experience; 15 years minimum	Kindly request you to consider total experience of 8 years in India	Refer to Addendum-1, S.No: 11 dated 08-03-2022
269	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	(3) Evaluation of Key Staff	CBS Expert – International* -Total Work Experience; 15 years minimum	Kindly request you to consider total experience of 8 years in India Kindly request you to remove " -Experience in CBS of at least 1 million USD covering end to end installations; 1 Project"	Refer to Addendum-1, S.No: 11 dated 08-03-2022
270	Part-1	Section III Evaluation and Qualification Criteria	EQC-3	(3) Evaluation of Key Staff	ATCS Expert - Local -Total Work Experience; 12 years	Kindly request you to consider total experience of 6 years in India" Kindly request you to remove -Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project"	Refer to Addendum-1, S.No: 11 dated 08-03-2022
271	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	ATCS Expert - Local International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years	Experience in Traffic domain/ATCS /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available locally and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged. We suggest to accept bidder undertaking to provide asked resources from proposed OEM	Refer to Addendum-1, S.No: 08 dated 08-03-2022
272	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	CBS Expert – Local Experience: -International experience in CAD/AVL projects. Depot Management System; 10 years Experience in CBS of at least 1 million USD covering end to end installations; 1 Project	The said criteria restricting the participating across the bidder who have resources with vast experience in large scale project implementation in India. Apart from the same, Implementation methodology / project dynamics of International project and Indian Domestic project have vast differences including the local language and way of working with Officials in India. Hence we request to amend the said clause and allow Indian Project execution experience as well. Change Request: <u>Domestic</u> / International experience in CAD/AVL projects. Depot Management System; 10 years	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
273	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	TIMS Expert - Local -International experience in city-wide Traffic Information & Management projects integrated with control room;10 years. -Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects; 3 projects	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements TIMS Expert - Local -International/ India experience in city-wide Traffic Information & Management/ITMS/ITS/ICCC projects integrated with control room;10 years. -Experience in TIMS/ITMS/ITS/ICCC of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS/ ITMS/ITS/ICCC projects; 3 projects TIMS Expert – International* Experience in designing, implementing, and integrating multiple Traffic Information & Management systems/ ITMS/ITS/ICCC; 5years -International/ India Experience in TIMS/ ITMS/ ICC project of at least total project value 1 million USD covering end to end installations; 1 Project -Experience in TIMS/ ITMS/ITS/ICCC;projects.; 3 projects.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
274	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	CBS Expert - Local -International experience in CAD/AVL projects. Depot Management System; 10 years -Experience in CBS of at least 1 million USD covering end to end installations; 1 Project -Experience in Public Transit System – 3 Projects 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	Request to modify as below: 1.1.1 Personnel The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements CBS Expert - Local -International/ India experience in CAD/AVL projects. Depot Management System; 5 years -Experience in CBS/ CAD/AVL/ PIS of at least 1 million USD covering end to end installations; 1 Project -Experience in Public Transit System/ CAD/AVL/ PIS consisting of any one– 3 Projects 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	Refer to Addendum-1, S.No: 08 dated 08-03-2022
275	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	Operation Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 10 years -Indian experience with in-depth knowledge of bus agencies and their systems along with a good understanding of ITS implementation for bus agencies with 10 years.	Kindly amend the clause as below: Operation Manager CBS Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 40 5 years -Indian experience with in-depth knowledge of bus agencies and their systems along with a good understanding of ITS implementation for bus agencies with 40 3years.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
276	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	8.TIMS Expert - Local Experience: -Total Work Experience; 12 years, -International experience in city-wide Traffic Information & Management projects integrated with control room;10 years. -Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects; 3 projects	We request the authority to change the following : Experience: -Total Work Experience; 10 years, -Local experience in city-wide Traffic Information & Management projects integrated with control room; 5 years. -Deletion of this clause: Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects; 2 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
277	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	9.CBS Expert - Local Experience: -Total Work Experience; 12 years -International experience in CAD/AVL projects. Depot Management System; 10 years -Experience in CBS of at least 1 million USD covering end to end installations; 1 Project -Experience in Public Transit System – 3 Projects 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	We request the authority to change the following : -Total Work Experience; 10 years -Local experience in CAD/AVL projects. Depot Management System; 5 years -Deletion of this clause: Experience in CBS of at least 1 million USD covering end to end installations; 1 Project -Experience in Public Transit System including any of the foolowing component– 1 Project 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	Refer to Addendum-1, S.No: 08 dated 08-03-2022
278	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	10. Operation Manager CBS Experience: -Indian experience with in-depth knowledge of bus agencies and their systems along with a good understanding of ITS implementation for bus agencies with 10 years.	We request the authority to change the following : Experience: Indian experience with in-depth knowledge of bus agencies and their systems along with a good understanding of ITS implementation for bus agencies with 5 years.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
279	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	TIMS Expert - Local Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience -Total Work Experience; 12 years minimum --International experience in city-wide Traffic Information & Management projects integrated with control room;10 years. --Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project -Experience in TIMS projects; 3 projects	TIMS Expert - Local Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience -Total Work Experience; 12 years minimum --International experience in city-wide Traffic Information & Management projects integrated with control room;10 years. --Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project --Experience in TIMS projects; 3 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
280	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	CBS Expert - Local Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience -Total Work Experience; 12 years minimum --International experience in CAD/AVL projects. Depot Management System; 10 years --Experience in CBS of at least 1 million USD covering end to end installations; 1 Project --Experience in Public Transit System – 3 Projects 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	CBS Expert - Local Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience -Total Work Experience; 12 years minimum --International experience in CAD/AVL projects. Depot Management System; 10 years --Experience in CBS of at least 1 million USD covering end to end installations; 1 Project --Experience in Public Transit System – 3 Projects 1. CAD/AVL system 2. Public Transit Infrastructure 3. Command Control Centre 4. Depot Management 5. PIS System Experience	Refer to Addendum-1, S.No: 08 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
281	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	RFP Part 1, Page 48	CBS Expert - International	As per the definition and requirements mentioned in the RFP, CBS also comprises Depot Management System. Hence the requirement as mentioned in the clause regarding international expertise is also deemed to be extended for the proposed Depot Management System (DMS) since DMS is solely responsible for overall core data generation and its management for bus transport. Kindly Confirm if our understanding is correct.	RFP condition prevails.
282	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	ATCS Expert – Local Experience: ' -International experience in traffic signalling projects with adaptive traffic signalling projects; 10 years Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project	We kindly request to consider Domestic experience / International experience.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
283	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	1.1.1 Personnel	CBS Expert – Local Experience: -International experience in CAD/AVL projects. Depot Management System; 10 years Experience in CBS of at least 1 million USD covering end to end installations; 1 Project	We kindly request to consider Domestic experience / International experience.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
284	Part-1	Section III Evaluation and Qualification Criteria	EQC-4	(3) Evaluation of Key Staff	TIMS Expert - Local Total Work Experience; 12 years,	Kindly request you to consider total experience of 7 years in India Kindly request remove " -Experience in TIMS of at least 1 million USD covering end to end installations; 1 Project"	Refer to Addendum-1, S.No: 11 dated 08-03-2022
285	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	1.1.1 Personnel	Note: The positions with asterisk (*) which shall be the international staff.	Experience in Traffic domain /ICT/project management is required for such large projects and should be the pre-requisite However such resources are available in India and don't see any value add on international experience which needs to be deleted . Further bidding company is providing all required undertakings with liability ownership to deliver project as envisaged.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
286	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	1.1.1 Personnel	Note: Note: The positions with asterisk (*) which shall be the international staff.	Request to modify as follows: Note: The positions with asterisk (*) which shall be the international/ India staff.	Refer to Addendum-1, S.No: 08 dated 08-03-2022
287	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	Part 1 Section III Evaluation and Qualification Criteria 1.1.1 Personnel EQC-5 & Part 2 Employer's Requirement Table 6-1: Requirement of Contractor's Personnel ER-43	Safety Infrastructure Specialist Education: - Graduate in Civil/or equivalent Experience: -Total Work Experience; 10 years -Experience in Similar Works as Safety Engineer; 7 years	Kindly amend the clause as below: Safety Infrastructure Specialist Education: - Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 40 5 years -Experience in Similar ICT Works as Safety Engineer; 7 3years	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
288	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	Part 1 Section III Evaluation and Qualification Criteria 1.1.1 Personnel EQC-5 & Part 2 Employer's Requirement Table 6-1: Requirement of Contractor's Personnel ER-43	Quality Control Engineer Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 10 years -Experience in designing and implementing Quality Assurance and Quality Control processes; 7 years	Kindly amend the clause as below: Quality Control Engineer Education: -Graduate in Civil/Electronics/Computer Science/or equivalent Experience: -Total Work Experience; 40 5 years -Experience in designing and implementing Quality Assurance and Quality Control processes; 7 3 years -Experience in relevant projects; 2 projects	RFP condition prevails.
289	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	1.1.1 Personnel	Financial Manager Education: - Graduate in MBA Finance, Commerce /CA/CFA Experience: -Total Work Experience; 12 years -Experience in Similar Works as Accounts/Finance; 10 years -Experience in relevant projects; 2 projects	Kindly amend the clause as below: Financial Manager Education: - Graduate in MBA Finance/Masters in Commerce /CA/CFA/Equivalent Experience: -Total Work Experience; 42 7 years -Experience in Similar Works as Accounts/Finance; 40 5 years -Experience in relevant projects; 2 projects	Refer to Addendum-1, S.No: 08 dated 08-03-2022
290	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	Part 1 Section III Evaluation and Qualification Criteria 1.1.1 Personnel EQC-5 & Part 2 Employer's Requirement Table 6-1: Requirement of Contractor's Personnel ER-42	Traffic/Transportation Engineer/ Planner Education: - Graduate in Civil/ Architecture /Equivalent -Masters in Transportation/or Planning/ Urban design/ Infrastructure or equivalent Experience: -Total Work Experience; 10 years -Experience in Similar Works as Traffic/Transportation Engineer; 7 years -Experience in relevant projects; 2 projects	Kindly amend the clause as below: Traffic/Transportation Engineer/ Planner Education: - Graduate in Civil/ Architecture /Equivalent Masters in Transportation/or Planning/ Urban design/ Infrastructure or equivalent Experience: -Total Work Experience; 40 5 years -Experience in Similar ICT Works as Traffic/Transportation Engineer; 7 3 years -Experience in relevant projects; 2 projects	RFP condition prevails.
291	Part-1	Section III Evaluation and Qualification Criteria	EQC-5	Part 1 Section III Evaluation and Qualification Criteria (3)Evaluation of Key Staff EQC-5	Note: Note: The positions with asterisk (*) which shall be the international staff.	We request you to kindly amend clause as follows: Note: Note: Subcontractor personnel shall be allowed. The positions with asterisk (*) which shall be the international staff.	Refer to Addendum-1, S.No: 8 dated 08-03-2022
292	Part-1	Section III Evaluation and Qualification Criteria	EQC-6	1.1.3 Detail Evaluation	1.1.3 Detail Evaluation (c) Bidders must achieve a minimum 80% marks (80 out of 100 marks). The bidder who does not achieve such minimum total points will be rejected.	We understand this is L1 based bidding &bidder to achieve overall 80% marks out of 100 to qualify, please confirm	Refer to Addendum-1, S.No: 9 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
293	Part-1	Section III Evaluation and Qualification Criteria	EQC-6	Part 1, Page 50, Section III. Evaluation and Qualification Criteria, Bidding Procedures, Detail Evaluation Item	<p>No. Detail Evaluation Item Maximum Marks (1) Specific Technical Experience-20 (2)Proposed Technical Solution-35 (3)Key Staff Evaluation-20 (4)Work Plan & Staffing-20 (5)USP and Innovation in proposed solution for Chennai-5 Total-100</p>	<p>Camera & ITMS software are the major and key components in this projects, Hence we request you to kindly include marks for major component OEMs as under,</p> <p>No. Detail Evaluation Item Maximum Marks (1) Specific Technical Experience-20 (2)Proposed Technical Solution-35 (3) Proposed Technical experience for Major component OEM - 20 (4)Key Staff Evaluation-10 (5)Work Plan & Staffing-10 (6)USP and Innovation in proposed solution for Chennai-5 Total-100</p> <p>Proposed ITMS (ANPR/RLVD/SVD) system OEM should have supplied minimum 1000 ITMS (ANPR/RLVD/SVD) system (Camera Hardware & software) in single project during last 5 financial years for any Smart city/ Safe city/ PSU/ any governement projects in India >2000 Nos ITMS System - 10 Marks >1500 to ≥ 2000 Nos ITMS System - 7.5 Marks >1000 to ≥ 1500 Nos ITMS System - 5 Marks</p> <p>OEM of Cameras should have supplied more than 3000 IP Cameras in single project during last 5 financial years for any Smart city/ Safe city/ PSU/ any governement projects in India. >6000 cameras - 10 Marks > 5000 to ≥ 6000 Cameras - 7.5 Marks > 4000 to ≥ 5000 Cameras - 5 Marks</p>	RFP condition prevails.
294	Part-1	Section III Evaluation and Qualification Criteria	EQC-6	1.1.3 Detail Evaluation	Bidders must achieve a minimum 80% marks (80 out of 100 marks). The bidder who does not achieve such minimum total points will be rejected.	<p>We understand that in order to achieve minimum 80% marks, bidders have to propose robust, scalable, Integrated, tried & tested and Industry proven solutions meeting the requirements of CSCL.</p> <p>Kindly confirm if our understanding is correct.</p>	Refer to Addendum-1, S.No: 9 dated 08-03-2022
295	Part-1	Section III Evaluation and Qualification Criteria	EQC-6	Part 1, Page 50, Section III. Evaluation and Qualification Criteria, Bidding Procedures, Detail Evaluation Item	<p>No. Detail Evaluation Item Maximum Marks (1) Specific Technical Experience-20 (2)Proposed Technical Solution-35 (3)Key Staff Evaluation-20 (4)Work Plan & Staffing-20 (5)USP and Innovation in proposed solution for Chennai-5 Total-100</p>	<p>Camera & ITMS software are the major and key components in this projects, Hence we request you to kindly include marks for major component OEMs as under,</p> <p>No. Detail Evaluation Item Maximum Marks (1) Specific Technical Experience-20 (2)Proposed Technical Solution-35 (3) Proposed Technical experience for Major component OEM - 20 (4)Key Staff Evaluation-10 (5)Work Plan & Staffing-10 (6)USP and Innovation in proposed solution for Chennai-5 Total-100</p> <p>Proposed ITMS (ANPR/RLVD/SVD) system OEM should have supplied minimum 1000 ITMS (ANPR/RLVD/SVD) system (Camera Hardware & software) in single project during last 5 financial years for any Smart city/ Safe city/ PSU/ any governement projects in India >2000 Nos ITMS System - 10 Marks >1500 to ≥ 2000 Nos ITMS System - 7.5 Marks >1000 to ≥ 1500 Nos ITMS System - 5 Marks</p> <p>OEM of Cameras should have supplied more than 3000 IP Cameras in single project during last 5 financial years for any Smart city/ Safe city/ PSU/ any governement projects in India. >6000 cameras - 10 Marks > 5000 to ≥ 6000 Cameras - 7.5 Marks > 4000 to ≥ 5000 Cameras - 5 Marks</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
296	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	1 . The Bidder should have experience of Operations and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 – General Experience , and shall be allocated marks as per below: 5 a. Any 2 qualifying projects 2 b. Any 3 qualifying projects 3 c. Any 4 qualifying projects 4 d. 5 or more qualifying projects 5	Inline with the Pre qualification criteria, we request to amend the Technical Experience criteria as follow: 1 . The Bidder should have experience of Operations and Maintenance for <u>2 1 consecutive years</u> for the qualifying projects mentioned in 2.4.1 – General Experience , and shall be allocated marks as per below: 5 a. Any <u>1</u> qualifying Projects - 2 marks b. Any <u>2</u> qualifying Projects - 3 marks c. Any <u>3</u> qualifying projects - 4 marks d. <u>4</u> or more qualifying projects - 5 marks	Refer to Addendum-1, S.No: 10 dated 08-03-2022
297	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	2 Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: 5 a. Any 2 qualifying Customers/Clients 2 b. Any 3 qualifying Customers/Clients 3 c. Any 4 qualifying projects 4 d. 5 or more qualifying projects 5	Inline with the Pre qualification criteria, we request to amend the Technical Experience criteria as follow: 2 Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: 5 a. Any <u>1</u> qualifying Customers/Clients <u>Projects</u> - 2 marks b. Any <u>2</u> qualifying Customers/Clients <u>Projects</u> - 3 marks c. Any <u>3</u> qualifying projects - 4 marks d. <u>4</u> or more qualifying projects - 5 marks	Refer to Addendum-1, S.No: 10 dated 08-03-2022
298	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	3 Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: 5 a. Any 2 qualifying Customers/Clients 2 b. Any 3 qualifying Customers/Clients 3 c. Any 4 qualifying projects 4 d. 5 or more qualifying projects 5	Inline with the Pre qualification criteria, we request to amend the Technical Experience criteria as follow: 3 Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: 5 a. Any <u>1</u> qualifying Customers/Clients <u>Projects</u> - 2 marks b. Any <u>2</u> qualifying Customers/Clients <u>Projects</u> - 3 marks c. Any <u>3</u> qualifying projects - 4 marks d. <u>4</u> or more qualifying projects - 5 marks	Refer to Addendum-1, S.No: 10 dated 08-03-2022
299	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	4 Qualifying projects as per 2.4.2 (a3) - City Bus System: 5 a. Any 2 qualifying Customers/Clients 2 b. Any 3 qualifying Customers/Clients 3 c. Any 4 qualifying projects 4 d. 5 or more qualifying projects 5	Inline with the Pre qualification criteria, we request to amend the Technical Experience criteria as follow: 4 Qualifying projects as per 2.4.2 (a3) - City Bus System: 5 a. Any <u>1</u> qualifying Customers/Clients <u>Projects</u> - 2 marks b. Any <u>2</u> qualifying Customers/Clients <u>Projects</u> - 3 marks c. Any <u>3</u> qualifying projects - 4 marks d. <u>4</u> or more qualifying projects - 5 marks	Refer to Addendum-1, S.No: 10 dated 08-03-2022
300	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	2.4.1 - General Experience	2.4 Experience & 1.1.3 Detail Evaluation 1) Evaluation of Specific Technical Experience Each item of the specific experience with Bid in Form EXP – 1 and EXP 2(a) will be reviewed and evaluated for specific technical experience for qualifying project as per 2.4.2 of section III.	1) We understand supporting documents required to be submitted are Work order/agreement & Client Go-Live certificate, please confirm. In case of scope/ price details missing in work order/client Go-Live, RFP pages/ price schedule shall be acceptable, please confirm 2) Request you to confirm in case of ongoing projects with ongoing OPEX, Go-Live certificate from client beyond 1st Jan 2021 shall be acceptable 3) In case of large ongoing projects, request you to allow CA certificate mentioning 60% CAPEX completed where client completion is missing	Completion certificate issued/if completion certificate cannot be submitted, then bidder shall submit certificate mentioning the project completion details/current status of the project signed by the statutory auditor/designated authority of client along with invoice raised/payment received details as well as work order/letter of award/letter of intent/purchase order/contract/citation.
301	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	The Bidder should have experience of Operation and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 General Experience and shall be allocated marks as per below a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5	In order to maximise Indian bidder participation Kindly change marking criteria as below . The Bidder should have experience of Operation and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 General Experience and shall be allocated marks as per below a. Any 2 Qualifying Project -4 b. Any 3 Qualifying Project -5	Refer to Addendum-1, S.No: 10 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
302	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5	In order to maximise Indian bidder participation Kindly change marking criteria as below . Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: shall be allocated marks as per below a. Any 2 Qualifying Project -4 b. Any 3 Qualifying Project -5	Refer to Addendum-1, S.No: 10 dated 08-03-2022
303	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: a. Any 2 Qualifying Project -2 b. Any 3 Qualifying Project -3 c. Any 4 Qualifying Project -4 d. Any 5 Qualifying Project -5	In order to maximise Indian bidder participation Kindly change marking criteria as below . Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: a. Any 2 Qualifying Project -4 b. Any 3 Qualifying Project -5	Refer to Addendum-1, S.No: 10 dated 08-03-2022
304	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	2.4.2 (a3) - Specific Experience for City Bus System	Reference of clause 4.2.1 & Clause no. 4.2 i. The Bidder should have experience of Operations and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 – General Experience ii. Qualifying projects as per 2.4.2 (a3) - City Bus System:	Based on the suggested PQ criteria it is requested to accordingly dilute the requirement of project specific exp for eligible projects under TQ criteria for 1. The cost the project for TQ criteria may please limited to INR 10 crores for each project 2. Similarly, max no of projects for scoring 5 max marks may be restricted to 4 projects. The experience spectrum for AVLS may also be allowed to include PT / IPT (Para Transit) domain.	Refer to Addendum-1, S.No: 12 dated 08-03-2022
305	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	The Bidder should have experience of Operations and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 – General Experience , and shall be allocated marks as per below: 5 a. Any 2 qualifying projects - 2 b. Any 3 qualifying projects -3 c. Any 4 qualifying projects -4 d. 5 or more qualifying projects -5 Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects -4 d. 5 or more qualifying projects -5 Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects -4 d. 5 or more qualifying projects -5 Qualifying projects as per 2.4.2 (a3) - City Bus System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects -4 d. 5 or more qualifying projects -5	The Bidder should have experience of Operations and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 – General Experience , and shall be allocated marks as per below: - 5 a. Any 2 qualifying projects - 2 b. Any 3 qualifying projects -3 c. Any 4 qualifying projects - 5 <u>d. 5 or more qualifying projects -5</u> Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects -5 <u>d. 5 or more qualifying projects -5</u> Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects -5 <u>d. 5 or more qualifying projects -5</u> Qualifying projects as per 2.4.2 (a3) - City Bus System: -5 a. Any 2 qualifying Customers/Clients -2 b. Any 3 qualifying Customers/Clients -3 c. Any 4 qualifying projects 5 <u>d. 5 or more qualifying projects -5</u>	Refer to Addendum-1, S.No: 10 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
306	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	RFP Part 1, Page 51,	Evaluation of Specific Technical Experience	<p>We understand that Depot Management System (DMS) is the core of overall transport implementation for City Bus Services (CBS); Project success for CBS components will depend majorly on DMS. Any compromise may have adverse impact on overall project success.</p> <p>IN the evaluation, marking on DMS system is missing. We request to kindly incorporate technical marks for DMS client's letters.</p>	RFP condition prevails.
307	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	<p>The Bidder should have experience of Operations and Maintenance for 2 consecutive years for the qualifying projects mentioned in 2.4.1 – General Experience , and shall be allocated marks as per below:</p> <p>a. Any 2 qualifying projects b. Any 3 qualifying projects c. Any 4 qualifying projects d. 5 or more qualifying projects</p>	<p>We request to reduce the number of projects experience since the quantities mentioned in the criteria is very high and only few international companies will qualify for the bid.</p> <p>Also the components in the BOM of the current RFP and marks requested for five projects varies a lot. Usually the department will provide the highest technical marks if the bidder is having experience of 100% quantity of the smart solutions. But as per the current RFP, you are requesting for more than 300% for providing full marks.</p> <p>Hence, we request to provide full marks for three projects instead of five projects</p>	Refer to Addendum-1, S.No: 10 dated 08-03-2022
308	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	<p>Qualifying projects as per 2.4.2 (a1) – Adaptive Traffic Signal Control System:</p> <p>a. Any 2 qualifying projects b. Any 3 qualifying projects c. Any 4 qualifying projects d. 5 or more qualifying projects</p>	<p>We request to reduce the number of projects experience since the quantities mentioned in the criteria is very high and only few international companies will qualify for the bid.</p> <p>Also the components in the BOM of the current RFP and marks requested for five projects varies a lot. Usually the department will provide the highest technical marks if the bidder is having experience of 100% quantity of the smart solutions. But as per the current RFP, you are requesting for more than 300% for providing full marks.</p> <p>Hence, we request to provide full marks for three projects instead of five projects</p>	Refer to Addendum-1, S.No: 10 dated 08-03-2022
309	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	<p>Qualifying projects as per 2.4.2 (a2) - Traffic Information & Management System:</p> <p>a. Any 2 qualifying projects b. Any 3 qualifying projects c. Any 4 qualifying projects d. 5 or more qualifying projects</p>	<p>We request to reduce the number of projects experience since the quantities mentioned in the criteria is very high and only few international companies will qualify for the bid.</p> <p>Also the components in the BOM of the current RFP and marks requested for five projects varies a lot. Usually the department will provide the highest technical marks if the bidder is having experience of 100% quantity of the smart solutions. But as per the current RFP, you are requesting for more than 300% for providing full marks.</p> <p>Hence, we request to provide full marks for three projects instead of five projects</p>	Refer to Addendum-1, S.No: 10 dated 08-03-2022
310	Part-1	Section III Evaluation and Qualification Criteria	EQC-7	(1) Evaluation of Specific Technical Experience	<p>Qualifying projects as per 2.4.2 (a3) - City Bus System:</p> <p>a. Any 2 qualifying projects b. Any 3 qualifying projects c. Any 4 qualifying projects d. 5 or more qualifying projects</p>	<p>We request to reduce the number of projects experience since the quantities mentioned in the criteria is very high and only few international companies will qualify for the bid.</p> <p>Also the components in the BOM of the current RFP and marks requested for five projects varies a lot. Usually the department will provide the highest technical marks if the bidder is having experience of 100% quantity of the smart solutions. But as per the current RFP, you are requesting for more than 300% for providing full marks.</p> <p>Hence, we request to provide full marks for three projects instead of five projects</p>	Refer to Addendum-1, S.No: 10 dated 08-03-2022
311	Part-1	Section III Evaluation and Qualification Criteria	EQC-8	(2) Evaluation of Detail Technical Solution Proposed:	<p>TIMS system description: Predictive analytics and insight capabilities of the Central Platform considering Project components (VMS, ATCC, SLVD, RLVD, etc.) and other potential external data sources</p>	<p>1. please clarify, if a third party predictive analysis software integrated with TIMS is acceptable.</p> <p>2. Please confirm, (VMS, ATCC, SLVD, RLVD, etc.) includes ATCS. Is it required to offer micro simulation software for integration with ATCS.</p>	<p>1. An integrated third party predictive analysis software is acceptable as long as software provides the functionality required in a timely manner.</p> <p>2. Query is not clear. Microsimulation may be provided by the bidder, if so desired.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
312	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. Project Director ≥ 20 years& ≤ 22 years 0.5 ≥ 23 years & ≤ 25 years 1 ≥ 26 years or more 2	Request to modify as below: 3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. Project Director ≥ 15 years& ≤ 18 years 0.5 ≥ 19 years & ≤ 20 years 1 ≥ 21 years or more 2	Refer to Addendum-1, S.No: 11 dated 08-03-2022
313	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. Project Manager TIMS & Project Manager CBS, TIMS Expert – International, ATCS Expert – International, CBS Expert – International ≥ 15 years & ≤ 17 years 0.5 ≥ 18 years & ≤ 20 years 1 ≥ 20 years or more 2	Request to modify as below: 3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. Project Manager TIMS & Project Manager CBS, TIMS Expert – International, ATCS Expert – International, CBS Expert – International ≥ 5 years& ≤ 7 years 0.5 ≥ 7 years & ≤ 8 years 1 ≥ 9 years or more 2	Refer to Addendum-1, S.No: 11 dated 08-03-2022
314	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. ATCS Expert – Local, TIMS Expert – Local, CBS Expert – Local ≥ 12 years & ≤ 14 years 0.5 ≥ 15 years or more 1	Request to modify as below: 3)Evaluation of Key Staff Each item of proposed personnel and their experience records in SimilarWorks in Forms PER-1 and PER-2 will be reviewed and evaluated. ATCS Expert – Local, TIMS Expert – Local, CBS Expert – Local ≥ 4 years & ≤ 5 years 0.5 ≥ 6 years or more 1	Refer to Addendum-1, S.No: 11 dated 08-03-2022
315	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	Project Director - 2 Marks ≥ 20 years& ≤ 22 years - 0.5 Mark ≥ 23 years & ≤ 25 years - 1 Mark ≥ 26 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: Project Director - 2 3 Marks ≥ 20 15 years& ≤ 22 16 years - 0.5 1 Mark ≥ 23 17 years & ≤ 25 19 years - 4 2 Marks ≥ 26 20 years or more - 2 3 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
316	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	Project Manager TIMS - 2 Marks ≥ 15 years & ≤ 17 years - 0.5 Mark ≥ 18 years & ≤ 20 years - 1 Mark ≥ 20 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: Project Manager TIMS - 2 3 Marks ≥ 15 10 years & ≤ 17 12 years - 0.5 1 Mark ≥ 18 13 years & ≤ 20 14 years - 4 2 Marks ≥ 20 15 years or more - 2 3 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
317	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	Project Manager CBS - 2 Marks ≥ 15 years & ≤ 17 years - 0.5 Mark ≥ 18 years & ≤ 20 years - 1 Mark ≥ 20 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: Project Manager CBS - 2 3 Marks ≥ 15 10 years & ≤ 17 12 years - 0.5 1 Mark ≥ 18 13 years & ≤ 20 14 years - 4 2 Marks ≥ 20 15 years or more - 2 3 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
318	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	ATCS Expert – International - 2 Marks ≥ 15 years & ≤ 17 years - 0.5 Mark ≥ 18 years & ≤ 20 years - 1 Mark ≥ 20 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: ATCS Expert – International - 2 Marks ≥ 15 7 years & ≤ 17 8 years - 0.5 Mark ≥ 18 9 years & ≤ 20 10 years - 1 Mark ≥ 20 11 years or more - 2 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
319	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	TIMS Expert – International - 2 Marks ≥ 15 years & ≤ 17 years - 0.5 Mark ≥ 18 years & ≤ 20 years - 1 Mark ≥ 20 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: TIMS Expert – International - 2 Marks ≥ 15 7 years & ≤ 17 8 years - 0.5 Mark ≥ 18 9 years & ≤ 20 10 years - 1 Mark ≥ 20 11 years or more - 2 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
320	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	CBS Expert – International - 2 Marks ≥ 15 years & ≤ 17 years - 0.5 Mark ≥ 18 years & ≤ 20 years - 1 Mark ≥ 20 years or more - 2 Marks	Kindly amend the Evaluation of Key Staff clause as below: CBS Expert – International - 2 Marks ≥ 15 7 years & ≤ 17 8 years - 0.5 Mark ≥ 18 9 years & ≤ 20 10 years - 1 Mark ≥ 20 11 years or more - 2 Marks	Refer to Addendum-1, S.No: 11 dated 08-03-2022
321	Part-1	Section III Evaluation and Qualification Criteria	EQC-9	(3) Evaluation of Key Staff	ATCS Expert – Local - 1 Mark TIMS Expert – Local - 1 Mark CBS Expert – Local - 1 Mark	Kindly remove marks for below as the same has been covered above: ATCS Expert – Local TIMS Expert – Local CBS Expert – Local	Refer to Addendum-1, S.No: 11 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
322	Part-1	Invitation for Bids	IFB-1	Part 1 Bidding Procedures/Invitation for Bids/Page No 5	Bids must be delivered to the address above on or before [15:00 PM] on [18 th January 2022] and must be accompanied by a Bid Security of INR 10 Crores (equivalent USD 1.35 million).	Please extend the bid submission date by minimum 30 days due to global christmas holidays.	Refer to Addendum-1, S.No: 6 & 7 dated 08-03-2022
323	Part-1	Invitation for Bids	IFB-1	Invitation for Bids	Bids must be delivered to the address above on or before [15:00 PM] on [18th January 2022] and must be accompanied by a Bid Security of INR 10 Crores (equivalent USD 1.35 million).	EMD exemption for MSE companies we request you to consider EMD exemption for MSE companies which is registered under UDYAM as per government G.O.	RFP condition prevails.
324	Part-1	Section I. Instructions to Bidders	ITB-12	ITB-12 13.4	When Bidders are invited in the BDS to submit alternative technical solutions for specified parts of the Works, such parts shall be described in Section VI, Employer's Requirements. Technical alternatives that comply with the performance and technical criteria specified for the Works shall be considered by the Employer on their own merits, pursuant to ITB 35.2	Whether the alternate bid is requested before deadline. Also, pls specify conditions in which alternate bid will be requested. Kindly clarify	Refer clause ITB 13.1 of BDS, where it was clearly mentioned that alternative bids are not permitted.
325	Part-1	Section I. Instructions to Bidders	ITB-24	RFP Part 1, Page 32, clause 32.4	The capabilities of the manufacturers and Subcontractors proposed in its Bid to be used by the Bidder will also be evaluated for acceptability in accordance with Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. <u>Should a manufacturer or Subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or Subcontractor without any change to the Bid Price.</u>	We understand that CSCL is considering Subcontractor an integral part of this project as selection of rightly fitted subcontractor is vital for its success. Hence eligibility of subcontractors are also defnied in this RFP. We further understand that CSCL wants bidders to only propose most suited subcontractors, and any unsuitable subcontractor will make bid unacceptable. This will further help realising project objectives within stipulated timeframe. This is also in line with the clause mentioned on RFP Part 1, pg-69, pt-b mentioned in the Letter of Technical Bid. Kindly confirm if our understanding is correct.	RFP condition prevails. Yes, your understanding is correct.
326	Part-1	Section I. Instructions to Bidders	ITB-27	38. Evaluation of Price Bids	Price Adjustment	As the project execution is spread over a duration of 31 months followed by O&M for 5 years, we request to include Price Adjustment Clause as below "Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures as per formula given below. The amount certified in each payment certificate is adjusted by applying the respective price adjustment factor to the payment amounts due in each currency: (a) Price adjustment shall apply only for work carried out within the stipulated time or extensions granted by the Employer and shall not apply to work carried out beyond the stipulated time for reasons attributable to the Contractor, shall be paid in accordance (b) Price adjustment shall be calculated for the local and foreign components of the payment for work done"	RFP condition prevails.
327	Part-1	Section I. Instructions to Bidders	ITB-29	Part 1, 44. Performance Security Page no 37	44.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.5, using for that purpose the Performance Security Form included in Section IX Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been detemined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.	Request to help with the Performance Bank Guarantee value i.e. % of total contract value to be submitted by Successful bidder. Here we would like to draw your kind attention that as per the Office Memorandum No. F.9/4/2020-PPD issued by Ministry of Finance, GOI due to Covid 19 pandemic. Ministry has reduced the Performance bank guarantee would be 3% of the contract value for all the tenders.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
328	Part-1	Section I. Instructions to Bidders	ITB-29	44. Performance Security	Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.5, using for that purpose the Performance Security Form included in Section IX Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.	According to our understanding As per the Latest DIPP Guideline Vide Order no F.9/4/2020/- PPD Dated- 12November2020 of Procurement Policy Division, Department of Expenditure, Ministry of Finance for Performance Security the PBG limit has been reduced from 10% to 3% . Hence kindly confirm PBG amount to 3% in this BID. Also We request you to kindly consider 2 Separate PBGs for CAPEX & OPEX Period: PBG 1 : 3% of CAPEX Value PBG 2: 3% of OPEX Value PBG Submitted during CAPEX shall be returned after Implementation Period.	RFP condition prevails.
329	Part-1	Section I. Instructions to Bidders	ITB-29	Part 1, 44. Performance Security Page no 37	44.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.5, using for that purpose the Performance Security Form included in Section IX Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.	As per the Office Memorandum No. F.9/4/2020-PPD issued by Ministry of Finance, GOI due to Covid 19 pandemic. Ministry has reduced the Performance bank guarantee would be 3% of the contract value for all the tenders. So kindly consider this request and reduce the performance bank guarantee.	RFP condition prevails.
330	Part-1	Section I. Instructions to Bidders	ITB-3	ITB-3 2.3	The above Loan Agreement will cover only part of the project cost. As for the remaining portion, the Borrower will take appropriate measures for finance	The Fund details is not clear whether the entire fund for the project is available with the purchaser or will be allocated. Please clarify	Fund for the project is available with Empolyer.
331	Part-1	Section I. Instructions to Bidders	ITB-5	4. Eligible Bidders	4.1 A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JV:	Please confirm the JV is not required to be a registered company and companies can get into a consortium agreement.	Refer to Addendum-1, S.No: 3 dated 08-03-2022
332	Part-1	Section I. Instructions to Bidders	ITB-5	ITB-5 4.2 (a)	A firm shall be disqualified from providing goods or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm. This provision does not apply to the various firms (consultants, contractors, or suppliers) only due to the reason that those firms together are performing the Contractor's obligations under a turnkey or design and build contract.	This clause seems to be ambiguous. Please clarify	The clause is self explanatory.
333	Part-1	Section I. Instructions to Bidders	ITB-5	4. Eligible Bidders	4.1 A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JV: (a) all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and (b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during Contract execution	Kindly clarify, if JV mentioned in the document is a legal entity or a consortium with each member "jointly and severally responsible for the job".	Refer to Addendum-1, S.No: 03 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
334	Part-1	Section I. Instructions to Bidders	ITB-5	Part 1 Pg 13	4. Eligible Bidders 4.1 A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JV: (a) all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and (b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during Contract execution.	The bidder requests the following clarifications: As per the Eligibility Criteria given in the RFP Vol 1 (attached) on page # 13, the RFP requires the bidder to participate as a single bidder or in the form of a Joint Venture (JV). However, as per Form of Joint Bidding Agreement for JV given on page # 159, the definition of JV also mentions the word "Consortium". Please clarify if the Purchaser will accept bids from a Consortium or only from a JV?	Refer to Addendum-1, S.No: 03 dated 08-03-2022
335	Part-1	Section I. Instructions to Bidders	ITB-5	4. Eligible Bidders	joint venture (JV)	We would request to allow request to allow/add one more partner instead of 3 partners including lead. We would request you to kindly allow Joint Venture Or Consortium throughout Clause definition where only mentioned JV. As allowing so will be clarify the context of involving Consortiu partner for inclusion of variou solution offerings.	Refer to Addendum-1, S.No: 03 dated 08-03-2022
336	Part-1	Section I. Instructions to Bidders	ITB-5	4. Eligible Bidders	A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JV	A Bidder may be A firm that is A single entity / Consortium or any combination of such entities in the form of A joint venture (JV) Remark: Consortium may be allowed and the criteria may be allowed to be met by any member of consortium	Refer to Addendum-1, S.No: 03 dated 08-03-2022
337	Part-1	Section I. Instructions to Bidders	ITB-5	4. Eligible Bidders	A Bidder may be a firm that is a single entity / Consortium or any combination of such entities in the form of a joint venture (JV)	Consortium may be allowed and the criteria may be allowed to be met by any member of consortium	Refer to Addendum-1, S.No: 03 dated 08-03-2022
338	Part-1	Section I. Instructions to Bidders	ITB-5	RFP Part 1, Page 13, Pt-4 Eligible Bidders	all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and	We request CSCL to limit liability of Joint Venture / Consortium upto the scope of the individual member while Lead bidder shall be liable for the entire project. In several recently floated RFPs, this clause is changed and limited to scope of consortium / Joint venture members (except Lead). Request to changes - We request to change as " Lead member shall be jointly & severally liable for the execution of the contract and other members will be severally liable in accordance with the contract terms" This will help in getting more bids and hence more competitive scenario will be there .	RFP condition prevails.
339	Part-1			Additional	RFP mentions at many places that bidder may consider additional costs for items not listed but are necessary to delivering RFP solutions. However Schedule format for bid (Finance bid) does not have any provision for additional items or costs .	We request to revise schedule format for bid(finance boq) with additional lines so as bidders could put additional/items or costs which are not listed but are necessary for this project.	RFP condition prevails. Please refer to Break Down of Price Schedule No. 2 and Break Down of Price Schedule No. 3 of Part-1 for the same. Instead of "Other items to make system functional and meet SLA" bidder can input additional "items, unit and qty" as required.
340	Part-1	New		New Clause	-	Bidder or any of the consortium member is not debarred or blacklisted by any goveremnt department in india at any given time(Not even for a single day) in last 10 years, from the date of publishing of this tender.	RFP condition prevails.
341	Part-1	New		New Clause	General Query- Schedule format for_1. Bidding Document Part 1 Bidding Procedures Nov 12th 2021	Schedule 4 is missing in the excel sheet. Please provide ethe same.	It is available in first sheet of excel file (Sh1-5).

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
342	General	General		General	General	We have received tender document in the name of our company by paying 75000/- . After getting Tender document only, We are coming to know that our concern is not qualified few tender eligibility conditions. As one of our group company having complete eligibility, Shall we bid from those company by using same tender document. Kindly Confirm.	Standard bidding document conditions do not exclude bidders who have not bought the tender document from participating in the bid. However, at least one of member of the JV/Consortium should have bought the document in their name.
343	General	General		General	Additional	Experience of Traffic Management including implementation and operations for a large Indian city/metro with no down time during transition/up gradation phase considering continual traffic movements should be mandatory qualification for this complex project.	RFP condition prevails.
344	General	General		General	Additional	Considering requirement of IT implementation and service management in this project bidder needs to have relevant certification to ensure quality process. Please make ISO20000 certificate as mandatory qualification for bidders and same to have marks for evaluation criteria.	RFP condition prevails.
345	General	General		General	Additional	There is requirement of IT security management as part of implementation and operations in this project bidder need to have relevant certification to ensure quality process. Please make ISO27000 as mandatory qualification for bidders and same to have marks for evaluation criteria.	RFP condition prevails.
346	General	General		General	Additional	Considering requirement of software implementation and development in this project bidder needs to have relevant certification to ensure quality process. Please make CMMi Level 5 as qualification for bidders and same to marks for evaluation criteria.	RFP condition prevails.
347	General	General		General	Additional	Asked project value experience to be brought to Net Present Value.	RFP condition prevails.
348	General	General		General	Additional	Taking in account COVID pandemic , we request that pre-bid meeting to be in online format	RFP condition prevails.
349	General	General		General	General Query 1	Request you to confirm that Labour cess would not be deducted from our payments	Yes, your understanding is correct.
350	General	General		General	General Query 2	Request you to confirm whether ,Chennai Smart City Limited is a Government organisation under GST Act defination.	No.
351	General	General		General	General Query 3	Request you to provide supporting documents to substantiate if the answer to general query 1 is yes	Not applicable
352	General	General		General	General Query 4	Request you to confirm ,whether the original work/service taken under this contract is used by Chennai Smart City Limited for other than for commerce, industry, or any other business or profession. & work/service under this contract are in relation to work entrusted by Central/State Govt or union territory or local Authority	JICA ODA loan project and CSCL is act as an implementing authority.
353	General	General		General	Additional Clause-COVID 19	Notwithstanding anything to the contrary, in light of the COVID-19 pandemic, the effects of which cannot be foreseen, the parties agree that Contractor shall be entitled to an equitable extension of time to deliver or perform its work and appropriate additional compensation to the extent Contractor's delivery or performance, or the delivery or performance of its suppliers and/or subcontractors, is in any way delayed, hindered or otherwise affected by the COVID-19 pandemic	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
354	General	General		General	Additonal Clause-Remote Services	<p>Employer agrees that Contractor may enhance system operations or perform some or all of the Work remotely using an Internet connection and may install additional software and related communication and/or diagnostic devices on EMPloyer's applicable systems (the "Systems") to enable such connection, enhancement and/or remote Work performance. Notwithstanding any other provision of the Contract Agreement, such software and devices will remain the property of Contractor and shall be removed from the Systems and returned to Contractor promptly at Contractor request. Employer agrees to fully cooperate with Contractor's installation and commissioning of such software and devices on the Systems. To the extent required by Contractor, Employer will enable and consents to Internet connectivity, with appropriate protection(s), between its applicable Systems and Contractor's applicable computer server(s)/system(s) and/or the Contractor cloud platform(s) throughout the term of the Contract Agreement. Contractor and its affiliates may, in any country in which they or their agents or suppliers conduct business, collect, transmit, receive, process, maintain and use for the purpose of performing the Work all data obtained in connection with the Contract Agreement. Employer represents and warrants that Employer is the owner of the premises that are the subject of this Contract Agreement or, if not, that the owner of such premises consents to the foregoing, to the extent such consent is required.</p>	RFP condition prevails.
355	General	General		General		<p>Notwithstanding any other provision of the Contract Agreement, (a) in no event will Employer be responsible or liable for protection against, or mitigation of consequences associated with, a cybersecurity incident or other similar cyber-related events and/or attacks that may affect EMPloyer's sites or systems, (b) Employer is solely responsible for ensuring that its sites and systems are protected against such a cybersecurity incident or other similar cyber-related events and/or attacks including, but not limited to, ensuring that all software is kept up to date, that all cybersecurity products used are compatible with one another and that any patches are correctly and appropriately installed, and (c) all remedial, reinstallation or update works provided by Contractor, if any, as a result of or related to a cybersecurity incident or other similar cyber-related events and/or attacks will be performed subject to additional fees for such work, plus applicable taxes, to be paid by Employer to Contractor (in addition to fees otherwise due under the Contract Agreement).</p>	RFP condition prevails.
356	General	General		General	Additonal Clause-Authority caused delay	<p>Where Contractor incurs additional cost due to a delay to the date of completion (<u>need to be agreed</u>) from the date of Work Order caused by Employer or their suppliers or their sub-contractors then Contractor shall be entitled to claim additional delay costs for such delay.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
357	General	General		General	Additional Clause-Economic Surcharge	Contractor may, from time to time and in its sole discretion, issue surcharges on this Agreement in order to mitigate and/or recover increased operating costs arising from or related to, without limitation: (a) foreign currency exchange variation; (b) increased cost of third-party content, labor and materials; (c) impact of duties, tariffs, and other government actions; and (d) any other circumstances that increase Contractor's costs, including, without limitation, increases in freight, labor, material or component costs, and increased costs due to inflation (collectively, "Economic Surcharges"). Contractor will invoice Employer, through a revised or separate invoice, and Employer agrees to pay for the Economic Surcharges pursuant to the standard payment terms in this Agreement. If a dispute arises with respect to Economic Surcharges, and that dispute remains open for more than fifteen (15) days, Contractor may, in its sole discretion, withhold performance and future shipments or combine any other rights and remedies as may be provided under this Agreement or permitted by law until the dispute is resolved. The terms of this section shall prevail in the event of inconsistency with any other terms in this Agreement. Any Economic Surcharges, as well as the timing, effectiveness, and method of determination thereof, will be separate from and in addition to any changes to pricing that are affected by any other provisions in this Agreement.	RFP condition prevails.
358	General	General		General	General	Request to kindly remove the civil work such as duct boring, road marking, intersection improvement, temporary restoration of paved road, final reinstatement of road and sidewalk from the project scope.	RFP condition prevails.
359	General	General		General	General	We understand hot stand standby servers would be required in the Datacenter (for both ITMS and CBS)for the applications installed in respective datacenter. Further there will be a common DR for both the location which do not require to have a failover servers. Kindly confirm if our understanding for the project is correct.	Yes. Your understanding is correct.
360	General	General		General	General	In case of DC failure , kindly advise which all systems/applications needs to be considered at the DR. Also advise once DR is up will there be any location where these systems needs to be monitored?	All the systems mentioned in RFP to be considered for DR in case DC failure.
361	General	General		General	General	We understand DC and DR will be in active passive mode. Kindly advise or confirm if our understanding is correct.	DC and DR shall be Active-Passive mode.
362	General	General		General	General	We understand open source lic can be used in the project. Kindly advise and confirm	Yes. Your understanding is correct.
363	General	General		General	General	Kindly advise can we have a combined server, network & storage resources, security for both ITMS and CBS components at the DR. Or we need to keep these as two separate ownership and account at DR	Preferrably a combained DR, however bidder may propose suitable solution.
364	General	General		General	Additional	Considering vast scope & complexity of project , we believe it would be difficult to consider all aspects of bidder concerns. Hence we request to schedule second prebid meeting after releaseof reponse so as all viewpoints are discussed and considered.	RFP condition prevails.
365	Part-2	Employer's Requirement	ER - 382	Part 2 Employer's Requirement, Table 5-16: Performance/Accuracy of RLVD & Table 5-17: Performance/Accuracy of SLVD, ER - 382	1. RLVD Data accuracy & 1. SLVD Data accuracy Requirement: 95.0% Penalty (INR): 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter.	Kindly amend as: 1. RLVD Data accuracy & 1. SLVD Data accuracy Requirement: 80% 95.0% Penalty (INR): 500 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 500 2000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter. Accuracy shall be calculated only within the field of view of the system. Tailgating & lane indiscipline shall not be accounted.	RFP condition prevails.
366	Part-2	Employer's Requirement	ER132	Table 4-2: Functional requirement of ITMS Command Control Software	Integrated User Specific & Customizable Dashboard GIS details procured shall include the following data with attributes;	1- Pls define the area of interest for GIS details to be procured in Sq. km. 2- There are online Map data service providers who provide similar data as defined in the scope. Can these services utilized for this bid? Pls confirm.	1. CMA area and MTC busese running places. 2. Yes, may be utilized as long as data is accurate.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
367	Part-2	Employer's Requirement	ER132	Table 4-2: Functional requirement of ITMS Command Control Software	Integrated User Specific & Customizable Dashboard GIS details procured shall include the following data with attributes;	The defined base map data were requested in the previous RFP's which are mentioned below, can the same base map data extended to this project which will save resources, 1- Request for Proposal for selection of System Integrator to "Design, Supply, Implement, Commission, Operate & Manage the Command & Control Centre "as a part of Smart City Solutions for Chennai City. RFP No. S.P.D.C.No.B1/100/2016 2- Request for Proposal for selection of System Integrator to "Design, Supply, Implement, Commission, Operate and Manage the Chennai Safe City Solution and Cyber Forensics Lab under Safe City Project for Women's Safety in Public Places in Chennai (Nirbhaya Fund)" RFP No.C.No.MPF-1/12484/2020 3- Request for Proposal for Selection of System Integrator to conduct "GIS Mapping of Crime Zones under Safe City Project for Women's Safety in Public Places in Chennai (Nirbhaya Fund)" RFP - Rc.No. NP/59231/2020	RFP Condition Prevails. The bidder shall assess and arrange both required data and GIS Platform. In case any data available with Employer then same will be provided to the selected bidder.
368	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller ER-180	Additional clause	Controller shall have user friendly VGA touch screen display for local programming and a PC based application tool to program the parameters using 3D model.	RFP condition prevails.
369	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller ER-180	Additional clause	Controller should have Should have EN 12675 Traffic signal controller, functional safety requirements certification	RFP condition prevails.
370	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller ER-180	Additional clause	Controller Should have EN 50293 Road traffic signal systems, electromagnetic compatibility certification	RFP condition prevails.
371	Part-2	Employer's Requirement	ER307	Table4-1 / ER307	31.The CAD/AVL system shall incorporate maps to support the functionality, comprised of a selection of individually selectable theme layers (e.g., stations, streets, names, water features, parks, major buildings). The base map shall be Google Maps or similar quality.	It is assumed as single base map instance can be used for all the functional systems.	For entire CBS scope, single base map shall be used.
372	Part-2	Employer's Requirement	ER307	Table4-1 / ER307	33. The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	In the Table4-2: Functional requirement of ITMS Command Control Software; Integrated User Specific & Customizable Dashboard base map requirement is defined 1- Base map creation is defined in the said section, in the CAD/AVL section there is a requirement defined. In multiple places base map requirement is defined with various specs. 2- Pls confirm the specs / approach to be followed for the base map.	RFP Condition Prevails. The bidder shall assess and arrange both required data and GIS Platform.
373	Part-2	Employer's Requirement	ER307	Table4-1 / ER307	33. The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	1- For the development of GIS base map at a scale of 1:2500, high resolution satellite images of spatial resolution of 0.6 m are required. 2- If this approach to be followed the satellite imagery to be procured for total study area to be defined. 3- Pls share the information.	RFP condition prevails.
374	Part-2	Employer's Requirement	ER-317	Part 2 Employers Requirements -System functional requirement of CAD/AVL - ER-317	Currently safe city project being implemented in MTC for 2500 buses. Selected bidder is expected to integrate Onboard Computer (SCU) with Mobile NVR installed in the bus to transfer the Video data to control centre where Video Management System is running.	Kindly confirm whether API level integration is required for the Mobile NVR with the SCU and to the existing VMS system (Installed at the Control Center). Or the SCU integration with the Mobile NVR is required only for the bus driver to view the camera feeds. As there is an existing communication module with 4G SIM connectivity is already available as part for the exiting project scope, hence the Integration of SCU with existing VMS may not be required. Please clarify.	Refer to Addendum-1, S.No: 132 dated 08-03-2022
375	Part-2	Section IV. Bidding Forms	BF - 23	Section IV. Bidding Forms	Speed Limit Violation Detection System (SLVD) Doppler Radar and ANPR Camera	For detection of Speed violation, the ANPR camera along with SPVD application is enough. Doppler Radar may not be required and instead will increase the cost . Therefore,Please clarify if the same will be required as part of solution or not/	RFP condition prevails. Refer to Addendum-1, S.No: 76 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
376	Part-2	Employer's Requirement	ER - 383	Part 2 Employer's Requirement, Table 5-18: Performance/Accuracy of ATCC, ER - 383	1. ATCC Counting accuracy Requirement: 92.0% Penalty (INR): 5000 Calculation: For every decrease of 1% in performance for a quarter, a penalty of INR. 5000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter.	Kindly amend as: 1. RLVD Data accuracy Requirement: 80% 92.0% Penalty (INR): 200 5000 Calculation: For every decrease of 1% in performance for a quarter, a penalty of INR. 200 5000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter. Accuracy shall be calculated only within the field of view of the system. Tailgating & lane indiscipline shall not be accounted.	RFP condition prevails.
377	Part-2	Employer's Requirement	ER - 383	Part 2 Employer's Requirement, Table 5-18: Performance/Accuracy of ATCC, ER - 383	2. Classification Accuracy Requirement: 75.0% Penalty (INR):5000 Calculation: For every decrease of 1% in performance for a quarter, a penalty of INR. 5000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter.	Kindly amend as: 2. ANPR for standard number plates accuracy Requirement: 75.0% Penalty (INR): 200 5000 Calculation: For every decrease of 1% in performance for a quarter, a penalty of INR. 200 5000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter. Accuracy shall be calculated only within the field of view of the system. Tailgating & lane indiscipline shall not be accounted.	RFP condition prevails.
378	Part-2	Employer's Requirement	ER - 384	Part 2 Employer's Requirement, Table 5-19: Performance of ETA Accuracy, ER - 384	1. Predictions for ETA made 15 minutes before the bus arrival shall have accuracy between -2 to 7 minutes Requirement: 70.00 Penalty (INR):5000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend as: 1. Predictions for ETA made 15 minutes before the bus arrival shall have accuracy between -2 to 7 minutes Requirement: 70.00 % Penalty (INR):200 5000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 5000 shall be imposed.	RFP condition prevails.
379	Part-2	Employer's Requirement	ER - 384	Part 2 Employer's Requirement, Table 5-20: Application Performance, ER - 384	1. Data Loading in 3 seconds for all applications/software Requirement: 99.5% Penalty (INR):2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2,000 shall be imposed. Applies to all project applications.	Kindly amend as: 1. Data Loading in 1minute 3 seconds for all applications/software Requirement: 95% 99.5% Penalty (INR):100 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR.100 2,000 shall be imposed. Applies to all project applications.	RFP condition prevails.
380	Part-2	Employer's Requirement	ER - 384	Part 2 Employer's Requirement, Table 5-20: Application Performance, ER - 384	2. Report Loading in 5 seconds for all applications/software Requirement: 99.5% Penalty (INR):2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2,000 shall be imposed. Applies to all project applications.	Kindly amend as: 2. Report Loading in 3 minutes 5 seconds for all applications/software Requirement: 95% 99.5% Penalty (INR): 100 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 100 2,000 shall be imposed. Applies to all project applications.	RFP condition prevails.
381	Part-2	Employer's Requirement	ER - 384	Part 2 Employer's Requirement, Table 5-21: Security Requirement Performance, ER - 384	1. Security Reporting: Falls by: 100% Penalty (INR): 5000 Calculation: For every delay of one day a penalty of INR. 5,000/ day shall be imposed	Kindly amend as: 1. Security Reporting: Falls by: 99% 100% Penalty (INR): 2000 5000 Calculation: For every delay of one day a penalty of INR. 2000 5,000 / day shall be imposed	RFP condition prevails.
382	Part-2	Employer's Requirement	ER - 385	Part 2 Employer's Requirement, Table 5-21: Security Requirement Performance, ER - 385	2. Vulnerability assessment and closure: Falls by: 100% Penalty (INR): 20000 Calculation: For every delay of one day after 7 days a penalty of INR. 20,000 /day shall be imposed	Kindly amend as: 2. Vulnerability assessment and closure: Falls by: 99% 100% Penalty (INR): 5000 20000 Calculation: For every delay of one day after 7 days a penalty of INR.5000 20,000 /day shall be imposed. Any genuine exception shall be excluded.	RFP condition prevails.
383	Part-2	Employer's Requirement	ER - 385	Part 2 Employer's Requirement, Table 5-21: Security Requirement Performance, ER - 385	3. Penetration testing: Falls by: 100% Penalty (INR): 2000 Calculation: For every delay of one day after 7 days a penalty of INR. 2,000 /day shall be imposed	Kindly amend as: 3. Penetration testing: Falls by: 99% 100% Penalty (INR): 500 2000 Calculation: For every delay of one day after 11 7 days a penalty of INR. 500 2,000 /day shall be imposed	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
384	Part-2	Employer's Requirement	ER - 385	Part 2 Employer's Requirement, Table 5-21: Security Requirement Performance, ER - 385	4. Application Security: Falls by: 100% Penalty (INR): 2000 Calculation: For every delay of one day after 7 days a penalty of INR. 2,000 /day shall be imposed	Kindly amend as: 4. Application Security: Falls by: 100% Penalty (INR): 500-2000 Calculation: For every delay of one day after 7 days a penalty of INR. 500 2,000 /day shall be imposed	RFP condition prevails.
385	Part-2	Employer's Requirement	ER - 385	Part 2 Employer's Requirement, Table 5-22: Helpdesk Performance, ER - 385	1. Helpdesk application Availability Requirement: 99.5% Penalty (INR): 2500 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2500 shall be imposed.	Kindly amend as: 1. Helpdesk application Availability Requirement: 98% -99.5% Penalty (INR): 200 2500 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 2500 shall be imposed.	RFP condition prevails.
386	Part-2	Employer's Requirement	ER - 386	Part 2 Employer's Requirement, Table 5-22: Helpdesk Performance, ER - 386	2. Helpdesk logging of service tickets Requirement: 99.5% Penalty (INR): 2500 Calculation: For every decrease of 0.50% in logging of service ticket number calculated over a period of one quarter, a penalty of INR. 2,500 shall be imposed	Kindly amend as: 2. Helpdesk logging of service tickets Requirement: 98% 99.5% Penalty (INR): 200 2500 Calculation: For every decrease of 0.50% in logging of service ticket number calculated over a period of one quarter, a penalty of INR. 2002,500 shall be imposed	RFP condition prevails.
387	Part-2	Employer's Requirement	ER - 375	Part 2 Employer's Requirement, Table 5-5: Availability of SLVD, ER - 375	1. SLVD Availability Requirement: 99.0% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. SLVD Availability Requirement: 98% 99.0% Penalty (INR): 2000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 2000 5000 shall be imposed.	RFP condition prevails.
388	Part-2	Employer's Requirement	ER - 375	Part 2 Employer's Requirement, Table 5-5: Availability of SLVD, ER - 375	2. SLVD Application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 2. SLVD Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.
389	Part-2	Employer's Requirement	ER - 375 to 376	Part 2 Employer's Requirement, Table 5-6: Availability of VMS ER - 375 to 376	1. VMS Availability Requirement: 99.0% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. VMS Availability Requirement: 95% 99.0% Penalty (INR): 1000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 1000 5000 shall be imposed.	RFP condition prevails.
390	Part-2	Employer's Requirement	ER - 376	Part 2 Employer's Requirement, Table 5-6: Availability of VMS ER - 376	2. VMS Application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 2. VMS Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.
391	Part-2	Employer's Requirement	ER - 376	Part 2 Employer's Requirement, Table 5-7: Availability of ATCC, ER - 376	1. ATCC Availability Requirement: 99.0% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. ATCC Availability Requirement: 95% 99.0% Penalty (INR): 2000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 2000 5000 shall be imposed.	RFP condition prevails.
392	Part-2	Employer's Requirement	ER - 377	Part 2 Employer's Requirement, Table 5-8: Availability of ITMS Platform, ER - 377	1. Application Availability: Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 1. Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
393	Part-2	Employer's Requirement	ER - 377	Part 2 Employer's Requirement, Table 5-9: Availability of CAD/AVL, ER - 377	1. SCU/BOC Availability Requirement: 99.0% Penalty (INR): 1000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 1000 shall be imposed.	Kindly amend clause as: 1. SCU/BOC Availability Requirement: 90% 99.0% Penalty (INR): 200 1000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 200 1000 shall be imposed.	RFP condition prevails.
394	Part-2	Employer's Requirement	ER - 377	Part 2 Employer's Requirement, Table 5-9: Availability of CAD/AVL, ER - 377	2. CAD/AVL Application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 2. CAD/AVL Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR.5000 50,000 shall be imposed.	RFP condition prevails.
395	Part-2	Employer's Requirement	ER - 378	Part 2 Employer's Requirement, Table 5-10: Availability of PIS, ER - 378	1. PIS Availability Requirement: 99.0% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. PIS Availability Requirement: 90% 99.0% Penalty (INR): 500 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 500 5000 shall be imposed.	RFP condition prevails.
396	Part-2	Employer's Requirement	ER - 378	Part 2 Employer's Requirement, Table 5-11: Availability of DMS, ER - 378	1. DMS Application Availability Requirement: 99.5% Penalty (INR): 1000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 1. DMS Application Availability Requirement: 98% 99.5% Penalty (INR): 1000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR.1000 50,000 shall be imposed.	RFP condition prevails.
397	Part-2	Employer's Requirement	ER - 378	Part 2 Employer's Requirement, Table 5-12: Availability of Communications Network, ER - 378	1. Communication (Wired Connectivity) Availability Requirement: 99.5% Penalty (INR): 10000 Calculation: For every decrease of 0.25% in performance of each device/location & its associated component in a quarter, a penalty of INR. 10,000 shall be imposed	Kindly amend clause as: 1. Communication (Wired Connectivity) Availability Requirement: 99% 99.5% Penalty (INR): 1000 10000 Calculation: For every decrease of 0.25% in performance of each device/location & its associated component in a quarter, a penalty of INR. 1000 10,000 shall be imposed	RFP condition prevails.
398	Part-2	Employer's Requirement	ER - 378,ER-380	Part 2 Employer's Requirement, Table 5-12: Availability of Communications Network, ER - 378 to 379 & Table 5-13: Availability of Command Control Centre, ER- 380	Table 5-12: Availability of Communications Network 1. Communication (Wired Connectivity) Availability 2. Communication (Wireless Connectivity-SIM Card) Availability & Table 5-13: Availability of Command Control Centre 8. SMS services	As per TRAI, Bandwidth cannot be resold and a Tripartite agreement has to be signed by Employer, Contractor & ISP. So we request you to kindly levy this SLA penalty directly on ISP as the payment shall be made directly by the Employer to ISP. So, kindly remove these penalties from contractor scope.	RFP condition prevails.
399	Part-2	Employer's Requirement	ER - 379	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 379	2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability Requirement: 99.99% Penalty (INR): 50000 Calculation: For every decrease of 0.10% in performance of each device & its associated component in a quarter, a penalty of INR. 50,000 shall be imposed	Kindly amend clause as: 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability Requirement: 99% 99.99% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.10% in performance of each device & its associated component in a quarter, a penalty of INR.5000 50,000 shall be imposed	RFP condition prevails.
400	Part-2	Employer's Requirement	ER - 379	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 379	3. Firewall Availability Requirement: 99.99% Penalty (INR): 50000 Calculation: For every decrease of 0.10% in performance of each device & its associated component in a quarter, a penalty of INR. 50,000 shall be imposed	Kindly amend clause as: 3. Firewall Availability Requirement: 99% 99.99% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.10% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 50,000 shall be imposed	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
401	Part-2	Employer's Requirement	ER - 379	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 379	4. Workstations/ Printer Availability Requirement: 99.5% Penalty (INR): 2000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 2,000 shall be imposed	Kindly amend clause as: 4. Workstations/ Printer Availability Requirement: 95% 99.5% Penalty (INR): 500 2000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 500 2,000 shall be imposed	RFP condition prevails.
402	Part-2	Employer's Requirement	ER - 380	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 380	5. Local area network within CCC Requirement: 99.5% Penalty (INR): 2000 Calculation: For every decrease of 0.25% in Local Network availability for each location in a period of one month, a penalty of INR. 2,000 shall be imposed	Kindly amend as: 5. Local area network within CCC Requirement: 98% 99.5% Penalty (INR): 500 2000 Calculation: For every decrease of 0.25% in Local Network availability for each location in a period of one month, a penalty of INR. 500 2,000 shall be imposed	RFP condition prevails.
403	Part-2	Employer's Requirement	ER - 380	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 380	6. UPS with 3 hours battery backup at all locations (data centre, field, etc.) Requirement: 99.5% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5,000 shall be imposed. Availability shall be calculated only for power outages that are less than the UPS backup time. Power outages beyond UPS backup time shall be excluded from the SLA calculations.	Kindly amend as: 6. UPS with 3 hours battery backup at all locations (data center, field, etc.) Requirement: 98% 99.5% Penalty (INR): 2000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 2000 5,000 shall be imposed. Availability shall be calculated only for power outages that are less than the UPS backup time. Power outages beyond UPS backup time shall be excluded from the SLA calculations.	RFP condition prevails.
404	Part-2	Employer's Requirement	ER - 380	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 380	7. Other application Availability (Web Portal/ Mobile App/ Any other application, Integration services, etc.) Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend as: 7. Other application Availability (Web Portal/ Mobile App/ Any other application, Integration services, etc.) Requirement: 99% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.
405	Part-2	Employer's Requirement	ER - 381	Part 2 Employer's Requirement, Table 5-13: Availability of Command Control Centre, ER - 381	7. EMS & NMS application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend as: 7. EMS & NMS application Availability Requirement: 99% 99.5% Penalty (INR): 2000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2000 50,000 shall be imposed.	RFP condition prevails.
406	Part-2	Employer's Requirement	ER - 381	Part 2 Employer's Requirement, Table 5-14: Performance/Accuracy of ATCS, ER - 381	1. ATCS Counting Accuracy Requirement: 92.0% Penalty (INR): 1000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 1000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter.	We request you to kindly amend clause as: 1. ATCS Counting Accuracy Requirement: 75% 92.0% Penalty (INR): 200 1000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 1000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter. Tailgating & lane indiscipline shall not be accounted. Night time vehicles without headlight also shall not be included in calculating accuracy.	RFP condition prevails.
407	Part-2	Employer's Requirement	ER - 381	Part 2 Employer's Requirement, Table 5-15: Performance/Accuracy of TIDS, ER - 381	1. TIDS Data accuracy Requirement: 95.0% Penalty (INR): 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 2000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter.	Kindly amend as: 1. TIDS Data accuracy Requirement: 80% 95.0% Penalty (INR): 200 2000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 2000 shall be imposed. Measurement to be made at different time of the day for random time periods set by Employer, every quarter. Accuracy shall be calculated only within the field of view of the system.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
408	Part-2	Employer's Requirement	ER - 382 & 383	Part 2 Employer's Requirement, Table 5-16: Performance/Accuracy of RLVD & Table 5-17: Performance/Accuracy of SLVD, ER - 382 & 383	2. ANPR for standard number plates accuracy Requirement: 75.0% Penalty (INR): 10000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 10,000 shall be imposed.	Kindly amend as: 2. ANPR for standard number plates accuracy Requirement: 75.0% Penalty (INR): 200 40000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 40,000 shall be imposed. Accuracy shall be calculated only within the field of view of the system. Tailgating & lane indiscipline shall not be accounted.	RFP condition prevails.
409	Part-2	Employer's Requirement	ER - 382 & 383	Part 2 Employer's Requirement, Table 5-16: Performance/Accuracy of RLVD & Table 5-17: Performance/Accuracy of SLVD, ER - 382 & 383	3. Generation of violation tickets Requirement: 99.5% Penalty (INR): 1000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 1000 shall be imposed.	Kindly amend as: 3. Generation of violation tickets Requirement: 98% 99.5% Penalty (INR): 200 4000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 200 4000 shall be imposed.	RFP condition prevails.
410	Part-2	Employer's Requirement	ER 120	Table 8-12: Hardware Requirement of Data Storage No Item	Hardware Requirement - Tape Library	Hardware Requirement - Tape Library (This is applicable if On Premise primary DC option chosen by the Contractor)	Successful bidder need to share the architecture/ Specifications with Employer. Engineer and Employer to approve the same before execution.
411	Part-2	Employer's Requirement	ER 127	Chapter 2-2 Requirements of Integrated Traffic Management System	Video Feed Protocol	Video Feed Protocol should be unicast	Query is not clear.
412	Part-2	Employer's Requirement	ER 171	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, (1) Fully Adaptive Traffic Control (FATC), ER 171	· ATCS shall be able to enable the automatic subarea formulation which is to dynamically connect and separate adjacent adaptive regions(subareas) comparing the real-time traffic conditions of each adaptive region to optimize the traffic flow. (for example: if difference of cycle length of each adaptive region(subarea) is less than 20 seconds, the adjacent adaptive regions(subareas) can be connected.)	Requesting you to kindly modify the following clause: ATCS shall be able to connect and specify offsets between traffic signals at separate adjacent regions (subareas) and provide coordination. Justification: Adaptive regions is a functionality provided by only one or two international ATCS systems. No Indian ATCS system provides this functionality. The suggested change can also achieve the same outcome of coordinating traffic flow between junctions belonging to different regions without locking out Indian ATCS OEMs.	RFP condition prevails.
413	Part-2	Employer's Requirement	ER 174	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, Method of Operation, ER 174	· The System shall enable a minimum of 8 users to use the System simultaneously. Access to the System shall be by username and password. The System shall provide for a minimum of 48 user passwords. The System shall provide for a level of access for each configured user account.	Requesting you to kindly modify the clause to the following: · The System shall enable a minimum of 25 users to use the System simultaneously. Access to the System shall be by username and password. The System shall provide for a minimum of 150 user passwords. The System shall provide for a level of access for each configured user account. Justification: As the city wants to expand upto 1000 traffic signals in the future, then having 8 users will not be sufficient. Hence requesting you to revise the no. of minimum users and user passwords in line with the vision presented in the city.	RFP condition prevails.
414	Part-2	Employer's Requirement	ER 178	Part 2 Employer's Requirements, 4.2 Functional Requirements of Controller, Table 4-2: Functional Requirement of Controller, Fully Adaptive Control Mode, ER 178	- Pushbutton Faults	Please explain on how the city envisage the controller to implement this functionality. The push button are simple switches for which the demand is captured by completing the circuit by pushing the button. The push buttons aren't IOT devices and hence cannot communicate this status to the controller. Also unlike like lights we cannot monitor the current flow through the lines as they are don't have scheduled on and off times. If the city is unable to explain the logic behind this then requesting you to kindly delete this clause.	The Controller is expected to check the push buttons for fault. This can be implemented by checking if the push button was not actuated during a specified interval (user configurable). Also if a push button which remained continuously actuated shall also be flagged as faulty.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
415	Part-2	Employer's Requirement	ER 180	Part 2 Employer's Requirements, 5.1 Controller, Table 5-1: Hardware requirement of Controller, ER 180	5. A minimum of 512KB flash memory and 128KB RAM shall be provided.	<p>Requesting you to kindly modify the clause to the following:</p> <p>5 · A minimum of 2 GB flash memory and 1 GB RAM shall be provided. The controller shall have a processor of at least 1GHz or more.</p> <p>Justification: The detectors produce a lot of vehicle by vehicle data which will be lost if the controller memory or the processing power is less.</p>	Bidder may propose better solution without any additional cost to the Employer.
416	Part-2	Employer's Requirement	ER 183	Part 2 Employer's Requirements, 5.1 Controller, Table 5-1: Hardware requirement of Controller, ER 183	<p>Design Life:</p> <p>· All components must be rated for minimum 10-year life, excluding the standby battery, which shall have a minimum life of 5 years. Also Mean Time Between Failures (MTBF) of greater than 3 years is required.</p>	<p>Requesting you to kindly modify the clause to the following:</p> <p>Design Life:</p> <p>· All components must be rated for minimum 5-year life, excluding the standby battery, which shall have a minimum life of 1 years. Also Mean Time Between Failures (MTBF) of greater than 1 year is required.</p> <p>Justification: Electronic components typically don't last for more than 6 years in harsh street environment such as in India. All Smart City tenders require traffic signal controllers to have a life-time of 6 years. We request you to kindly bring this clause in line with the norm used by other Smart Cities.</p>	RFP condition prevails.
417	Part-2	Employer's Requirement	ER_201	Chapter 2-4 Requirements of Traffic Incident Detection System		<p>Sir for effective Traffic incident system . The lens shodul be able to see and track vehicle at least 250 meters or more in all weather and light conditions. The sensor should be able to detect speed of individual vehicle, wrong direction, abnormal traffic or any changes in complete dark (which is more accident prone time) . This is only possible with long range traffic radars which can be integrated to dome camera for zooming in and find the incident details and dispatching it. Only video based system mught not be effective and will be more like CCTV.</p> <p>We suggest you please clarify on range of incident detecion, weather and light conditon, queue detection, tracking of multiple vehicles and what all incidents in what type. Else all MSI might quote different CCTV based solutions which is not effective in dark, twilight and might also not work as chennai is sea side city and cameras will often be dirty and video anaytics might be big failure. As of now RFP speaks of simple cameras which we are sure might not provide effetcive traffic monitoring in dark or twilight and chennai weather.</p> <p>Incident detection system should work in complete darkness , all weather, twilight and should be able to track vehicles for atleast 200 meters so that incident like wrong direction, abnormal traffic queue, count volume and speeding of traffic can be monitored. the system shoudl be integrated with a high speed dome which should be zoomed towards the incident. The system shodul be integrated to Traffic accident reporting. The sensor should be 4D HD and should be able to monitor upto 8 lanes from 30 meters to 250 meter in all light and weather conditions.</p>	RFP condition prevails.
418	Part-2	Employer's Requirement	ER-102	Table 6-1: Building utilities requirement of Control room and Datacentre	It is required that there is early detection of fire for effective functioning of the Control Room.	Early smoke detection to be design for DC Server Room. Kindly confirm	Yes. Your understanding is correct.
419	Part-2	Employer's Requirement	ER-102	Table 6-1: Building utilities requirement of Control room and Datacentre	The Contractor shall be supply, install and commissioning access control system with integration BAS.	Is there an existing BAS? Kindly confirm if so, existing BAS details required.	No.
420	Part-2	Employer's Requirement	ER-103	Part 2 Employers Requirements Pg. 344 Chapter 4 Bill of Quantity (BOQ)	CCTV surveillance at TIMS Control Centre	We understand that the cameras proposed at the command control center shall be connected to NVR. Hence, kindly include the NVR qty in the BOQ and provide the minimum required specification. Also provide the camera qty for each type of cameras required at the CCC.	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
421	Part-2	Employer's Requirement	ER-103	Part 2 Employers Requirements, Pg. 107 7.2 Disaster Recovery	The Contractor shall propose the suitable disaster recovery plan for the System. ■ The minimum following three (3) servers of Traffic Information and Management System which will be critical for operation at a time of disaster shall be protected by replicating them on cloud.	Kindly clarify what all applications to be present in disaster recovery. Also clarify the production capacity of the same (eg: 50%, 100%)	Refer to Addendum-1, S.No: 101 dated 08-03-2022
422	Part-2	Employer's Requirement	ER-103	Table 6-1: Building utilities requirement of Control room and Datacentre	CCTV surveillance at TIMS Control Centre The Contractor must supply, installation, commissioning, and maintenance of appropriate CCTV system to monitor activity in TIMS-CCC related for CITS Project Facilities such as server room, UPS Room, inventory Room etc ✓ Fixed Dome Camera ✓ Fixed Bullet Camera ✓ Fisheye Camera ✓ NVR With 42" Monitor ✓ Storage Capacity minimum 4 months ✓ 5 MP or better	CCTV surveillance at TIMS Control Centre: Please clarify on the qty required for cameras mentioned in CCC	Please refer to A22 in Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2
423	Part-2	Employer's Requirement	ER-105	7.1 System Server Architecture	To minimize the system downtime and make the System effective, central system servers shall be established with active-active architecture to provide seamless service with no down time.(On premise / Cloud)	Should not be applicable to infrastructure housed in cloud for Primary DC and for DR.Cloud based equivalent services should be allowed for Primary DC and for DR infrastructure hosted on cloud.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
424	Part-2	Employer's Requirement	ER-105	7.1 System Server Architecture	To minimize the system downtime and make the System effective, central system servers shall be established on premises with redundant architecture (hot and standby).	To minimize the system downtime and make the System effective, central system servers shall be established with active-active architecture to provide seamless service with no down time.(On premise / Cloud)	RFP condition prevails.
425	Part-2	Employer's Requirement	ER-105	Table 7-1: Functional requirement of System server architecture	Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, anti-malware solutions without the need for agents inside the virtual machines.	Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, anti-malware solutions without the need for agents inside the virtual machines. Virtualization should support capability to enables customers to create isolated compute environments to further protect and securely process highly sensitive data including cryptographic attestation for your software, so that you can be sure that only authorized code is running	RFP condition prevails. The bidder may propose suitable architecture/solution.
426	Part-2	Employer's Requirement	ER-105	Table 7-1: Functional requirement of System server architecture	The solution shall provide the ability to identify and report on over-sized, under- sized, idle and powered-off virtual machine such that the environment can be right-sized, and resources can be reclaimed	The solution shall provide the ability to identify and report on over-sized, under-sized, idle and powered-off virtual machine such that the environment can be right-sized, and resources can be reclaimed. The solution should provide recommendation on right instance sizes and should also recommend best practices across cost optimization, security, performance, fault-tolerance and any service limits.	RFP condition prevails.
427	Part-2	Employer's Requirement	ER-105/	ER-105/ 7.1 System Server Architecture	For backup cloud-based system servers shall be higher availability and non-failure configuration.	We understand that Server High Availability is required at DC and not required at Cloud-based DR. Please confirm.	Yes. Your understanding is correct.
428	Part-2	Employer's Requirement	ER-106	ER-106 - 7.1	Virtualization software should support Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option. While doing migration across CPU generation there should be no overall application down time.	Live migration is vendor specific and only specific provider supports this function.Kindly remove live migration function to avail more vendors participation.	Bidder may assess the requirement and propose the solution which satisfies functional requirement to the satisfaction of the employer.
429	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Request to allow bidder to quote for compatible/certified virtualisation solution from Hardware OEM or Reputed OEMs	1. OEM Specific Clause. RFP is favouring only one OEM and hence+E24:G28 its creates a unfair competition leading to unfair commercial advantage to specific OEM which may result in additional investment. Request to allow all Enterprise Class Virtualisation Solution 2. Our solution comes bundled with Server Nodes, Internal Storage, 100 Gbps Converged Network with Software defined capabilities, Private Cloud Software Suite (IaaS with Self Service Capabilities), Virtualisation Software Suite, Management solution Suite (Complete Hardware & Software Stack), DR Automation Solution Suite, Docker based Containers solution etc	Refer to Addendum-1, S.No: 44 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
430	Part-2	Employer's Requirement	ER-106	Server Virtualization for Primary and Secondary Servers	Kindly clarify "Are you looking for a hardware vendor agnostic software defined networking solution, such that your free to which variety of hardware switches co-existing together, all managed intelligently by a vendor agnostic SDN solution" . If your not looking for that then, you would merely get locked to a specific hardware networking vendor for the entire lifetime of the project.	Proposed SDN/Network Virtualization solution should not have any dependence on any proprietary hardware resulting into vendor lockin	Yes. Your understanding is correct.
431	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Ability to present more memory to virtual machines than physically available by dynamically (re)allocating memory to virtual machines when needed/reclaiming it when not needed to maximize consolidation ratios.	This is vendor specific and only specific provider supports this function.Kindly alter the function to avail more vendors participation	RFP condition prevails.
432	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Provide granular VM-Centric controls, automated self-rebalancing capabilities to align with defined Storage service levels (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to Primary cloud DC or DR bidders / Contractors	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
433	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Provide Interactive topology maps to visualize the relationships between physical servers, virtual machines, networks and storage. (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to Primary cloud DC or DR bidders / Contractors	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
434	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, anti-malware solutions without the need for agents inside the virtual machines. Virtualization should support capability to enables customers to create isolated compute environments to further protect and securely process highly sensitive data including cryptographic attestation for your software, so that you can be sure that only authorized code is running	Data security is important especially in Cloud and in large ITMS projects.	RFP condition prevails. The bidder may propose suitable architecture/solution.
435	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	The solution shall provide the ability to identify and report on over-sized, under- sized, idle and powered-off virtual machine such that the environment can be right-sized, and resources can be reclaimed. The solution should provide recommendation on right instance sizes and should also recommend best practices across cost optimization, security, performance, fault-tolerance and any service limits.	The resources consumed need to be monitored and optimised for efficient use of the solution.	RFP condition prevails.
436	Part-2	Employer's Requirement	ER-106	7.1 System Server Architecture	The solution should be able to automatically increase the number of instances during demand spikes to maintain performance and decrease capacity during low resources requirements stages to reduce costs.	This feature is for resilient infrastructure and help for increasing the availability of the system.	RFP condition prevails.
437	Part-2	Employer's Requirement	ER-106	7.1 System Server Architecture	Provision to Monitor, store, and validate activity events for authenticity. Easily generate audit reports required by internal policies and external regulations. Detect unauthorized access using the Who, What, and When information.	Data security is important especially in Cloud and in large ITMS projects.	RFP condition prevails. The bidder may propose suitable architecture/solution.
438	Part-2	Employer's Requirement	ER-106	7.1 System Server Architecture		The solution shall provide capability to interactively query Traffic Big Data using Standard SQL. Since this analysis is adhoc, the service should preferably be serverless, so that there is no infrastructure to manage, and you pay only for the queries that run.	RFP condition prevails.
439	Part-2	Employer's Requirement	ER-106	7.1 System Server Architecture	The database should support backtracking in time to enable faster restores compared to restoring from back-up which is often time consuming and can take upto hours whereas backtrack can quickly restore to a point in time.	This is critical for time saving and efficiently use the infrastructure	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
440	Part-2	Employer's Requirement	ER-106	Part 2 Employer's Requirement ER-106 Table 7-1: Functional requirement of System server architecture	Server Virtualization for primary and secondary server: The solution shall provide the ability to identify and report on over-sized, under- sized, idle and powered-off virtual machine such that the environment can be right-sized, and resources can be reclaimed.	Critical DC like ITMS require a completely automated solution for managing the resources depending upon the application workload changes at all the times and in realtime. Manual changes are tedious and often not applied when necessary. We request to amend the clause as following. The solution should provide a holistic view of applications and underlying infrastructure, health status, usage and provide realtime recommendations which can be automated without any manual intervention.	RFP condition prevails.
441	Part-2	Employer's Requirement	ER-106	Part 2 Employer's Requirement ER-106 Table 7-1: Functional requirement of System server architecture	The solution shall provide prebuilt & customizable operations dashboards & reports to provide real-time insight into infrastructure behavior, upcoming problems and opportunities for efficiency improvements.	Visibility about the infrastructure is insufficient as it only shows an isolated view. The visibility should include both Applications and the underlying infrastructure as a wholesome view. The solution should provide a holistic view of applications and underlying infrastructure, health status, usage and provide realtime recommendations which can be automated without any manual intervention.	RFP condition prevails.
442	Part-2	Employer's Requirement	ER-106	Part 2 Employer's Requirement ER-106 Table 7-1: Functional requirement of System server architecture	The solution should provide a log analytical tool which will collect data from various data Sources	Log collection and analysis is redundant when there is a solution that performs holistic analysis including infrastructure and applications and provides actionable recommendations in realtime. Therefore, we request to remove this redundant feature and clause.	RFP condition prevails.
443	Part-2	Employer's Requirement	ER-106	Part 2 Employer's Requirement ER-106 Table 7-1: Functional requirement of System server architecture	The solution should provide capacity analytics to do "What If" scenarios such as Project planning to identify the resource shortfall and do Capacity Planning for Future workload requirements.	The RFP calls for on-prem and public cloud options. The tool/solution should be agnostic to hypervisors and should work with popular public clouds. This clause is hypervisor specific. We request to amend this clause to "The solution should provide utilization & capacity information in realtime for both on-prem VMs and cloud instances so that the necessary infrastructure or cloud instances can be predicted and planned well in advance"	RFP condition prevails.
444	Part-2	Employer's Requirement	ER-106	Part 2 Employer's Requirement ER-106 Table 7-1: Functional requirement of System server architecture	The solution should offer automated orchestration of site failover and failback with a single click to reduce recovery times. The solution should offer Centralized management of recovery plans from the virtualization manager console replacing the manual runbooks both DC and DR The solution should offer frequent, non- disruptive testing of recovery plans to ensure highly predictable recovery objectives The solution should offer planned migration workflow to enable disaster avoidance and data center mobility.	The RFP calls for on-prem and public cloud options. The tool/solution should be agnostic to hypervisors and should work with popular public clouds. This clause is hypervisor specific. We request to amend this clause to "The solution should provide replication, failover, failback, DR drills, etc. for agnostic environments and on-prem to cloud landscapes as well."	RFP condition prevails.
445	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Virtualization software should support live Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option.	Virtualization software should support Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option. While doing migration across CPU generation there should be no overall application down time.	RFP condition prevails.
446	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Ability to present more memory to virtual machines than physically available by dynamically (re)allocating memory to virtual machines when needed/reclaiming it when not needed to maximize consolidation ratios	Ability to change CPU-RAM configuration of the VM for them to make optimum resource utilisation should be present. While making this change there should be no overall application down-time	RFP condition prevails.
447	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Provide granular VM-Centric controls, automated self-rebalancing capabilities to align with defined Storage service levels	Provide granular VM-Centric controls, automated self-rebalancing capabilities to align with defined Storage service levels (This is applicable if On Premise primary DC option chosen by the Contractor)	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
448	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Provide Interactive topology maps to visualize the relationships between physical servers, virtual machines, networks and storage.	Provide Interactive topology maps to visualize the relationships between physical servers, virtual machines, networks and storage. (This is applicable if On Premise primary DC option chosen by the Contractor)	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
449	Part-2	Employer's Requirement	ER-106	Table 7-1: Functional requirement of System server architecture	Table 7-1: Functional requirement of System server architecture	Request to allow bidder to quote for compatible/certified virtualisation solution from Hardware OEM or Reputed OEMs	Yes. Your understanding is correct.
450	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	The minimum following three (3) servers of Traffic Information and Management System which will be critical for operation at a time of disaster shall be protected by replicating them on cloud.	Kindly clarify which three application needs to be considered in DR. As there are 7 application listed in the following section .	Refer to Addendum-1, S.No: 101 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
451	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	The traffic big data analytics	Kindly elaborate on the requirement, we understand that you would like to perform Big Data Analytics of traffic data, but how is that under replication method?	Refer to Addendum-1, S.No: 61 dated 08-03-2022
452	Part-2	Employer's Requirement	ER-107	ER-107 - 7.3	Long Term Data Archive - Duration	Kindly share the duration of archival and share the details of how frequently will the data be accessed?	RFP Condition prevails, The data shall be archived During the project period. The frequency of data access shall be proposed by the bidder in it's technical submission .
453	Part-2	Employer's Requirement	ER-107	7.2 Disaster Recovery	Recovery Point Objective (RPO) should aim to provide near zero data loss, not exceeding 15 min.	Lesser the RPO will be resilient infrastructure and help for reducing data loss	Refer to Addendum-1, S.No: 111 dated 08-03-2022.
454	Part-2	Employer's Requirement	ER-107	7.2 Disaster Recovery	Recovery Time Objective (RTO) shall be less than 1.0 hours	Lesser the RTO will be resilient infrastructure and help for increasing the availability of the system.	RFP condition prevails.
455	Part-2	Employer's Requirement	ER-107	7.3 Long Term Data Archive	The system should provide capability to run queries and custom analytics on the data that is stored in archive, without having to restore your entire object to hot storage.	This is critical for time saving and efficiently use the long term archival.	RFP condition prevails.
456	Part-2	Employer's Requirement	ER-107	Table 7-1: Functional requirement of System server architecture	Replication Method - The traffic big data analytics	The traffic big data analytics	Refer to Addendum-1, S.No: 61 dated 08-03-2022
457	Part-2	Employer's Requirement	ER-107	Table 7-3: Functional requirement of Long term data archive	Long Term Data Archive	Long Term Data Archive - Duration	RFP Condition prevails, The data shall be archived During the project period. The frequency of data access shall be proposed by the bidder in it's technical submission .
458	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	Recovery Point Objective (RPO) shall be less than 24.0 hours	Recovery Point Objective (RPO) should aim to provide near zero data loss, not exceeding 15 min.	Refer to Addendum-1, S.No: 111 dated 08-03-2022
459	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	Recovery Time Objective (RTO) shall be less than 24.0 hours	Recovery Time Objective (RTO) shall be less than 1.0 hours	RFP condition prevails.
460	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	Long Term Data Archive	The system should provide capability to run queries and custom analytics on the data that is stored in archive, without having to restore your entire object to hot storage.	RFP condition prevails.
461	Part-2	Employer's Requirement	ER-107	Table 7-2: Functional requirement of Disaster recovery	Auto scaling	The solution should be able to automatically increase the number of instances during demand spikes to maintain performance and decrease capacity during low resources requirements stages to reduce costs.	RFP condition prevails.
462	Part-2	Employer's Requirement	ER-108	Table 4-2: Functional requirement of Security	4.4 Security Physical or virtual network appliance that monitors 360 degrees of network to create complete visibility into all aspects of targeted attacks, advanced threats, and ransomware.		No query provided.
463	Part-2	Employer's Requirement	ER-108	Table 4-2: Functional requirement of Security	7.4 Security Endpoint security refers to cybersecurity services for network endpoints. These services include antivirus, email filtering, web filtering, and firewall services.	Request to confirm number of users for web security and number of Email Boxes for Email Security	Bidder shall provide the requisite end point security.
464	Part-2	Employer's Requirement	ER-108	7.4 Security	Physical or virtual network appliance that monitors 360 degrees of network to create complete visibility into all aspects of targeted attacks, advanced threats, and ransomware.		Query is not clear.
465	Part-2	Employer's Requirement	ER-108	7.4 Security	For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	Request to consider draft Server Security technical specification as Annexure - 2 mentioned in subsequent section of this document.	RFP condition prevails.
466	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	Endpoint security refers to cybersecurity services for network endpoints. These services include antivirus, email filtering, web filtering, and firewall services. Endpoint security plays a crucial role for businesses, ensuring critical systems, intellectual property, customer data, employees, and guests are protected from ransomware, phishing, malware, and other cyberattacks	"Endpoint security refers to cybersecurity services for network endpoints. These services include antivirus. Endpoint security plays a crucial role for businesses, ensuring critical systems, intellectual property, customer data, employees, are protected from ransomware, phishing, malware, and other cyberattacks" (mail filtering, web filtering, and firewall are perimeter security services, hence requesting for change)	RFP condition prevails. The bidder may propose suitable architecture/solution.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
467	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	Firewall (Win PC) - The firewall can block or allow certain types of network traffic by creating a barrier between the endpoint and the network	Please remove the clause	RFP condition prevails.
468	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	Full Disk Encryption	Please remove the clause	RFP condition prevails.
469	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	HTTPS Web Threat Protection	Please remove the clause (This is functionality of Web Proxy/Url Filtering solution)	RFP condition prevails.
470	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	Unauthorized Change Prevention Service (Win PCs only) - Regulates application behavior and validates program trustworthiness.	Please remove the clause OEM Specific Clause	RFP condition prevails. The bidder may propose suitable architecture/solution.
471	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	URL Filtering - URL Filtering allows administrators to block specific types of websites during different times of the day.	Please remove the clause (This is functionality of Web Proxy/Url Filtering solution)	RFP condition prevails. The bidder may propose suitable architecture/solution.
472	Part-2	Employer's Requirement	ER-108	Part 2 Employer's Requirement ER-108 Table 7-4: Functional requirement of Security	Industry leading protection from Virus, Spyware, Phishing and Hacking. URL filtering. USB Port Blocking. Data Theft prevention	Industry leading protection from Virus, Spyware, Phishing and Hacking.	RFP condition prevails. The bidder may propose suitable architecture/solution.
473	Part-2	Employer's Requirement	ER-108 & ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	Request the department to incorporate specifications of encryption and protection of software, files, folders or documents to protect from unauthorized persons. Data is very critical for every organization and now days increased risks from various Ransomware and Malware attacks that are happening worldwide including India. In addition, there are mandates from regulatory bodies to protect the sensitive / critical data, hence request department to consider a proper encryption and key management solution to protect your data.	Refer to Addendum-1, S.No: 46 dated 08-03-2022
474	Part-2		ER-108 & ER-279	Table 7-4: Functional requirement of Security & Table 4-2: Functional requirement of Security	Page no 112/391 Table 7-4: Functional requirement of Security: Physical or virtual network appliance that monitors 360 degrees of network to create complete visibility into all aspects of targeted attacks, advanced threats, and ransomware.	Request to confirm throughput requirement for appliance and type of interface	Refer to Addendum-1, S.No: 96 dated 08-03-2022.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
475	Part-2		ER-108 & ER-279	Table 7-4: Functional requirement of Security & Table 4-2: Functional requirement of Security	Page no 112/391 Table 7-4: Functional requirement of Security: For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	Request to consider dedicated server security solution for Servers instead of Endpoint security as security requirement and its priorities are completely different for servers which are running with critical applications. Request to consider attached Annexure Server Security sheet for Server security specifications	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
476	Part-2	Employer's Requirement	ER-108 & ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	Considering the increased risks from various Ransomware and Malware attacks that are happening worldwide including India. Should an encryption and protection solution to protect software, files, folders or documents from unauthorized persons. incorporate be factored in the solution. Please suggest some indicative specifications for the same.	Refer to Addendum-1, S.No: 46 dated 08-03-2022
477	Part-2	Employer's Requirement	ER-108 & ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files Considering the increased risks from various Ransomware and Malware attacks that are happening worldwide including India. Should an encryption and protection solution to protect software, files, folders or documents from unauthorized persons. incorporate be factored in the solution. Please suggest some indicative specifications for the same.	We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications. It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration. Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection. Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy	Refer to Addendum-1, S.No: 46 dated 08-03-2022
478	Part-2	Employer's Requirement	ER-108 & ER-279	4.4 Security & 7.4 Security	Endpoint security refers to cybersecurity services for network endpoints. These services include antivirus, email filtering, web filtering, and firewall services.		Query is not clear.
479	Part-2	Employer's Requirement	ER-108 & ER-279	4.4 Security & 7.4 Security	For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	Request to consider draft Server Security technical specification as Annexure - 2 mentioned in subsequent section of this document.	RFP condition prevails.
480	Part-2	Employer's Requirement	ER-108, ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	As we, all know that, there are mandates from regulatory bodies (UIDAI, PDP) to protect the sensitive / critical data, hence request department to consider a proper encryption and key management solution along with backup solution to protect your data from unauthorised persons.	Refer to Addendum-1, S.No: 46 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
481	Part-2	Employer's Requirement	ER-108, ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	<p>Keeping in mind the mandates from regulatory bodies (UIDAI, PDP) to protect the sensitive / critical data, should a encryption and key management solution be factored to achieve this functionality. If yes, then please give some indicative specifications.</p> <p>We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications.</p> <p>It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration.</p> <p>Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	Refer to Addendum-1, S.No: 46 dated 08-03-2022
482	Part-2	Employer's Requirement	ER-108, ER-279	Table 7-4: Functional requirement of Security Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	"Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files" (Automatically back-up and restoring files are not functionality of endpoint security)	Refer to Addendum-1, S.No: 46 dated 08-03-2022
483	Part-2	Employer's Requirement	ER-108,279	Table 4-2: Functional requirement of Security & Table 4-2: Functional requirement of Security	7.4 Security For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	Request to consider dedicated server security solution for Servers instead of Endpoint security as security requirement and its priorities are completely different for servers which are running with critical applications.	RFP condition prevails. Bidder may assess the requirement and propose the equal or better solution.
484	Part-2	Employer's Requirement	ER-108,279	Table 4-2: Functional requirement of Security & Table 4-2: Functional requirement of Security	4.4 Security For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.		No query provided.
485	Part-2	Employer's Requirement	ER-109	Table 8-1: Hardware requirement of Servers		Please specify the number of environments (e.g, Production / Development / Test / Staging / etc.) that would be provisioned for each solution.	Bidder need to consider at a minimum Development, Testing, Staging and Production environments.
486	Part-2	Employer's Requirement	ER-109	ER-109,110 - 8.1	Hardware Requirement - Servers (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to infrastructure housed in cloud for Primary DC and for DR.Cloud based equivalent services should be allowed for Primary DC and for DR infrastructure hosted on cloud.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
487	Part-2	Employer's Requirement	ER-109 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	* Bidder to propose integrated systems / blade chassis, rack-mountable, capable of accommodating minimum 8 or higher nodes/blades * Have the capability for installing industry-standard flavors of operating system including Microsoft Windows, Enterprise RedHat Linux OS, Oracle Linux as well as virtualization solutions as per proposed solution requirement and compatibility matrix	1. Solution Approach based on Blade Chassis is an legacy approach. We recommend Chennai Smart City to consider integrated systems approach which provides better performance, better consolidation, better integration, better availability, ease of management & better support, 2. Blade Server Specifications favours only few OEMs which will limit the number of OEMs participating in the RFP and hence it creates an unfair competition. We request to remove Blade Chassis Specifications and allow bidders to quote for latest technology based innovative solutions which can be a best fit for proposed technology stack catering to CSC requirements 3. Asking for VMware explicitly limits the fair competition. We request to amend this and ask for certified/compatible virtualisation software for the proposed solution 4. DVD-ROM is a security risk in servers and technology had caught up in remote installation in a more secured way	Refer to Addendum-1, S.No: 92 dated 08-03-2022
488	Part-2	Employer's Requirement	ER-110	Table 8-1: Hardware requirement of Servers	Hardware Requirement - Servers	Hardware Requirement - Servers (This is applicable if On Premise primary DC option chosen by the Contractor)	Successful bidder need to share the architecture/ Specifications with Employer. Engineer and Employer to approve the same before execution.
489	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Network interface Minimum of 40 Gbps bandwidth across redundant LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity (As required by solution proposed)	1. 20 Gbps is not an industry standard Switching Speed. 4 * 10 Gbps or 4 * 25 Gbps is industry Standard network speed 2. Integrated Solutions offers high speed low latency 100 Gbps Network for both LAN & Storage Requirements	Refer to Addendum-1, S.No: 92 dated 08-03-2022
490	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum of 2 Nos of PCIe 3.0 slots	Blade Specific Clause. Request to amend this to make it generic	Refer to Addendum-1, S.No: 92 dated 08-03-2022
491	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum of 1 Internal USB 3.0 port	SD Slot is not required since Virtualisation Software will be installed in Local HDDs	Refer to Addendum-1, S.No: 92 dated 08-03-2022
492	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Must have port level or card level redundancy	1. Blade/Node based system have limited PCIe Slots and hence card level redundancy is not possible in certain configurations. 2. RFP also asks for 2 PCI Slots Only	Refer to Addendum-1, S.No: 92 dated 08-03-2022
493	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	■ Microsoft Windows Server (latest version) ■ Latest Version of RHEL or Suse Linux or Oracle Linux ■ Feature-rich virtualization software supporting solution design & stack	1. Since the RFP asks for Virtualised Solution, OS Support for bare metal blade server / node is unnecessary. 2. Requesting for VMware is OEM Specific and creates a unfair competition. Hence we request to allow bidders to quote for equivalent Enterprise level Hypervisors compatible to host the proposed solution stack	Refer to Addendum-1, S.No: 92 dated 08-03-2022
494	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum 6U size, rack-mountable, capable of accommodating minimum 8 or higher hot-pluggable blades ■ Have the capability for installing industry-standard flavors of Microsoft Windows, and Enterprise RedHat Linux OS as well as virtualization solutions such as VMware. ■ DVD ROM shall be available in chassis, can be internal or external, which can be shared by all the blades allowing remote installation of software ■ Minimum 1 USB port	* Bidder to propose integrated systems / blade chassis, rack-mountable, capable of accommodating minimum 8 or higher nodes/blades * Have the capability for installing industry-standard flavors of operating system including Microsoft Windows, Enterprise RedHat Linux OS, Oracle Linux as well as virtualization solutions as per proposed solution requirement and compatibility matrix	Refer to Addendum-1, S.No: 92 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
495	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Shall support Industry-standard virtualization hypervisors like Hyper-V, VMWARE, and Citrix.	Shall support Industry-standard virtualization hypervisors like Hyper-V and/or VMWARE and/or Citrix and/or Oracle VM for x86 and/or Linux KVM	Refer to Addendum-1, S.No: 92 dated 08-03-2022
496	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum of 1 Internal USB 3.0 port, 1 Internal SD Card Slot	Minimum of 1 Internal USB 3.0 port	Refer to Addendum-1, S.No: 92 dated 08-03-2022
497	Part-2	Employer's Requirement	ER-110 & ER-286	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Must have port level and card level redundancy	Must have port level or card level redundancy	Refer to Addendum-1, S.No: 92 dated 08-03-2022
498	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Servers - Clause No.5 2 X 20GbE LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity	Hope Converged Network can be proposed here which provides both Ethernet and FC Connectivity in same Adapter. Please confirm. Request amendment as " 2 X 50G Converged connectivity per blade to cater both Ethernet & FC Connectivity" Converged Network is proven, cost effective & latest technology compared to separate Ethernet and FC Adapters/connectivity.	Refer to Addendum-1, S.No: 92 dated 08-03-2022
499	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Servers - Clause No.8 The licensed version of 64 bit latest version of Linux/ Unix/Microsoft® windows based Operating System	Request amendment as "The licensed version of 64 bit latest version of Linux/Microsoft® windows based Operating System" X86 Servers doesn't support Unix. Kindly ammend accordingly	Refer to Addendum-1, S.No: 92 dated 08-03-2022
500	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Servers - Clause No.9 Rack mountable/ Blade	Request to amend the specification as "Blade" Specifications mentioned are blade mostly and hence kindly remove word Rack - this leads to confusion and Rack Servers cannot be compared to Blade Servers (both technically and commercially).	Refer to Addendum-1, S.No: 92 dated 08-03-2022
501	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Shall support Industry-standard virtualization hypervisors like Hyper-V, VMWARE, and Citrix.	Request to amend as "Shall support Industry-standard virtualization hypervisors like Hyper-V & VMWARE". Citrix XenServer is Opensource virtualization platform which means there would be limitation in support. Hence request to kindly ammend it to Vmware & Hyper-v.	Refer to Addendum-1, S.No: 92 dated 08-03-2022
502	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Must have port level and card level redundancy	Request to amend as "Must have port level redundancy". Dual ports of each card will already be connected to 2 different switches at back side of blade chassis that takes care of redundancy. If at all card fails completely, VM migration would be taken care between servers by hypervisor solution already. Redundancy is fully achieved with single card itself & it is cost effective . Hence request for Port level redundancy.	Refer to Addendum-1, S.No: 92 dated 08-03-2022
503	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	2 X 20GbE LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity	Kindly provide the option to choose the solution with Converged Network card which provides both Ethernet and FC Connectivity in same Adapter. Please confirm.	Refer to Addendum-1, S.No: 92 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
504	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	The licensed version of 64 bit latest version of Linux/ Unix/Microsoft® windows based Operating System	Request amendment as "The licensed version of 64 bit latest version of Linux/Microsoft® windows based Operating System" Justification: X86 Servers doesn't support Unix. Kindly ammend accordingly	Refer to Addendum-1, S.No: 92 dated 08-03-2022
505	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	2 X 20GbE LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity	Hope Converged Network can be proposed here which provides both Ethernet and FC Connectivity in same Adapter. Please confirm. Request amendment as " 2 X 50G Converged connectivity per blade to cater both Ethernet & FC Connectivity"	Refer to Addendum-1, S.No: 92 dated 08-03-2022
506	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	The licensed version of 64 bit latest version of Linux/ Unix/Microsoft® windows based Operating System	Request amendment as "The licensed version of 64 bit latest version of Linux/Microsoft® windows based Operating System"	Refer to Addendum-1, S.No: 92 dated 08-03-2022
507	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Shall support Industry-standard virtualization hypervisors like Hyper-V and/or VMWARE and/or Citrix and/or Oracle VM for x86 and/or Linux KVM	Vendor should be allowed to quote virtualisation solutions that cater to the functional, technical and business requirements of RFP while being certified/compatible virtualisation software for the proposed solution. Hence please amend this clause	Refer to Addendum-1, S.No: 92 dated 08-03-2022
508	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	2 X 20GbE LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity	Network interface Minimum of 40 Gbps bandwidth across redundant LAN ports for providing Ethernet connectivity Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity (As required by solution proposed)	Refer to Addendum-1, S.No: 92 dated 08-03-2022
509	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Shall support Industry-standard virtualization hypervisors like Hyper-V, VMWARE, and Citrix.	Shall support Industry-standard virtualization hypervisors like Hyper-V and/or VMWARE and/or Citrix and/or Oracle VM for x86 and/or Linux KVM	Refer to Addendum-1, S.No: 92 dated 08-03-2022
510	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Minimum of 2 Nos of PCIe 3.0 based mezzanine slots supporting Converged Ethernet adapters	Minimum of 2 Nos of PCIe 3.0 slots	Refer to Addendum-1, S.No: 92 dated 08-03-2022
511	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	Must have port level and card level redundancy	Must have port level or card level redundancy	Refer to Addendum-1, S.No: 92 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
512	Part-2	Employer's Requirement	ER-110, ER-286	Table 8-1: Hardware requirement of Servers Table 5-1: Hardware requirement of Servers	<ul style="list-style-type: none"> ■ Microsoft Windows Server (latest version) ■ Red Hat Enterprise Linux (RHEL) (latest version) ■ SUSE Linux Enterprise Server (latest version) ■ VMware / feature-rich virtualization software supporting solution design & stack 	<ul style="list-style-type: none"> ■ Microsoft Windows Server (latest version) ■ Latest Version of RHEL or Suse Linux or Oracle Linux ■ Feature-rich virtualization software supporting solution design & stack 	Refer to Addendum-1, S.No: 92 dated 08-03-2022
513	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Processor:- Intel Xeon processor (4core) 4.1GHz / 4.6GHz, cache 8MB or be	Latest 11th Generation Intel® Xeon® W-1350P (12 MB Cache, 6 Core, 4.0 GHz to 5.1 GHz (125W)), Kindly modify as per the processor ask.	Refer to Addendum-1, S.No: 79 dated 08-03-2022
514	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Memory:- 64GB ECC 4x16GB DDR4 2933MHz RDIMM ECC Memory	64GB ECC 4x16GB DDR4 2933MHz RDIMM nonECC Memory	Refer to Addendum-1, S.No: 79 dated 08-03-2022
515	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Storage:-2.5" 256GB SATA Solid State Drive or better	Suggested for 1TB 7200rpm SATA 2.5" HDD because looking at the overall configuration 256GB SATA is very less.	Refer to Addendum-1, S.No: 79 dated 08-03-2022
516	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Graphics Card:- <ul style="list-style-type: none"> ■ NVIDIA GEFORCE RTX 3070, 8GB, 4DP ■ AMD Radeon Pro W5500, 8GB, 4 DP 	AMD Radeon Pro W5500, 8GB, 4 DP or Nvidia Quadro RTX 4000, 8GB, 3DP will be provided. kindly amend as any one of Graphics card	Refer to Addendum-1, S.No: 79 dated 08-03-2022
517	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Display Ports:- 1 VGA, 2 Displays Ports, 1 HDMI / compatible display ports	Nvidia Quadro RTX 4000, 8GB, 3DP will be having 3DP ports, with that 3 monitors can be connected. Request to ammend for 3 DP ports or higher video ports.	Refer to Addendum-1, S.No: 79 dated 08-03-2022
518	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Peripheral:- 16x DVD R/W	Kindly consider 8x DVD +/-RW	Refer to Addendum-1, S.No: 79 dated 08-03-2022
519	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Hardware Requirement of Workstation (3 monitors), Console Display monitor - 3 monitors	Kindly clarify the Total work station monitor required. As mentioned in BOQ qty is 16 nos. Is the qty required is 16*3 i.e 48 nos ?	Yes. Your understanding is correct.
520	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Storage:-2.5" 256GB SATA Solid State Drive or better	Suggested to ask for 1TB 7200rpm SATA 2.5" HDD because looking at the overall configuration 256GB SATA is very less.	Refer to Addendum-1, S.No: 79 dated 08-03-2022
521	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Peripheral:- 16x DVD R/W	8x DVD +/-RW to be asked	Refer to Addendum-1, S.No: 79 dated 08-03-2022
522	Part-2	Employer's Requirement	ER-111	Table 8-2: Hardware Requirement of Workstation (3 monitors)	Security:- Virus protection	Along with Antivirus kindly ask for The hardware vendor should supply an AI Based performance optimiser software, which ensures optimum performance tuning for leading CAD/CAE	Refer to Addendum-1, S.No: 79 dated 08-03-2022
523	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Operating System:- Latest Windows operating system or compatible OS with the server OS	Kindly amend as only Windows 10/11 Operating system.	Refer to Addendum-1, S.No: 80 dated 08-03-2022
524	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Memory:- 8GB ECC DDR4 or better	8GB, DDR4 UDIMM non-ECC Memory	Refer to Addendum-1, S.No: 80 dated 08-03-2022
525	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Display Ports:- 1 VGA, 2 Displays Ports, 1 HDMI	Nvidia Quadro P1000, 4GB will be having 4mDP ports and workstation will be having 2 DP Ports. Request to amend as 2DP Ports and additional mDP/DP to VGA or HDMI cable to be asked.	Refer to Addendum-1, S.No: 80 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
526	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Power Consumption:- AC230V, 700 W or better	As per the configuration asked 300W Power supply is more than sufficient for system performance. Kindly amend it to 300W or higher.	Refer to Addendum-1, S.No: 80 dated 08-03-2022
527	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Operating System:- Latest Windows operating system or compatible OS with the server OS	Only Windows 10/11 Operating system to be asked.	Refer to Addendum-1, S.No: 80 dated 08-03-2022
528	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Peripheral:- 16x DVD R/W	8x DVD+/-RW to be asked	Refer to Addendum-1, S.No: 80 dated 08-03-2022
529	Part-2	Employer's Requirement	ER-112	Table 8-3: Hardware Requirement of Workstation (1 monitor)	Security:- Virus protection	Along with Antivirus kindly ask for The hardware vendor should supply an AI Based performance optimiser software, which ensures optimum performance tuning for leading CAD/CAE	Refer to Addendum-1, S.No: 80 dated 08-03-2022
530	Part-2	Employer's Requirement	ER-113	Table 8-4: Hardware requirement of Call centre Terminal	Storage:- 2 TB SATA-3 Hard drive @7200 rpm with Flash Cache of 64GB SSD. Provision for installing 4 more drives	3 SATA HDD+1 M.2 SSD can be provided. Please amend accordingly.	Refer to Addendum-1, S.No: 80 dated 08-03-2022
531	Part-2	Employer's Requirement	ER-113	Table 8-4: Hardware requirement of Call centre Terminal	1 HDMI port (Preferable), 2x USB 2.0 and 2 x USB 3.0 (Preferable), 10 USB ports external - with minimum 4 ports USB 3.0 Front I/O includes (2 or more) USB 2.0 ports Rear I/O includes (2 or more) USB 3.0 ports, (2 or more) USB 2.0 ports, serial port, Parallel port, PS 2 mouse and keyboard ports, RJ-45 network interface, Display Port 1 VGA and 3.5mm audio in /out jacks; 4 in 1 Media Card Reader Preferable)	Front:- 2x USB 2.0 Type A 1x USB 3.2 Type A Gen1 (5Gbps), with PowerShare 1x USB 3.2 Type CTM Gen2 (10Gbps), with PowerShare 1x 3.5mm headphone jack with microphone Rear:- 2x DisplayPortTM 1.4 2x PS2 (Legacy for keyboard and mouse) 2x USB 2.0 Type A (with SmartPower) 1x RJ45 Network Connector 1x USB 3.2 Type A Gen2 (10Gbps) 2x USB 3.2 Type A Gen1 (5Gbps) 1x Audio Line out	Refer to Addendum-1, S.No: 80 dated 08-03-2022
532	Part-2	Employer's Requirement	ER-113	Table 8-4: Hardware requirement of Call centre Terminal	Power Consumption:- AC230V, 700 W or better	As per the configuration asked 300W Power supply is more than sufficient for system performance. Kindly amend it to 300W or higher.	Refer to Addendum-1, S.No: 80 dated 08-03-2022
533	Part-2	Employer's Requirement	ER-114	Part 2; Employer's Requirements 8.5 Video Wall Table 8-5: Hardware Requirement of Video Wall	5. Contrast Ratio: 1800:1 or higher	Request you to change this clause as per below so that DLP LED or DLP LASER both can qualify Contrast Ratio: 1600:1 or higher	RFP condition prevails.
534	Part-2	Employer's Requirement	ER-114, ER-287	Table 8-5: Hardware Requirement of Video Wall Table 5-2: Hardware requirement of Video wall	13. Mount: VESA Standard Mount Interface	Every OEM has its own mounting mechanism; so, request you to change this clause as per below Mount: VESA Standard Mount Interface or Floor Mount	Refer to Addendum-1, S.No: 56 dated 08-03-2022
535	Part-2	Employer's Requirement	ER-115	ER-115 / 8.5 Video Wall	Videowall Grid Videowall in the matrix with 48 (8 cubes in column and 6 cubes in row)	For the installation of 8 cubes in column and 6 cubes in row, we may required 12500 (H) x 6500 (V) MM front wall size minimum space, hoping this considered. Please Clarify	Yes. Your understanding is correct.
536	Part-2	Employer's Requirement	ER-117	Part 2 Employer's Requirement ER-117 8.9 IP Phone Table 8-9: Hardware requirement of IP Phone	Additional	Display: Minimum 3 inch screen 3 inch display must be bare minimum to ensure that the phones display can support caller ID and show atleast 3 lines within phone	RFP conditon prevails. The bidder may propose equal or better system.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
537	Part-2	Employer's Requirement	ER-117	Part 2 Employer's Requirement ER-117 8.9 IP Phone Table 8-9: Hardware requirement of IP Phone	Additional	Must support registration to IP PABX over Internet without need of a VPN (This is latest feature of IP PABX systems and can be used when connectivity from a remote location. This helps to ensure communication is not impacted due to issue/break in MPLS/WAN network to the DC/DR.)	RFP condition prevails. The bidder may propose equal or better system.
538	Part-2	Employer's Requirement	ER-117	Part 2 Employer's Requirement ER-117 8.9 IP Phone Table 8-9: Hardware requirement of IP Phone	Additional	Landline Phone must be from same OEM as IP PABX, however PABX must support third-party Phones if required (This is to support tight integration and ensure smooth operations)	RFP condition prevails.
539	Part-2	Employer's Requirement	ER-118	ER-118,119 - 8.12	Hardware Requirement - Storage (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to infrastructure housed in cloud for Primary DC and for DR. Cloud based equivalent services should be allowed for Primary DC and for DR infrastructure hosted on cloud.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
540	Part-2	Employer's Requirement	ER-118 & ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	RAID 0, 1, 1+0, 5+0 and 6	We request you to amend the specification as "RAID 5 or 6" RAID-6 with concurrent dual drive failure provides highest reliability and helps avoid data loss due to concurrent drive failures. As best practice all leading Enterprise Storage OEMs are moving to RAID 6.	Refer to Addendum-1, S.No: 93 dated 08-03-2022
541	Part-2	Employer's Requirement	ER-118 & ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Cache Minimum 128 GB of useable cache across all controllers. If the cache is provided in additional hardware for a unified storage solution, then the cache must be over and above 128 GB.	Request amendment as "Minimum 256 GB of useable cache across all controllers"	Refer to Addendum-1, S.No: 93 dated 08-03-2022
542	Part-2	Employer's Requirement	ER-118 & ER-289	Table 5-6: Hardware Requirement of Data Storage Table 8-12: Hardware Requirement of Data Storage	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically or horizontally	Horizontal Scaling (More Controllers) are required for large scale requirements and hence this clause is limiting the number of OEMs.	Refer to Addendum-1, S.No: 93 dated 08-03-2022
543	Part-2	Employer's Requirement	ER-118 & ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically and horizontally	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically or horizontally	Refer to Addendum-1, S.No: 93 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
544	Part-2	Employer's Requirement	ER-118 & ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically and horizontally	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically or horizontally	Refer to Addendum-1, S.No: 92 dated 08-03-2022
545	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data.	We understand that the bidders need to consider only the storage capacity mentioned as part of the BOQ/ Specification. However, if any additional storage capacity required as per the actual solution design and sizing shall be paid by the authority on actual basis as a additional scope. If no, kindly provide the actual capacity required/ to be considered meeting the current and future requirement of the project.	Refer to Addendum-1, S.No: 93 dated 08-03-2022
546	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Storage system capable of scaling vertically and and horizontally	The Storage should be capable of adding more drives for capacity upgrade without adding additional controllers, the storage should be scalable to support upto 500 drives	Refer to Addendum-1, S.No: 93 dated 08-03-2022
547	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Storage system capable of scaling vertically and horizontally	Request to consider only vertical scaling as dual controller entry level storage with 5 9's uptime can provide scalability upto 2PB and higher. Adding horizontal will lead to high end storage products. This change also will allow wider participation in the bid. "Storage system capable of scaling vertically."	Refer to Addendum-1, S.No: 93 dated 08-03-2022
548	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Modular design to support controllers and disk drives expansion	Request consider clause as below inline to above ask. "Modular design to support disk drives expansion"	Refer to Addendum-1, S.No: 93 dated 08-03-2022
549	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	The controllers / Storage nodes should be upgradable seamlessly, without any disruptions/downtime to production workflow for performance, capacity enhancement, and software/firmware upgrades.	Request to consider HDDs scalability without any disruption to operations. "The Storage capacity should be upgradable seamlessly, without any disruptions/downtime to production workflow for performance, capacity enhancement, and software/firmware upgrades."	Refer to Addendum-1, S.No: 93 dated 08-03-2022
550	Part-2	Employer's Requirement	ER-118, ER-289	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	RAID 0, 1, 1+0, 5+0 and 6	Request to consider industry standard RAID types "RAID 1/10, 5, 6"	Refer to Addendum-1, S.No: 93 dated 08-03-2022
551	Part-2	Employer's Requirement	ER-118, ER-289,	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Cache Minimum 128 GB of useable cache across all controllers. If the cache is provided in additional hardware for a unified storage solution, then the cache must be over and above 128 GB.	Request amendment as "Minimum 256 GB of useable cache across all controllers"	Refer to Addendum-1, S.No: 92 dated 08-03-2022
552	Part-2	Employer's Requirement	ER-119	Table 8-12: Hardware Requirement of Data Storage No Item	Hardware Requirement - Storage	Hardware Requirement - Storage (This is applicable if On Premise primary DC option chosen by the Contractor)	Successful bidder need to share the architecture/ Specifications with Employer. Engineer and Employer to approve the same before execution.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
553	Part-2	Employer's Requirement	ER-119 & ER-290	Table 8-12: Hardware Requirement of Data Storage Table 5-6: Hardware Requirement of Data Storage	Data Protection The storage array must have a complete cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for up to 4 hours	Request to amend the specification as "The storage array must have complete cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for at least 72 hours" 4 hours of battery backup time is too little especially when considering the potential for extended outages due to critical unforeseen events. All leading storage systems support 72 hours or more and hence this may be considered in the interests of the project.	Refer to Addendum-1, S.No: 93 dated 08-03-2022
554	Part-2	Employer's Requirement	ER-120	Tape Library - Clause No.2	Shall be offered with Minimum of four LTO7 FC tape drive. Drive shall support encryption.	Request to amend as "Minimum of four LTO8 FC Tape Drive" Justification: LTO8 is the current latest available and will be supported for the next 7+ years.	Refer to Addendum-1, S.No: 78 dated 08-03-2022
555	Part-2	Employer's Requirement	ER-120	ER-120 - 8.14	Hardware Requirement - Tape Library (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to infrastructure housed in cloud for Primary DC and for DR.Cloud based equivalent services should be allowed for Primary DC and for DR infrastructure hosted on cloud.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
556	Part-2	Employer's Requirement	ER-120 & ER-291	Table 8-14: Hardware requirement of Tape library & Table 5-8: Hardware requirement of Tape library	Library shall be able to back up the encrypted keys in a redundant fashion	Library shall be able to back up the encrypted keys in a redundant fashion either through hardware or backup software	Refer to Addendum-1, S.No: 78 dated 08-03-2022
557	Part-2	Employer's Requirement	ER-120 ER-291	Table 8-13: Hardware requirement of Backup software Table 5-8: Hardware requirement of Tape library	Library shall be able to back up the encrypted keys in a redundant fashion either through hardware or backup software	OEM Specific Clause. Different OEM have different approach to storing encryption keys	Refer to Addendum-1, S.No: 78 dated 08-03-2022
558	Part-2	Employer's Requirement	ER-120, ER-291	Table 5-8: Hardware requirement of Tape library Table 8-14: Hardware requirement of Tape library	Shall be offered with Minimum of four LTO7 FC tape drive. Drive shall support encryption.	Request to amend as "Minimum of four LTO8 FC Tape Drive" LTO8 is the current latest available and will be supported for the next 7+ years.	Refer to Addendum-1, S.No: 78 dated 08-03-2022
559	Part-2	Employer's Requirement	ER-120, ER-291	Table 5-8: Hardware requirement of Tape library Table 8-14: Hardware requirement of Tape library	Shall be offered with Minimum of four LTO7 FC tape drive. Drive shall support encryption.	Request to amend as "Minimum of four LTO8 FC Tape Drive" Justification: LTO8 is the current latest available and will be supported for the next 7+ years.	Refer to Addendum-1, S.No: 78 dated 08-03-2022
560	Part-2	Employer's Requirement	ER-121	Table 8-15: Hardware Requirement of Network Switch -Level 2	No. 2. Item: WAN Interface Requirements: 1) 10/100BASE-TX x4 port or more 2) Optical port (Media Converter) x2 port or more	Switch ports can be used for any purpose Please delete this Requirement, as already LAN Interface requirement provided in No.3	Refer to Addendum-1, S.No: 94 dated 08-03-2022
561	Part-2	Employer's Requirement	ER-121	Table 8-15: Hardware Requirement of Network Switch -Level 2	No. 9. Item: Routing Protocol Requirements: RIP, RIPv2, OSPF	Please delete Requirements: RIP, RIPv2, OSPF as this is layer 2 switch.	Refer to Addendum-1, S.No: 94 dated 08-03-2022
562	Part-2	Employer's Requirement	ER-121	Table 8-16: Hardware Requirement of Network Switch -Level 3	No. 2. Item: WAN Interface Requirements: 1) 10/100BASE-TX x4 port or more 2) Optical port (Media Converter) x2 port or more	Switch ports can be used for any purpose Please delete this Requirement, as already LAN Interface requirement provided in No.3	Refer to Addendum-1, S.No: 95 dated 08-03-2022
563	Part-2	Employer's Requirement	ER-121	Table 8-15: Hardware Requirement of Network Switch -Level 2	Switching bus: 56 Gbps or more Switching fabric capacity or better	Switching bus: 36 Gbps or more Switching fabric capacity or better (As per port count for both uplink and downlink Switch capacity should be 36 Gbps)	Refer to Addendum-1, S.No: 94 dated 08-03-2022
564	Part-2	Employer's Requirement	ER-121	Table 8-15: Hardware Requirement of Network Switch -Level 2	WAN Interface: 1) 10/100BASE-TX x4 port or more 2) Optical port (Media Converter) x 2 port or more	WAN Interface: 1) 10/100BASE-TX x4 port or more 2) Optical port (Media Converter) x 2 port or more (Request to remove this clause WAN interface is not applicable on switches)	Refer to Addendum-1, S.No: 94 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
565	Part-2	Employer's Requirement	ER-121,122, 123, 124	ER-121,122, 123, 124 - 8.15, 8.16,8.17,8.18, 8.19,8.20	Network ,SAN switches, Load balancer, Firewall,Network Rack/ Server Rack (This is applicable if On Premise primary DC option chosen by the Contractor)	Should not be applicable to infrastructure housed in cloud for Primary DC and for DR.Cloud based equivalent services should be allowed for Primary DC and for DR infrastructure hosted on cloud.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
566	Part-2		ER-123	8.19 Firewall	Page no 127/391 Table 8-19: Hardware Requirement of Firewall	There is no separate NGIPS Technical specification section. Request to consider attached Annexure sheet for IPS specifications	Refer to Addendum-1, S.No: 96 dated 08-03-2022.
567	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	General -Should support multiple instances having dedicated CPU, memory, SSL & I/O for guaranteed performance. Should also support open source and Third Party virtual function including SSL VPN, ubuntu , centos etc on same appliance	As per MOUD and MeitY guidelines, open sources is preferred and should be included in data center component in case of future requirements.	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
568	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	The device should provide minimum throughput of 80 Gbps, 40 Gbps SSL throughput, 10 Million L7 RPS, 75K SSL TPS for RSA 2 K and ECDSA 256	In current scenarios, 95 % traffic is HTTPS or SSL based, so it very critical to define the SSL related performance parameters TPS and SSL throughput. And for Load balancer, L7 RPS is very critical parameter to consider along with throughput. Firewall throughput is asked 40 Gbps and Load Balancer is deployed in DMZ and MZ zone, so should have twice throughput of Firewall.	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
569	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	The device should provide 4x10G ports scalable to an additional 4x10G ports and should have 4 TB HDD and 512 GB RAM	For virtualization environment, load balancer is used to deploy multiple virtual instances, it is always recommended to specify the HDD and memory requirement for better performance and log retention	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
570	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	General -Should support multiple instances having dedicated CPU, memory, SSL & I/O for guaranteed performance	General -Should support multiple instances having dedicated CPU, memory, SSL & I/O for guaranteed performance. Should also support open source and Third Party virtual function including SSL VPN, ubuntu , centos etc on same appliance Justification: As per MOUD and MeitY guidelines, open sources is preferred and should be included in data center component in case of future requirements.	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
571	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	The device should provide minimum throughput of 10Gbps	The device should provide minimum throughput of 80 Gbps, 40 Gbps SSL throughput, 10 Million L7 RPS, 75K SSL TPS for RSA 2 K and ECDSA 256 Justification: In current scenarios, 95 % traffic is HTTPS or SSL based, so it very critical to define the SSL related performance parameters TPS and SSL throughput. And for Load balancer, L7 RPS is very critical parameter to consider along with throughput. Firewall throughput is asked 40 Gbps and Load Balancer is deployed in DMZ and MZ zone, so should have twice throughput of Firewall.	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
572	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	The device should provide 4x10G ports scalable to an additional 4x10G ports	The device should provide 4x10G ports scalable to an additional 4x10G ports and should have 4 TB HDD and 512 GB RAM. Justification: For virtualization environment, load balancer is used to deploy multiple virtual instances, it is always recommended to specify the HDD and memory requirement for better performance and log retention	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
573	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	Should support High Availability in Active-Active, Active-Passive mode.	Should support High Availability in Active-Active, Active-Passive mode using standard VRRP Justification: As per MOUD and MeitY guidelines, open standard is preferred and should be included in data center component	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022
574	Part-2	Employer's Requirement	ER-123 & ER-293	Table 8-18: Hardware requirement of Load balancer Table 5-12: Hardware requirement of Load balancer	New Clause	Should have deployed in any of the PSU/ Govt in India from past 5 years	Refer to Addendum-1, S.No: 97 & 99 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
575	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Routing Protocols - RIPv2	RIPv1 is not used as an IGP in current Network deployment scenarios as hop count is used in metric calculations for the best route selection and there are many limitations with it including lack of even loop avoidance mechanisms. Please ask for RIPv2 and remove RIPv1 from the specifications	Refer to Addendum-1, S.No: 96 dated 08-03-2022
576	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	<ul style="list-style-type: none"> ■ Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall" ■ Concurrent connections: up to 100,000 ■ Simultaneous VPN tunnels: 2000 	<ul style="list-style-type: none"> ■ Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall" ■ Concurrent Sessions: up to 50 Million ■ Simultaneous SSL VPN tunnels: 30, 000 <p>There is nothing called concurrent connections in Firewall by any OEM. It is called Concurrent sessions. Concurrent sessions in a lowest model Firewall with 100 mbps throughput will have 7,00,000 concurrent connections. Hence request to change as 50Million concurrent connections.</p> <p>VPN Tunnels means SSL VPN Tunnels which will be used to connect securely from remote.For example,officials from various dept. wants to access the dashboard from their mobile/laptop from home/on move, SSL VPN tunnels will be used. 2,000 tunnels is very low for a 20Gbps Firewall, hence please chnage to minimum 30,000</p>	Refer to Addendum-1, S.No: 96 dated 08-03-2022
577	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	<ul style="list-style-type: none"> ■ Static Routes ■ RIPv1, RIPv2 ■ OSPF 	<ul style="list-style-type: none"> ■ Static Routes ■ RIPv1, RIPv2 ■ OSPF, BGP <p>As this Firewall is going to be Router cum Firewall for connecting to the DC/DR and other locations, BGP protocol is mandatory for any routing device.</p>	Refer to Addendum-1, S.No: 96 dated 08-03-2022
578	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	<ul style="list-style-type: none"> ■ 802.1Q, NAT, PAT, IP Multicast support, Remote Access VPN, Time based Access control lists, URL Filtering, support VLAN, Radius/ TACACS 	<ul style="list-style-type: none"> ■ 802.1Q, NAT, PAT, IP Multicast support, Remote Access VPN, Time based Access control lists, URL Filtering, support VLAN, Radius/ TACACS <p>Next Generation firewall protects the gateway from any attack with all the UTM/NG security features. Hence all the NGFW /UTM Security features are to be included in the Firewall to proect the network.</p>	Refer to Addendum-1, S.No: 96 dated 08-03-2022
579	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	To be added	<p>Firewall must support SD - WAN feature along with advance routing protocols such as BGP and Built-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or application</p> <p>The Firewall is going to be main Router in TIMS-CCC and Control Room and going to estab;ish connectivity to Data Center, DR Cloud and any other Data Centers/CCC of GCC/GCP. Hence this Rouer cum firewalls hould have SD-WAN functionality to establish the IPSEC Tunnjels to do the secure Access.</p>	Refer to Addendum-1, S.No: 96 dated 08-03-2022
580	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	To be added	<p>SLA for SDWAN must be defined based on packet loss or latency or jitter. Even combination of all 3 option must be possible</p> <p>The Firewall is going to be main Router in TIMS-CCC and Control Room and going to estab;ish connectivity to Data Center, DR Cloud and any other Data Centers/CCC of GCC/GCP. Hence this Rouer cum firewalls hould have SD-WAN functionality to establish the IPSEC Tunnjels to do the secure Access.</p>	Refer to Addendum-1, S.No: 96 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
581	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	To be added	The cloud DR center should have security instances like industry leading Next Generation Firewall with SD-WAN functionality and Web Application Firewall as a VM License registered in the name of Chennai Smart City and it should not be a shared service from any Cloud Service Provider. DR Cloud should have a exclusive security architecture as per industry standrad to ensure the security. For which a exclusive Firewall with SD-WAN Routing, Web Application Firewall etc to be proposed as a exclusive VM License to ensure that proper securioty for the cloud data. Hence Request to add the clause.	Refer to Addendum-1, S.No: 96 dated 08-03-2022
582	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Page no 298/391 Table 5-13: Hardware Requirement of Firewall	There is no separate NGIPS Technical specification section. Request to consider attached Annexure NGIPS sheet for IPS specifications	Refer to Addendum-1, S.No: 96 dated 08-03-2022
583	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall	Clarification (Please clarify Do we need to consider separate firewall for internet and Intranet . Is this single qty (Internet Firewall 1+ Intranet Firewall 1) or with High availability (Internet Firewall 2+ Intranet Firewall 2))	Refer to Addendum-1, S.No: 96 dated 08-03-2022
584	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall	"Next Generation Firewall Throughput (FW+IPS+AVC): minimum 19 Gbps for internet and 19 Gbps for intranet firewall." (As per the RFP requiremnt is firewall along with IPS, hence requesting to considered with NGFW throughput.) (Also the recommend practice is to have seperate firewall for internet and intranet traffic. Hence request to revise the clause)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
585	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Concurrent connections: up to 100,000	"Maximum Concurrent connections: 10 Million with AVC enabled" (As per the RFP ask is for NGFW firewall, concurrent connection should be calculated including L7 parameter. Also the no-of concurrent connection count is quite low with respect to the firewall throughput asked .Hence request to revise the clause)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
586	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	RTP, LEVEL 2TP	"Please remove the clause" (Real Time Protocol (RTP) uses wide range of UDP port when it passes through Firewall , Which needs to be openened to pass VoIP traffic . Is this Layer 2 Tunnelling protocol (Layer 2TP) or LEVEL 2 TP ? Please clarify)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
587	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	PPPoE, EAP-TLS, RTP	PPPoE, EAP-TLS (Real Time Protocol (RTP) uses wide range of UDP port when it passes through Firewall , Which needs to be openened to pass VoIP traffic .)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
588	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	IPSec, GRE, DES/3DES/AES	"IPSec, DES/3DES/AES" (GRE is an older protocol and now a days replaced with protocols which provide much better security like IPSec . For wider participation request to remove this clause)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
589	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	QoS features like traffic prioritization, differentiated services, committed access rate. Should support for QoS features for defining the QoS policies	"QoS features like traffic prioritization/differentiated services/ committed access rate/rate-limiting. Should support for QoS features for defining the QoS policies" (Security OEM uses different way to rate limit traffic based on application, users etc. For wider participation request to modify this clause)	Refer to Addendum-1, S.No: 96 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
590	Part-2	Employer's Requirement	ER-123, ER-294	Table 8-19: Hardware Requirement of Firewall Table 5-13: Hardware Requirement of Firewall	Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall	Next Generation Firewall Throughput(FW+IPS+AVC): minimum 19 Gbps for internet and 19 Gbps for intranet firewall. (As per the RFP requiremnt is firewall along with IPS, hence requesting to considered with NGFW throughput.) (Also the recommend practice is to have seperate firewall for internet and intranet traffic. Hence request to revise the clause)	Refer to Addendum-1, S.No: 96 dated 08-03-2022
591	Part-2	Employer's Requirement	ER-125	Part 2,, 5.3 UPS	1. Input voltage: ■ Commercial Power generally but with existing condition of power failure, instantaneous power failure and voltage fluctuation	In order to ensure surge protection against severe voltage fluctuations, additional protections need to be included. Thus, kindly add the Voltage stabilizers in the BoQ line item for CCC, DC and filed junctions.	RFP condition prevails. Bidder should refer to A73 as given in the BOQ in RFP.
592	Part-2	Employer's Requirement	ER-125	Table 8-21: Hardware Requirement of UPS	Three 3 hours or longer backup power supply for Equipment in TIMS-CCC.	Kindly confirm the type batteries	Bidder free to choose the battery type.
593	Part-2	Employer's Requirement	ER-127	Part 2 Employers Requirements - Chapter 2-2 Requirements of Integrated Traffic Management System - ER-127	In future, the proposed ITMS system shall be capable to integrate required Probe taxi data or any other probe data.	Please provide the future integration list with the required integration matrix.	Any probe data or taxi data may require to integrate with ITMS platform without additional cost to the Employer.
594	Part-2	Employer's Requirement	ER-127	ER-127 - General	Video Feed Protocol should be unicast	The video feed going to cloud should be unicast	Query is not clear.
595	Part-2	Employer's Requirement	ER-127	ER-127 - General	Video Feed Bandwidth	Kindly share the stream bandwidth per camera and how many cameras will be present?	Bidder need to assess the required bandwidth.
596	Part-2	Employer's Requirement	ER-127	ER-127 - General	Video Feed Archival	Kindly share the archival duration and retrieval frequency of past video feeds?	Please refer to Section-VII of Part-2
597	Part-2	Employer's Requirement	ER-127	ER-127 - General	Video Wall	Kindly share the details of how many cameras will be simultaneously viewed on Video wall and at what streaming bandwidth of each camera feed?	Information shall be provided in design stage.
598	Part-2	Employer's Requirement	ER130	Table 4-2: Functional requirement of ITMS Command Control Software	1.The proposed software should have functions of GIS and Image Processing along with advance functions such as network analysis, terrain analysis, 3D analysis, change analysis, etc.	The license requirement for the GIS software is not proposed. Pls share the following, 1- Enterprise license - Number of cores 2- Desktop license - Number of GIS, image processing, extension licenses. 3- Expected number of operators / non-GIS users.	Bidder need to propose the solution as per funcational requirement mentioned in bid document. Type of license varies OEM to OEM.
599	Part-2	Employer's Requirement	ER-130	Table 4-2: Functional requirement of ITMS Command Control Software	The proposed GIS software could be any Industry standard COTS GIS platform	Is there any preferred GIS software?	Any GIS maps from reputed OEM will be suitable to propose.
600	Part-2	Employer's Requirement	ER-130	Table 4-2: Functional requirement of ITMS Command Control Software	The proposed GIS software could be any Industry standard COTS GIS platform	Is this to be procured by Contractor or Chennai Smart City will be procuring due to the licences and its further obligation?	It is in bidders scope.
601	Part-2	Employer's Requirement	ER-130	Table 4-2: Functional requirement of ITMS Command Control Software	The proposed GIS software could be any Industry standard COTS GIS platform	We presume that you need GIS software for Desktop and Mobile versions- Please confirm	Kindly read bid document clearly. Most of the applications are web based application. Bidder need to consider both Web application and Mobile application.
602	Part-2	Employer's Requirement	ER-130	Table 4-2: Functional requirement of ITMS Command Control Software	The software should have the capability to process optical satellite data as well as microwave image data etc.	Could you please elaborate the use case for this requirement. What type of Satellite or Aerial images to be viewed or processed in the GIS system?	This is related to Map type (Default, Satellite)
603	Part-2	Employer's Requirement	ER-130	Table 4-2: Functional requirement of ITMS Command Control Software		1. We assume the Software needs to be with open standards and it will be integrated with other systems and ICCC through APIs	Software shall support open standards protocols for data and communication and API's.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
604	Part-2	Employer's Requirement	ER-130	Software (Application, Database and any other) must not be restricted by the license terms of the OEM from scaling out on unlimited number of cores and servers during future expansion.		<p>1. Is the application going to be deployed as highly available with zero down time?</p> <p>2. We understand Software with corebased licensing can be scaled up according to the need of the project in phased manner</p> <p>3. There is no restriction in scaling the software and hardware infrastructure. Bidder will propose solution that fits best as per the requirement of RFP and specifications with future scalability. However, any future Increase in hardware & Software for scalability (Vertical & horizontal) which is not in the scope of work has a cost associated with it which authority has to pay.</p>	Yes. Your understanding is correct.
605	Part-2	Employer's Requirement	ER-130 & ER-157	<p>1) 4.1 Functional Requirements of ITMS Command Control Software ER-130</p> <p>2) 4.9 Functional Requirement of Website and Mobile Application ER-157</p>	<p>1. The customized software for the organization / department should have simple user interface both for departmental users as well as for citizens with easy navigation and querying facility.</p> <p>2. The web/Mobile application shall have GIS Map and do various Analyses, like location, Speed, congestion, corridor status, traveling time point to point.</p>	<p>A- All the GIS related function and ITMS related function are processed in parallel. Hence GIS functionality will be separate part for the execution of Project. Please clarify it.</p> <p>B- As per our understanding GIS functionality will be GIS based web application development and integration with other applications. So, we request you to provide the list of GIS based functionalities which should be customized to cater the ITMS project.</p>	<p>A: RFP Condition Prevails.</p> <p>B: GIS functionality to be developed to meet the functional requirements as mentioned in RFP. This shall be accessible through web.</p>
606	Part-2		ER-132	Table 4-2: Functional requirement of ITMS Command Control Software	<p>Integrated User Specific & Customizable Dashboard</p> <p>1.</p> <ul style="list-style-type: none"> ■ GIS Dashboard must have minimum following layers . ATCC Type 1 Layer . ATCC Type 2 Layer . ATCS Layer . RLVD Layer . SLVD Layer . VMS Layer . TIDS Layer . AVL/CAD Layer . PIS Layer . DMS Layer 	<p>We understand that the listed layers will be provided to the successful bidder by Chennai Smart City Ltd. Kindly confirm.</p>	<p>RFP Condition Prevails.</p> <p>The selected bidder shall assess and arrange both required data and GIS Platform.</p>
607	Part-2		ER-132	Table 4-2: Functional requirement of ITMS Command Control Software	<p>Integrated User Specific & Customizable Dashboard</p> <p>1.</p> <ul style="list-style-type: none"> ■ GIS details procured shall include the following data with attributes ✓ Road Network • City Arterial Road • Street • National Highways • State Highways etc. ✓ Administrative Boundaries • District and Sub District Boundary • Town Boundary ✓ Building footprint and names ✓ Point of interest data to include • Health service (Hospital, Blood Bank, Medical service, etc.) • Community Services (Fire Station, Police station, Bank, ATM, Education Institute, Govt. Buildings, etc.) • Business center (Shopping Mall, Market, Commercial complex, etc.) • Transportation (Bus Stop/Terminal, Parking Area, Railway station, Petrol pump, Metro station, Seaport, Airport, etc.) • Residential Area (Apartment, Housing society, etc.) • Road Amenities (Flyover, Foot Over, Underpass, etc.) 	<p>Please clarify whether the listed GIS layers will be provided by Chennai Smart City Ltd to the successful bidder in industry standard GIS formats OR bidder has to create these layers. Kindly confirm.</p>	<p>RFP Condition Prevails. The selected bidder shall assess and arrange required data for GIS Platform.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
608	Part-2	Employer's Requirement	ER-132	GIS details procured shall include the following data with attributes		1. How many users to be involved in Data creation process? 2. What are the data sources envisaged for the reference map creation? Will that be provided by the department? 3. Are there any survey/ field data collection involved or envisaged?	Details to be discussed during design stage.
609	Part-2	Employer's Requirement	ER-132	Table 4-2: Functional requirement of ITMS Command Control Software	1) GIS Dashboard must have minimum following layers..... GIS details procured shall include the following data with attributes...	As per ITMS project objectives, GIS layers like administrative Boundary layer, Road network layer, POI data is required. These layers will be used extensively for GIS based implementation in ITMS project. So full phase base map creation methodology which includes satellite image procurement, base map creation, QA/QC etc. will increase the project cost without putting extra benefit to the ITMS project. So we request you to modify this clause.	There is no requirement of satellite image.
610	Part-2	Employer's Requirement	ER-132	GIS details procured shall include the following data with attributes		1. How many users to be involved in Data creation process? 2. What are the data sources envisaged for the reference map creation? Will that be provided by the department? 3. Are there any survey/ field data collection involved or envisaged?	Details to be discussed during design stage.
611	Part-2	Employer's Requirement	ER-134	Table 4-2: Functional requirement of ITMS Command Control Software	The proposed GIS software could be any Industry standard COTS GIS platform and should be easy to handle, operate, maintain & also train the staff/end users.	The mentined feature is falling under ICCC Compliance. Kindly helpu us to understand that we need to quote the separate GIS Application	The proposed TIMS/ITMS control center software shall have GIS application.
612	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software - BI Analytics	BI Analytics capability must be in-built in the platform without usage of additional COTS product or additional integrations	can you please elaborate more on this. Some of the CAD/AVL provides basic level of tactical analytical capabilities but cannot perform much needed cross domain analytics, Scenario analysis, etc. for taking strategic decisions in managing traffic. Does this means bidders need to propose a capable COTS BI and Analytics products additional to typical CAD/AVL solution?	Yes. Your understanding is correct.
613	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software	BI Analytics	How many environments we need to factor for BI and Analytics like Dev, Test, Prod etc?	BI analytics shall be COTS product
614	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software - BI Analytics	BI Analytics capability must be in-built in the platform without usage of additional COTS product or additional integrations	Plz confirm if the proposed BI Analytics Solution has to be a perpetual license?	Please refer to Section-VII of Part-2
615	Part-2	Employer's Requirement	ER-136	Part 2, 4.1 Functional Requirements of ITMS Command Control Software (PDF Page No. 134 of 391)	BI Analytics BI Analytics capability must be in-built in the platform without usage of additional COTS, product or additional integrations.	Camera based AI can be built for ATCS. The same is not feasible for ITS solutions, due to various manual & human involvement in day to day operations. Hence we request to amend the cluase as per Industrial Standards.	RFP condition prevails.
616	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software	BI - The Analytics engine must be an artificial intelligence-based module to maximize business value through advanced machine learning capabilities. The machine learning capabilities must aid in operations management and result in better outcomes		No query provided.
617	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software		Please confirm the total nos. of users and concurrent users (with Year on year Growth) who would access the business analytics, and visualization environment to view various operation, maintenance, safety, traffic information reports on the centralized platform.	Details to be discussed during design stage.
618	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software		Please confirm the expected volume from Projected Year on Year Growth of structured data, semi-structured and unstructured data which would be captured from all module & sub-modules of TIMS & CBS	Details to be discussed during design stage.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
619	Part-2	Employer's Requirement	ER-136	Table 4-2: Functional requirement of ITMS Command Control Software - BI Analytics, Pg No 140	BI Analytics capability must be in-built in the platform without usage of additional COTS product or additional integrations	can you please elaborate more on this. Some of the CAD/AVL provides basic level of tactical analytical capabilities but cannot perform much needed cross domain analytics, Scenario analysis, etc. for taking strategic decisions in managing traffic. Does this means bidders need to propose a capable COTS BI and Analytics products which connect horizontally to modules for generating analytics insights and dashbaord reports for respective deparments. Please Confirm	Details to be discussed during design stage.
620	Part-2	Employer's Requirement	ER-137	9.2 System Design Requirement	Page no 55/391 point f) Security: The architecture must adopt an end-to-end security model that protects data and the infrastructure from malicious attacks, theft, natural disasters, etc. Using Firewalls and Intrusion detection systems such as attacks and theft should be controlled and well supported	In Design section at point Security Architecture refers about IPS solution apart from Firewall, but there is no Technical specification section given for IPS solution. Draft IPS specifications are mentioned as Annexure - I in subsequent part of this document for your kind condieration. Request you to kindly consider the same.	Refer to Addendum-1, S.No: 96 dated 08-03-2022
621	Part-2	Employer's Requirement	ER-139	Table 4-2: Functional requirement of ITMS Command Control Software	Should provide notifications to multiple agencies and departments (on mobile) that new intelligence has been gathered through the open source/social media	Kindly define which all social media channels (Eg: FB, Whatapp, Twitter) needs to be integrated. As each of the social media channel have their own business API. We need to factor the cost and design based on integration to each social media channel.	Facebook, Twitter and Whatsapp are minimum social media integration to be considered. However Employer may seek additional social media integration during design stage as required.
622	Part-2	Employer's Requirement	ER-140	Table 4-4: Functional Requirements of Information Sharing Module	Historical traffic data including ATCC, Probe analyzed data, traffic status, weather condition, construction condition, regulation and incident etc for every road segment is accumulated in database as a Big Data for analyzing. This data is delivered via a product called Traffic Stats, available through a web portal or via an API service.	What is the expected size of data which would be sourced from batch data & real time sensors which is deployed acorss modules. Kindly share Details of existing system storing historical data including ATCC, probe analyzed data, traffic, weather, etc.	Details to be discussed during design stage.
623	Part-2	Employer's Requirement	ER-147	Table 4-6: Functional Requirement of Common Function Module	GIS Platform 1. ■ GIS map data can be updated timely by easy operation (GIS Map data to be provided by another party. Cost for update shall be paid by the Contractor.	Please clarifiy the interval of updating the GIS Maps.	Bidder need to consider updating the GIS data as on when required during the entire project period.
624	Part-2	Employer's Requirement	ER-147	Table 4-6: Functional Requirement of Common Function Module	GIS map data can be updated timely by easy operation (GIS Map data to be provided by another party. Cost for update shall be paid by the Contractor.	Please provide the timeline for the periodic updating of the GIS map. It's generally recommended on annual basis. We assume that updation will be done on annual basis. please confirm it.	Bidder need to consider updating the GIS data as and when required during the entire project period.
625	Part-2	Employer's Requirement	ER-147	Table 4-6: Functional Requirement of Common Function Module	GIS Platform: Use GIS as spatial planning and analysis for various operation within city	Kindly provide clarity on various operations/ functions to be incorporated	Please refer to Section-VII of Part-2
626	Part-2	Employer's Requirement	ER-150	Part 2 - Employer's Requirement Chapter 2-2 Requirments of Integrated Traffic Management System 4.6 Functional Requirement of Enterprise Management System (EMS) Table 4-7: Functional requirement of Enterprise Management System (EMS) (Pg. No. 150)	Suggestion to add new clause in order to select EMS solution from OEM with compliance to standards such as ITIL and ISO	The OEM of the proposed EMS solution should have Pinkverify certification on atleast 5 ITIL processes and ISO 9001 & ISO 27001 cerifications.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
627	Part-2	Employer's Requirement	ER-150, ER-281	Table 4-7: Functional requirement of Enterprise Management System (EMS) Table 4-3: Functional requirement of Enterprise Management System (EMS)	The proposed solution shall allow for the display of different colours for the links including red, green, orange, yellow to show the status of the links and the connected devices	Basically the 3 types of alert threshold mechanism i.e., Red for Major/Critical, Orange for Minor, Green for Ok/healthy states.	Refer to Addendum-1, S.No: 65 & 66 dated 08-03-2022
628	Part-2	Employer's Requirement	ER-150, ER-281	Table 4-7: Functional requirement of Enterprise Management System (EMS) Table 4-3: Functional requirement of Enterprise Management System (EMS)	The proposed solution shall allow for the display of different colours for the links including red, green, orange, yellow to show the status of the links and the connected devices	"The proposed solution shall allow for the display of different colours for the links including red, green, orange OR yellow to show the status of the links and the connected devices"	Refer to Addendum-1, S.No: 65 & 66 dated 08-03-2022
629	Part-2	Employer's Requirement	ER-150, ER-281	Table 4-7: Functional requirement of Enterprise Management System (EMS) Table 4-3: Functional requirement of Enterprise Management System (EMS)	The proposed helpdesk system shall support ITIL processes like request management, problem management, configuration management, and change order management with out-of-the-box templates for various ITIL service support processes	Please amend to "The proposed helpdesk system shall support ITIL processes like request management, problem management, configuration management, and change order management/ Change Management with out-of-the-box templates for various ITIL service support processes".	Refer to Addendum-1, S.No: 69 dated 08-03-2022
630	Part-2	Employer's Requirement	ER-150, ER-281	Table 4-7: Functional requirement of Enterprise Management System (EMS) Table 4-3: Functional requirement of Enterprise Management System (EMS)	The proposed system shall support the exclusion of specific IP addresses or IP address ranges	The industry best practice for network element auto-discovery includes IP-based discovery, so kindly remove the "EXCLUSION" from the clause.	Refer to Addendum-1, S.No: 68 dated 08-03-2022
631	Part-2	Employer's Requirement	ER-150, ER-281	Table 4-7: Functional requirement of Enterprise Management System (EMS) Table 4-3: Functional requirement of Enterprise Management System (EMS)	The proposed helpdesk system shall support ITIL processes like request management, problem management, configuration management, and change order management with out-of-the-box templates for various ITIL service support processes	Please amend the "Change Order Management" to "Change Management ", since there is no such process available for Change Order Management in the ITIL Framework process.	Refer to Addendum-1, S.No: 69 dated 08-03-2022
632	Part-2	Employer's Requirement	ER-151	Network Management and Control/Pageno.155	The proposed solution shall allow for the display of different colours for the links including red, green, orange, yellow to show the status of the links and the connected devices	Would suggest amending the clause as below: -	RFP condition prevails.
633	Part-2	Employer's Requirement	ER-151	Network Management and Control/Pageno.155	The proposed solution shall be supplied with a server with Windows or Linux-based OS (latest) or later.	Proposed EMS solutions come with software keys and binaries. Hence it will be a Bidder/customer responsibility to arrange the respective server hardware sizing along with other prerequisite details like Server/VM's/DB/LB/OS etc to run the EMS components on it. Please correct our understanding and request you to amend the clause accordingly	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
634	Part-2	Employer's Requirement	ER-151	Table 4-7: Functional requirement of Enterprise Management System (EMS)	The proposed solution shall proactively monitor all user transactions for any web application hosted; detect failed transactions; gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes.	Is it expected to get the detailed information of the end-user experience performance of all users at all locations whenever users are active and automatically discover underlying infrastructure and classify user actions failure with the cause root cause analysis if it is related to Network/ Servers/ Application backend?	Yes. Your understanding is correct.
635	Part-2	Employer's Requirement	ER-151 & 282	Table 4-3: Functional requirement of Enterprise Management System (EMS) & Table 4-7: Functional requirement of Enterprise Management System (EMS)	<p>■ The proposed solution shall proactively monitor all user transactions for any web application hosted; detect failed transactions; gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes.</p>	Is it expected to get the detailed information of the end-user experience performance of all users at all locations whenever users are active and automatically discover underlying infrastructure and classify user actions failure with the cause root cause analysis if it is related to Network/ Servers/ Application backend?	RFP condition prevails.
636	Part-2	Employer's Requirement	ER-153	Table 4-7: Functional requirement of Enterprise Management System (EMS)	The proposed helpdesk system shall have an updatable knowledge base for technical analysis and further help end-users to search for solutions for previously solved issues.	Is it expected that the proposed Helpdesk solution must have Machine Learning and Analytics-Based Service Desk uses advanced search and analytics capabilities to enable agents to view and analyze patterns in incidents, requests, and other records and to create knowledge articles or problem records based on that pattern. Kindly confirm	RFP condition prevails. Yes, your understanding is correct.
637	Part-2	Employer's Requirement	ER-153	Table 4-7: Functional requirement of Enterprise Management System (EMS)	It shall allow the IT team to create solutions & make them available on the end-user login window for the most common requests.	The proposed helpdesk solution must have provided big data analytics, machine learning, hot topic analytics, Native mobile applications for use self-service, that helps to analyze common service requests, optimize change management. It should be possible to create support/knowledge articles for hot topics & it must support codeless configuration of processes, that can be upgraded seamlessly without the need to reconfiguration of processes. Is our understanding correct?	RFP condition prevails. Yes, your understanding is correct.
638	Part-2	Employer's Requirement	ER-153	Traffic Analysis through EMS/Pageno. 157	The traffic analysis system shall be from the same OEM providing Network Fault & Performance Management System.	Is it expected the proposed NMS should provide integrated fault, performance Monitoring, Configuration & compliance Management together in one tool?	RFP condition prevails. Yes, your understanding is correct.
639	Part-2	Employer's Requirement	ER-154	Incident Management and Root Cause Analysis Reporting/Pageno. 156	Information security incidents and weaknesses associated with information systems shall be communicated in a manner allowing timely corrective action to be taken	Is it expected to have NoC & SoC integration? If yes, please let us know the existing SIEM solution vendor details.	There is no existing SIEM, bidder may provide the SIEM as required to meet the functional requirement and information security point of view.
640	Part-2	Employer's Requirement	ER-154	Incident Management and Root Cause Analysis Reporting/Pageno. 156	Information security incidents and weaknesses associated with information systems shall be communicated in a manner allowing timely corrective action to be taken	As per the use case need, EMS/NMS/Helpdesk may require having integration with 3rd party SIEM solution for Information security incident!	There is no existing SIEM, bidder may provide the SIEM as required to meet the functional requirement and information security point of view.
641	Part-2	Employer's Requirement	ER-155	Table 4-8: Functional requirement of call centre	Interactive Voice Response (IVR)	In this section the specifications asked is of IP PBX. Kindly specify the technical requirements and the functional requirements of IVR including the call flow and the number of ports required for the IVR.	Refer to Addendum-1, S.No: 59 dated 08-03-2022.
642	Part-2	Employer's Requirement	ER-155	Table 4-8: Functional requirement of call centre	Functional Requirement of Call Centre Serial no 1 - Call center proposed system shall have minimum following parameters: ■ For up to 20 agents	Kindly clarify the work station requirement for call centre agents. Since you have asked only 4 work stations in the BOQ and the call centre agents mentioned are 20 agents	The bidder shall execute operation of Call center in multiple shifts as per assigned roles.
643	Part-2	Employer's Requirement	ER-155	Part 2 Employer's Requirement ER-155 Table 4-8: Functional requirement of call centre	For up to 20 agents	For up to 20 Agent How many supervisors ? Supervisors may or may not need licenses, but better to define and have atleast 5 supervisory licenses so that multiple different role based supervisors can view live statistics and realtime agent performance on their dashboard	The bidder shall execute operation of Call center in multiple shifts as per assigned roles.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
644	Part-2	Employer's Requirement	ER-156	Part 2 Employer's Requirement ER-156 Table 4-9: Functional requirement of IP-PABS system	The IP telephony system should be a converged communication System with ability to run TDM and IP on the same platform using same software load based on server and Gateway architecture	Request to revise the clause as "The IP telephony system should be a converged communication System with ability to run TDM and IP on the same platform using same software load based on server and Gateway architecture. IP-PABX system must be from same OEM as the IP Telephony server, IP Phones as well as Call Center" (A single make for entire communication setup will ensure all the components have a tight integration and work smoothly)	RFP condition prevails.
645	Part-2	Employer's Requirement	ER-156	Part 2 Employer's Requirement ER-156 Table 4-9: Functional requirement of IP-PABS system	The call control system should be fully redundant solution with no single point of failure & should provide 1:1 redundancy	Request to revise the clause as "The call control system should be fully redundant solution with no single point of failure & should provide 1:1 redundancy in active-active mode, with redundant solution being placed in same DC or across WAN in a geographically separate DR. There must not be any disconnection of internal VOIP or external PRI calls during failover from primary to secondary node" (This addition to the same clause is critical to ensure redundancy with seamless failover from primary to secondary node and ensure no calls are impacted during the failover.)	RFP condition prevails.
646	Part-2	Employer's Requirement	ER-156	Part 2 Employer's Requirement ER-156 Table 4-9: Functional requirement of IP-PABS system	The system should be based on server gateway architecture with external server running on Linux OS/Other. No card-based processor systems should be quoted	Request to revise the clause as The system should be based on server gateway architecture with external server running on Linux OS/Other. The IP PABX software & Call Center software must be a securely developed platform from a reputed vendor and must not be an OPEN SOURCE PLATFORM. No card-based processor systems should be quoted. (There are lot of open source platforms in market for IP PABX system which are prone to risk of vulnerabilities and security issues and hence are not suitable for an enterprise grade IP PABX requirement which is supposed to have strong and secure platform and whose source codes are not exposed)	RFP condition prevails.
647	Part-2	Employer's Requirement	ER-156	Part 2 Employer's Requirement ER-156 Table 4-9: Functional requirement of IP-PABS system	The communication server and gateway should support IP V6 from day one to be future proof	Request to revise the clause as "The communication software, server and gateway should be from same OEM and must support IP V6 from day one to be future proof. IP-PABX system must also work with Gateways with redundant Dual power supply." (From a compatibility perspective, it is recommended to have the core communication platform from same OEM. From redundancy perspective, it is important to ensure that the IP PABX & Call Center are compatible and support Voice Gateways that support Redundant power supply)	RFP condition prevails.
648	Part-2	Employer's Requirement	ER-156	Part 2 Employer's Requirement ER-156 Table 4-9: Functional requirement of IP-PABS system	Additional	Request to revise the clause as The IP PABX system must allow hosting IP Phones and agents across different geographical locations and also support tenant/logical partitioning functionality such that the IP PABX system can be configured to meet & comply TRAI & DoT regulations in India. (Please add this point to ensure TRAI & DoT guidelines can be adhered to)	RFP condition prevails.
649	Part-2	Employer's Requirement	ER-157	Table 4-9: Functional requirement of IP-PABS system	Should support signalling standards/Protocols – SIP, MGCP, H.323, Q.Sig	H.323 and Q.Sig are proprietary clause of some OEM. It is an older version of VoIP. Currently SIP (RFC 3261) is the industry wide standard for VoIP. So, we request to Amend the clause to, "Should support signalling standards/Protocols– SIP/ H.323/ Q. Sig" By this USE Case/ Functionality will remain the same, moreover more OEM's can participate.	Refer to Addendum-1, S.No: 104 dated 08-03-2022.
650	Part-2	Employer's Requirement	ER-157	Table 4-10: Functional requirement of website and mobile application	■ Web Site/Mobile and infrastructure shall be able to handle a minimum of 50,00,000 hits simultaneously	1. As per RFP requirement, the Web Site/Mobile app to be factored with min. 50,00,000 simultaneous hits which is very huge, and it will increase the infrastructure requirement and its respective value. Kindly provide the breakup of the concurrent hits for both web site and mobile app users separately as these services will be hosted in different servers/VMs 2. We understand that 50,00,000 hits are not required from day 1. Kindly provide the phase wise, concurrent hit details to optimally size the solution.	Refer to Addendum-1, S.No: 60 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
651	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	The web/Mobile application shall be host on the cloud and collect real-time traffic data from TIMS-CCC and offline data shall be available from the cloud server.	Need more clarity on this .How many GPS devices shall be required to be deployed	There will be around 3500 GPS device will be mounted in buses. In other devices of the project also to be considered for real-time traffic.
652	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Required security level shall be enough to handle the threat, hacking, or any other malfunction in the future. The Contractor shall be arranged the required IT hardware and software to full fill future requirements as the Employer desired.	Need more clarity on this . The solution will operational on cloud platform or is it required to be hosted in a captive server.	Bidder free to choose both DC and DR on cloud or DC on-prem and DR on cloud.
653	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	The change request shall be processed by the Contractor free of cost during the contract.	Need more clarity on this .how does one estimate the effort involved in the application customization during the contract period	The effort required for developing the change request shall be born by the bidder.
654	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	The Web Site/Mobile shall be open for integration with other data sources or government agency	Need more clarity on this .how does one estimate the effort and cost of customization involved	The effort required for developing the change request shall be born by the bidder.
655	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	The source code shall be the property of the Employer and the Contractor shall be maintained version control.	Source code buy out ??	Since continous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
656	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Provide search capabilities using keywords or phrasing that will provide access to content from throughout the site. Additionally, make it possible to download historical and recent data whereby the user can define his/her preference. The platform should allow users to search the content of the portal easily and quickly without the need for high-speed bandwidth.	Need more clarity on this .What is the maximum period for which the historical data shall be required to be stored and the content availability	Please refer to Section-VII of Part-2
657	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Portal must not require plug-ins as a default.	Need more clarity on this .To build any additional functionality , plug-ins need to be incorporated	Plugins must be provided by selected bidder along with portal. Not as separate tool/application.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
658	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Portal must be able to handle multimedia (video) with high performance.	Need more clarity on this .How many videos shall be hosted on the server, any estimates	Please refer to Section-VII of Part-2
659	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Mobile app should mirror the portal and be adapted for optimum viewing on multiple operating systems and device sizes. However, the actual application layout design for both mobile and web is the responsibility of the Contractor	Need more clarity on this .Mobile App should restrict the functionalities being offered on web. This is to ensure performance efficiency of the application	RFP condition prevails.
660	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	✓ Image compression, B/w conversion from color images	Need more clarity on this .Is there any requirement to capture, store and compress images and also convert to b/w- use case elaborate	During design stage same shall be discussed in detail.
661	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	✓ Auto cropping, Auto orientation, perspective correction, geo capture	Need more clarity on this .Explain use case	Please refer to Section-VII of Part-2
662	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	The platform will provide a report generating tool, which can be used to generate customized reports at any level	Need more clarity on this .How many reports please quantify	During design stage same shall be discussed in detail.
663	Part-2	Employer's Requirement	ER-157	ER-157 /4.9 Functional Requirement of Website and Mobile Application Table 4-10: Functional requirement of website and mobile application	Mobile App shall be able to take input information probe system	Need more clarity on this .Please elaborate on the desired functionality	For probe system, please refer to Section-VII of Part-2
664	Part-2	Employer's Requirement	ER-157	Table 4-10: Functional requirement of website and mobile application		1. How many total Mobile Users are envisaged? 2. How many will be concurrent viewers? 3. Are there any spatial editing envisaged for Mobile applications?	Details to be discussed during design stage.
665	Part-2	Employer's Requirement	ER-157	Table 4-10: Functional requirement of website and mobile application		1. How many Web Users are envisaged to consume the Web Portal? 2. How many concurrent viewers? 3. Are there any web editing envisaged? 4. How many editors and the concurrency?	Details to be discussed during design stage.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
666	Part-2	Employer's Requirement	ER-157	Table 4-10: Functional requirement of website and mobile application		1. How many total Mobile Users are envisaged? 2. How many will be concurrent viewers? 3. Are there any spatial editing envisaged for Mobile applications?	Details to be discussed during design stage.
667	Part-2	Employer's Requirement	ER-159	Part 2 Employers Requirements -Table 4-10: Functional requirement of website and mobile application - ER-159	Integration with other applications: Different existing and applications/modules shall have to be seamlessly integrated with the portal. It is envisaged that GIS and the proposed systems shall work in an integrated manner to allow CSCL/CITS to extract maximum benefits from the system.	Kindly provide the list of services to be integrated with the web portal for us to factor the integration effort.	RFP Condition Prevails. Minimum expected integration is mentioned in RFP. Kindly refer Section VII in Part-2 of RFP.
668	Part-2	Employer's Requirement	ER-16	Part2 , Employer Requirements, 2 Scope of Work, ER 16	The Contractor shall undertake the works that are not specifically mentioned in the Employer's Requirements but essential for the efficient operation of TIMS and CBS The requirements stated herein is to be construed as minimum requirement and meeting the respective requirements shall not relieve the Contractor from the responsibility of installing the integrated system that functions efficiently and also carry out its comprehensive Operation & Maintenance.	This clause is open-ended and is limitless. Kindly limit it to requirements specified in the bidding document.	Please refer to Section-VII of Part-2
669	Part-2	Employer's Requirement	ER-16	Part 2, 1.4 Purpose of RFP, ER-16	Any consideration affecting safety, security, redundancy, and compliance to stipulated provision prescribed by Government Authorities is the responsibility of the Contractor and shall be duly taken care of to ensure adherence to minimum functional and technical requirement stipulated in this document as well as the SLA parameters.	We request you to kindly clarify the Government Authorities defined herein. Also we request you to kindly provide the specific guidelines related to safety, security, redundancy, and compliance as defined by Government Authorities as this clause is generic.	RFP condition prevails.
670	Part-2	Employer's Requirement	ER-16	Part 2, 2 Scope of Work, ER-16	The requirements stated herein is to be construed as minimum requirement and meeting the respective requirements shall not relieve the Contractor from the responsibility of installing the integrated system that functions efficiently and also carry out its comprehensive Operation & Maintenance.	Kindly amend as: The requirements stated herein is to be construed as minimum requirement and meeting the respective requirements limited to those specified in RFP shall not relieve the Contractor from the responsibility of installing the integrated system that functions efficiently and also carry out its comprehensive Operation & Maintenance.	RFP condition prevails.
671	Part-2	Employer's Requirement	ER-16	Part 2, 2 Scope of Work, ER-16 & ER-19	The construction of equipment pole and gantry, handhole, conduit, tunneling mechanical duct boring, road marking, intersection improvement, temporary restoration of paved road, final reinstatement of road and sidewalk, Safety and etc. on Full Turnkey basis by the Contractor. & The Contractor shall quote for the entire system and facilities on a "single responsibility" basis such that the Contract Price covers all Contractor's obligations mentioned in or to be reasonably inferred from the Contract Documents in respect of the design, manufacture, procurement, construction, installation, adjustment and testing of the works and remedying any defect therein.	We understand that any addition in quantities specified in Price schedule after award of contract shall be paid based on unit rates quoted in the price bid which cannot be considered as a turnkey contract/single responsibility basis. Please confirm.	RFP condition prevails.
672	Part-2	Employer's Requirement	ER-162	2 System Configuration	ATCS comprises the roadside equipment and the central server application as shown below: ATCS Application on cloud	As ATCS solution works of real time vehicular data , which is being captured with the help of vehicle detection sensors. As this realtime data gets analyzed and processed by the Traffic signal controllers installed at each junction and the ATCS software , it is important to have a seamless connection between all the three components, without any latency. having ATCS Application on Cloud , may will lead to have a delay in communication between Vehicle Detector, Traffic Controller and ATCS Application which will impact the Signal Timing Optimization and Junction Coordination as per real time. hence it is suggested that ATCS application shall be deployed on Premise Server.	RFP condition prevails. Refer Figure 2.1 in ER-162 of Part-2 already allows for Cloud/on-Premises.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
673	Part-2	Employer's Requirement	ER-163	3. Equipment Location	Table 3-1: Target Location of ATCS	As per Table 3.1 total arms/legs of 165 junctions are 584. However, as per Bill of Quantity mentioned is 570. (B3 Vehicle Detector Nos 570, Break Down of Price Schedule No. 2) We request authority to amend quantity as 584 in BoQ/Financial Proposal template. Kindly amend the Traffic light aspects and other peripheral quantity, too accordingly.	RFP condition prevails. The difference is due to one-way streets.
674	Part-2	Employer's Requirement	ER-17	Part 2 Employers Requirements, Pg. 17, 2 Scope of Work	b) Data Centre within CTP & MTC Buildings or cloud-based primary data center	Kindly provide the following details for DC & DR. 1. BoQ for cloud requirement. 2. Technical specification for cloud and cyber security requirement	The bidder shall be proposed suitable architecture to fulfill the functional requirement.
675	Part-2	Employer's Requirement	ER-17	Payment of Retention Money	One is for TIMS Command & Control Centre (TIMS-CCC) which will be established with Chennai Traffic Police. All necessary facilities, equipment and associated works which will make TIMS-CCC functional shall be undertaken by the Contractor	There are two CCC are proposed for TIMS and CBS, do they need to share there data and shall be connected from IT system standpoint? Typically we recommend to establish the cross correlation between siloed system as it draw significant insights.	RFP Condition Prevails. Yes, the bidder is expected to provide fully integrated system.
676	Part-2	Employer's Requirement	ER-17	2 Scope of Work	Data Centre within CTP & MTC Buildings or cloud-based primary data center	can you please clarify this requirement? Are you ok with either on-premise or cloud infra? Please confirm our understanding the DR has to be on the cloud? Is that right	Yes. Your understanding is correct.
677	Part-2	Employer's Requirement	ER-17	Design, Supply, Installation, Testing and Commissioning of the following primary components: a) Two Command Control & Communication Centre b) Data Centre within CTP & MTC Buildings or cloud-based primary data center c) Cloud Data Centre for DR (Hosted in data center of any MEITY empaneled Cloud Service Provider)	Kindly reconfirm that " Bidder should consider ONLY on-Prem Datacenter for within CTP & MTC for Primary and secondary Applications, ONLY DR they can consider cloud based service provider "	The response will aim bidders to consider on prem DC for Primary and secondary apps only only consider cloud for DR. Otherwise some bidders consider cloud solutions for both DC and DR this will create ambiguity	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
678	Part-2	Employer's Requirement	ER-17	<p>Traffic Information Management System (TIMS)</p> <ul style="list-style-type: none"> ▪ Adaptive Traffic Signal Control System (ATCS) ▪ Automatic Traffic Counters-cum-classifier (ATCC) System ▪ Red Light Violation Detection (RLVD) System ▪ Speed Limit Violation Detection (SLVD) System ▪ Traffic Incident Detection (TID) System ▪ Variable Message Sign (VMS) board ▪ Integrated Traffic Management System (ITMS) with Probe System Platform with required integrations <ul style="list-style-type: none"> ▪ Call Center ▪ Intersection Improvements <p>City Bus System (CBS)</p> <ul style="list-style-type: none"> ▪ Bus Monitoring System (BMS) including Vol2 	Kindly clarify " whether the bidder shall propose Hyperconverged Infrastructure solution should be work with the leaders in Gartner's magic quadrant for the proposed applications mentioned in this tender.	This response will help bidders choose cloud solutions based on HCI/ Software Defined storage at Cloud . If you are confirming the HCI can be proposed pls include the below points in the corrigendum	RFP Condition Prevails, The bidder may their desgin .
679	Part-2	Employer's Requirement	ER-17	2 Scope of Work -The scope of work shall include but will not be limited to the following broad areas:	d) Obtain site clearance obligations & other relevant permissions with the support of the Employer.	Request you to please keep RI/ROW Permission in end customer's scope. This would help in avoiding delays which mostly comes when outdoor work is involved and the permission lies with a stakeholder other than the end customer.	RFP condition prevails.
680	Part-2	Employer's Requirement	ER-17	Employer's Requirement/ ER-17/2 Scope of Work	The Contractor shall also do the Intersection Improvement works at 165 intersections specified here in the Employer's Requirements.	We understand any civil work for improvement shall not be in bidder's scope. Please clarify and confirm.	RFP condition prevails.
681	Part-2	Employer's Requirement	ER-17	Employer's Requirement/ ER-17/2 Scope of Work b) Data Centre within CTP & MTC Buildings or cloud-based primary data center	We understand bidder can opt for either on premise DC or cloud based DC. Please confirm if understanding is correct.	Yes. Your understanding is correct.
682	Part-2	Employer's Requirement	ER-17	Employer's Requirement/ ER-17/2 Scope of Work	c) Integration with existing project control center at data level.	Please provide the details of existing Control room, location, address, existing OEM etc. We understand connectivity and API/SDK for integration shall be provided by Chennai Smart City Limited. Please confirm.	<p>Please see the location information:</p> <p>TIMS control center: 13.081337, 80.262562 CBS control center: 13.073790, 80.276333</p> <p>API/SDK for integration shall be provided by Employer in design stage to the successful bidder.</p>
683	Part-2	Employer's Requirement	ER-17	Employer's Requirement/ ER-17/2 Scope of Work	d) Internet Connectivity at DC in control center	We have seen in the past that many bidders do not consider enough Internet bandwidth at DC & DR and this creates problems in the later stage to employer and there is no check on this because capacity is not defined in the documents. Hence we request to provide the minimum bandwidth capacity which needs to be quoted by the bidders.	RFP Condition Prevails. The bidder shall provide required bandwidth for each system to meet functional requirement.
684	Part-2	Employer's Requirement	ER-17	4.1.1 Implementation Stage	(h) Replacement of existing equipment such as signal poles, signal lamps devices, equipment's, Gantry etc. and move to place where the Employer instructed.	Please provide the details of existing infra. Please also confirm, if successful bidder can utilize existing passive infra (Pole, Cantilever, Junction boxes etc.)	No, successful bidder cannot utilize existing passive infra.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
685	Part-2	Employer's Requirement	ER-17	Employer's Requirement/ ER-17/4.1.1 Implementation Stage	(i) Remove obstacles from the project site.	We understand during implementation if any object like Trees, Shops etc. which requires the permission from respective owner/authority to move or remove the object, shall be provided by employer and any charges towards this shall be reimbursed by employer as per actual. Please confirm.	Bidder to conduct their own site survey to determine the requirements for implementation. Necessary permissions will be provided by concerned authority.
686	Part-2	Employer's Requirement	ER-17	Tale 2-1 Configuration of the System, Pg No. 21		Kindly share the daily volume of records that will be generated from these systems. What will be the formats of the data.	Details to be discussed during design stage.
687	Part-2	Employer's Requirement	ER-17	Tale 2-1 Configuration of the System, Pg No. 21		What will be the interval of records/files generation from each of the sub-systems.	Details to be discussed during design stage.
688	Part-2	Employer's Requirement	ER-17	Table 2-1: Configuration of the System	Chennai Traffic Police. All necessary facilities, equipment and associated works which will make TIMS-CCC functional shall be undertaken by the Contractor		No query provided.
689	Part-2	Employer's Requirement	ER-17	2 Scope of Work	Data Centre within CTP & MTC Buildings or cloud-based primary data center	can you please clarify this requirement? Are you ok with either on-premise or cloud infra?	Bidder free to choose both DC and DR on cloud or DC on-prem and DR on cloud.
690	Part-2	Employer's Requirement	ER-170	ER-170 4 System Functional Requirements,, 4.1 Functional Requirements of ATCS Application	■ ATCS shall be able to display locations and status (Normal/Failure) of all roadside equipment such as Controllers, Communication Card/Modem, Power, Vehicle detectors, and signals on a map-based view.	It will be difficult display all these icons (controller, Communication Card/Modem, Power, Vehicle Detector and Signal etc) on a Map. Instead it is requested to recommend select few icons. Please clarify	RFP condition prevails. The exact implementation can be discussed further in the design stage of the project.
691	Part-2	Employer's Requirement	ER-170	ER-170 4 System Functional Requirements,, 4.1 Functional Requirements of ATCS Application	■ It shall be possible to display a minimum of 8 active displays on each Operator terminal and every display shall be capable of showing in real time ATCS facilities and events.	Considering size of a typical operator terminal screen, it is requested to change this requirement to display a minimum of 4 active displays on each operator terminals, for better view. Please confirm	RFP condition prevails.
692	Part-2	Employer's Requirement	ER-170	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, ER 170	ATCS Application Software Requirement: Additional Clause	Requesting you to add this clause: Supplying of calibrated traffic simulation models for AM peak, PM peak, inter-peak and off-peak for weekday and peak and off-peak for Saturdays and Sundays covering all the ATCS junctions. Shall provide a decision support tool for assessing strategies to minimize congestion, delays and emergency response time to events via simulation and planning tools linked with real time traffic data fusion and control of traffic signaling infrastructure on ground. Justification: The calibrated models would ensure the proper functioning of ATCS in tandem with simulation.	RFP condition prevails.
693	Part-2	Employer's Requirement	ER-170	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, ER 170	ATCS Application Software Requirement: Additional Clause	Requesting you to add this clause: The application shall interface with a popular microscopic traffic flow simulation software for pre and post implementation analysis which shall be based on real time traffic flow modelling capability with the capacity to calculate traffic flows, OD movements and turning movements along entire primary road transport network. In addition, the simulation should interface with an offline instance of the ATCS system in order to carry out what-if analyses of traffic control strategies. The system should be able to provide an estimate of a Performance Index of the chosen strategy versus alternative strategies. The simulation model along with ATCS shall thus assist the traffic engineers / police to identify the best possible strategy in planning for any unusual / unprecedented event. Justification: The online simulation model will assist traffic police/operators to visualise the on-ground issues better and act pro-actively by evaluating multiple strategies.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
694	Part-2	Employer's Requirement	ER-170	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, ER 170	Additional Clause	<p>Requesting you to add the following clause:</p> <p>VEHICLE DETECTOR INPUT:</p> <ul style="list-style-type: none"> • Direct interface with detectors from ethernet port. <p>Justification: It is better to have data transfer via ethernet port. This data would include the conventional vehicle presence data along with classsified counts, and other traffic data.</p>	RFP condition prevails.
695	Part-2	Employer's Requirement	ER-170	Table 4-1: System Functional Requirements of ATCS Application	Requirement Signal Control Function #2 Actual Text "ATCS should be able to calculate in real time the optimal cycle times, effective green time ratios, and change intervals for all system traffic signal controllers. Such calculations will consist of simulations carried out in the central control computer, or individual traffic signal controller, based on a data and information transmitted by the vehicle detectors at the intersections controlled by the system."	Request to change as, "ATCS should be able to calculate in real time the optimal cycle times, effective green time ratios, and change intervals for all system traffic signal controllers. Such calculations will consist of calculations carried out in the central control computer, or individual traffic signal controller, based on a data and information transmitted by the vehicle detectors at the intersections controlled by the system."	Refer to Addendum-1, S.No: 102 dated 08-03-2022
696	Part-2	Employer's Requirement	ER-171	Table 4-1: System Functional Requirements of ATCS Application	<input type="checkbox"/> In the event of a fully adaptive detector becoming faulty, it shall be possible for default splits to be used for the relevant stage, whilst the remainder of the stages at that node maintain fully adaptive operation	we understand it means ATCS solution will work in VA mode. <u>Please confirm if our understanding is correct.</u>	The node (junction) & system shall still work as fully adaptive control system with the relevant stage with the faulty detector working in default fixed time.
697	Part-2	Employer's Requirement	ER-171	Table 4-1: System Functional Requirements of ATCS Application	Time of Day Control Function: Each Time of Day Schedule shall contain a minimum of 500 timetable events and an alphanumeric description. A single 'event' shall be taken to be a real time fully adaptive or fixed time command applied either to a single node or a group of nodes or an entire fully adaptive region or Sub-area.	Please consider minimum of 250 entries. Time table entry shall be functionally possible as each system has it own way of addressing "Time of Day Schedule". E.g mon-tue or mon-Friday etc.	Refer to Addendum-1, S.No: 35 dated 08-03-2022
698	Part-2	Employer's Requirement	ER-171	Part 2 Employer's Requirements, 4.1 Functional Requirements of ATCS Application, Table 4-1: System Functional Requirements of ATCS Application, (1) Fully Adaptive Traffic Control (FATC), ER 171	· ATCS shall be able to initially set adaptive regions (subareas) which comprises from 1 up to 20 signalized junctions. The distance between adjacent intersections for organizing an adaptive region shall be less than around 400 m	<p>Requesting you to kindly modify the clause to the following:</p> <p>ATCS shall be able to initially set adaptive regions (subareas) which comprises from 1 up to 20 signalized junctions.</p> <p>Justification: Adaptive regions is a functionality provided by only one or two international ATCS systems. No Indian ATCS system provides this functionality, and there are no specific advantages for such a functionality under Indian traffic conditions. This clause is restrictive and locks out Indian ATCS OEMs. Hence, we request you to make an amendment along the suggested lines.</p>	RFP condition prevails.
699	Part-2	Employer's Requirement	ER-171	Table 4-1: System Functional Requirements of ATCS Application	Requirement Time of Day Control Function #1	Suggested Text Removal: "The system shall be able to create the time-of-day table based on the collected traffic data. The time-of-day table stored in the controller shall be updated at least once a week."	RFP Condition prevails. A SOP can be created for this update.
700	Part-2	Employer's Requirement	ER-171	Part 2 – Employer's requirements Clause 4.1 – Fully Adaptive Traffic Control -1 Pg no. ER-171	ATCS shall be able to enable the automatic subarea formulation which is to dynamically connect and separate adjacent adaptive regions(subareas) comparing the real-time traffic conditions of each adaptive region to optimize the traffic flow. (for example: if difference of cycle length of each adaptive region(subarea) is less than 20 seconds, the adjacent adaptive regions(subareas) can be connected.)	<p>Please change this requirement from automatic subarea formulation to semi-automatic subarea formulation.</p> <p>Sub area, or region is a collection of junctions in a common area, be this either as part of a closely spaced signalised area of the network or as an arterial route / corridor, where co-ordination between the junctions is advantageous. The formulation of a sub area is typically based on traffic engineering experience, and so a partial automatic subarea formulation is possible, where a common cycle time will be used</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
701	Part-2	Employer's Requirement	ER-172	Table 4-1: System Functional Requirements of ATCS Application	<input type="checkbox"/> The maximum time from the receipt at the System of a request for a Green Wave to initial transmission of data to implement the <u>Green Wave shall not exceed 3 seconds</u> .	It should be at least 25 seconds as per Industrial standards for Green wave. Hence, we request authority to amend this clause as, <input type="checkbox"/> The maximum time from the receipt at the System of a request for a Green Wave to initial transmission of data to implement the Green Wave shall not exceed <u>3 seconds, 25 seconds</u> "	RFP condition prevails.
702	Part-2	Employer's Requirement	ER-173	Table 4-1: System Functional Requirements of ATCS Application	Displaying Function: ATCS shall be able to display locations and status (Normal/Failure) of all roadside equipment such as Controllers, Communication Card-/Modem, Power, Vehicle detectors, and signals on a map-based view.	ATCS can display the map of the intersection only and Map based display shall be part of TIMS as ATCS is focused for signal coordination.please confirm.	RFP condition prevails. Bidder shall show the mentioned information on a map based system either within the ATCS application or any other integrated application provided as part of the project.
703	Part-2	Employer's Requirement	ER-173	Table 4-1: System Functional Requirements of ATCS Application	<input type="checkbox"/> ATCS shall be able to graphically display the transition of subareas on a map-based view.	please clarify the meaning of "transition of subareas".	"Transition of subarea" means changing of intersections included in one subarea.
704	Part-2	Employer's Requirement	ER-173	Table 4-1: System Functional Requirements of ATCS Application	■ ATCS shall be able to display locations and status (Normal/Failure) of all roadside equipment such as Controllers, Communication Card/Modem, Power, Vehicle detectors, and signals on a map-based view.	It will be very combersome to display all these icons (controller, Communication Card/Modem, Power, Vehicle Detector and Signal etc) on a Map. Instead it is recommended to show junction status on map in Green (JUNCTION ON) or Red (JUNCTION OFF) colour and subsequent right click/mouse over the RED Juction icon, shall provide details of erroneous itms/equipment	RFP condition prevails. The exact implementation can be discussed further in the design stage of the project.
705	Part-2	Employer's Requirement	ER-173	Table 4-1: System Functional Requirements of ATCS Application	■ It shall be possible to display a minimum of 8 active displays on each Operator terminal and every display shall be capable of showing in real time ATCS facilities and events.	Considering typical size of operator terminal screen, it is recommended to change this requirement to display a minimum of 4 active displays on each operator terminals, for better visibility.	RFP condition prevails.
706	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	<u>It shall be possible to modify the action times/green splits or cycle time parameter of a fixed time plan currently in operation such that the resulting cycle time is different to that specified in the original plan.</u> A suitable warning message shall be displayed on the operator's terminal when the cycle time is different.	Such functionality can be achieved by manual intervention of operator. Additionally, warning message/pop-up will also generate on software application by apply such modifications. However, it is not possible to make changes automatically in Fixed Mode. <u>Please confirm if our understanding is correct.</u>	Successful bidder has to ensure this functionality is provided in the proposed system, either manually or automatically (through scheduler etc.) and they have to achieve the same in compliance to RFQ cum RFP conditions.
707	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	It shall be possible using a single command to offset a group of junctions/nodes currently operating a fixed time plan by a single value, either in a positive or negative direction.	we understand it means group of junction/nodes operate in group in a fixed plan can be operate on same cycle by just single click. <u>Please confirm if our understanding is correct.</u>	No. This criteria refers to changing the "Offset" of group of juncitons/nodes, operating in fixed time plan, by a single positive or negative value using a single command.
708	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	The system shall be able to display the communication line status with appropriate colour coding on a map-based view.	Suggested clause: The system shall be able to display the communication line status with appropriate colour coding on GUI/a map-based view.	Refer to Addendum-1, S.No: 36 dated 08-03-2022
709	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	When such a plan is still in operation at a time when a timetabled plan is to be carried out, a suitable message or prompt containing the manually varied junctions shall be output no earlier than 15 minutes and no later than 5 minutes before the plan change time. The command used to maintain manually implemented plan(s) shall be on any area/sub-area, group, or junction basis. A suitable warning message shall be displayed on the operator's terminal when the cycle time is different.	This is contradicting with the main objective of having a manual operation,hence may please be deleted.	RFP condition prevails.
710	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	Requirement Method of Operation	Suggested Text Removal: It shall be possible to inhibit remote access to the System by time of day. The access times shall be user definable and can be associated with certain levels of access. Similarly, it shall be possible to limit the remote access to the System by user at defined times of day.	RFP condition prevails.
711	Part-2	Employer's Requirement	ER-174	Table 4-1: System Functional Requirements of ATCS Application	It shall be possible using a single command to offset a group of junctions/nodes currently operating a fixed time plan by a single value, either in a positive or negative direction.	we understand it means group of junction/nodes operate in group in a fixed plan can be operate on same cycle by just single click. Kindly clarify if our understanding is correct?	No. This criteria refers to changing the "Offset" of group of juncitons/nodes, operating in fixed time plan, by a single positive or negative value using a single command.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
712	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	Management Function: Shall have the functionality to supervise and control the system using web-interface so that maintenance is carried out with much ease.	Suggested clause: the system shall have the functionality to supervise and control through integration with web interface.	RFP condition prevails. As long supervision and control occurs through a web interface, within application or through integration, it is acceptable.
713	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	<ul style="list-style-type: none"> ■ The system through the signal controllers shall provide transit signal priority and have logging data that include time of event, duration, and frequency for each of these events. 	As Transit Signal Priority requires lot of interface development with 3rd party devices/systems and involvement of multiple agencies, Request you to keep this feature as future upgrade.	RFP condition prevails.
714	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	<ul style="list-style-type: none"> ■ A minimum of 24 vehicle detector inputs, via an integral detector rack and 16 buffered additional inputs for connection of external devices such as push buttons shall be available in the controller. All inputs shall be isolated either optically or by other means and provided with LED indication. All 16 inputs for external devices shall be wired to the field terminal blocks in the controller housing. 	24 vehicle detector inputs requirement will help only a few traffic controller OEMs as most of the traffic controller supports 16 vehicle detector inputs hence for maximum participation of established traffic controller OEMs, it is recommended to change this requirement to 16 vehicle detector input instead of 24. As separate controllers have been asked for traffic signal and pelican junctions under table 5.1, additional 16 buffered inputs for push button etc, to be made optional.	RFP condition prevails.
715	Part-2	Employer's Requirement	ER-175	ER-175 4 System Functional Requirements, 4.1 Functional Requirements of ATCS Application	<ul style="list-style-type: none"> ■ The system through the signal controllers shall provide transit signal priority and have logging data that include time of event, duration, and frequency for each of these events. ■ The system should provide transit signal priority for emergency vehicles, buses, VIP vehicles etc. based on Centre to Centre (C2C) communication and user selection (individual intersections and corridors). ■ The ATCS application shall integrate with the CAD/AVL application and accept triggers for TSP. The TSP call shall then be relayed in real-time to the field controller. 	<p>As Transit Signal Priority requires lot of interface development with 3rd party devices/systems and involvement of multiple agencies.</p> <p>It is humbly requested to keep this feature as future requirement.</p>	RFP condition prevails.
716	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	Requirement Method of Operation Original Text: A facility shall also be included to enable an operator to acknowledge and automatically silence the alarm from any active Operator terminal. Whenever an alarm condition is generated, the System shall output an appropriate message indicating the reason for the alarm and the System date and time. Alarm acknowledgement shall initiate a listing of all previously unacknowledged alarms and every alarm acknowledgement and cancellation shall be recorded in the System log.	Revised Text: A facility shall also be included to enable an operator to acknowledge and automatically silence the alarm from any active Operator terminal. Whenever an alarm condition is generated, the System shall output an appropriate message indicating the reason for the alarm and the System date and time. Alarm acknowledgement shall initiate a listing of all previously unacknowledged alarms.	<p>RFP condition prevails.</p> <p>Details of implementation for this requirement to be discussed during design stage.</p>
717	Part-2	Employer's Requirement	ER-175	Table 5-2: Hardware requirement of Controller cabinet	Requirement 6	Suggested Text Removal: An Intercom Jack	Refer to Addendum-1, S.No: 37 dated 08-03-2022
718	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	Transit Signal Priority Requirements, it states that the "...The ATCS application shall integrate with the CAD/AVL application and accept triggers for TSP."	What CAD/AVL protocol was envisioned for use in order to provide real time positioning of vehicles.	Bid includes CAD/AVL system as part of the project. Bidder should be able to determine the protocol and integration requirements.
719	Part-2	Employer's Requirement	ER-175	Table 4-1: System Functional Requirements of ATCS Application	Transit Signal Priority	was it envisioned to have a conditional priority system where priority is granted based on schedule adherence or passenger load, or will priority be granted strictly based on proximity and estimated time of arrival at the intersection?	RFP Condition prevails. It is envisioned to add additional conditions to TSP once TSP is effectively used in Chennai. Bidder should provide various features of their signalling and CAD/AVL system in the USP writeup.
720	Part-2	Employer's Requirement	ER-176	Table 4-1: System Functional Requirements of ATCS Application	Functional requirements, it states the controller shall provide a "Safety Operation" mode.	Can this mode be defined as to how it operates?	Please refer to ER-179 (point 11 to 13) in Part 2 of RFP.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
721	Part-2	Employer's Requirement	ER-178	Table 4-2: Functional Requirement of Controller	Functional requirements section 7, it states that the local traffic signal controller shall be capable of returning indications of state for "Safety Fail Red 1" and "Saety Red Fail 2".	Can you define how these functions operate?	"Safety fail red 1" means failure of 1st Red of a Stage/Group and the controller shall be capable of sending the indication of failure to central ATCS application. Similarly controller should do the same for "Safety fail red 2" & upon failure of 2nd Red of a Stage/Group be able to send indication of failure to central ATCS application..
722	Part-2	Employer's Requirement	ER-179	Table 4-2: Functional Requirement of Controller	Fully Adaptive Control Mode: Send/Receive Text to/from Portable System Terminal-	please consider SMS also.	The bidder shall be responsible for delivering the text between the field and central systems. As long as the functionality required is satisfied, SMS will also be accepted. However, all infrastructure and networking costs associated with providing the SMS solution shall be borne by bidder.
723	Part-2	Employer's Requirement	ER-179	Table 4-2: Functional Requirement of Controller	Fully Adaptive Control Mode: Send/Receive Text to/from Portable System Terminal	Please provide the details about portable system terminal.	Any portable device such as Laptop, Handheld device with keypad/touch screen etc. which can be used for callibration , configuration, operation, maintenance etc. for carrying out any and all of the functionalities that can be carried out in the field is defined as portable system terminal.
724	Part-2	Employer's Requirement	ER-179	Table 4-2: Functional Requirement of Controller	<p>■ Shall identify a communication failure with the central computer within a specified time period. In such an event the signal plan timings shall be executed from the local timetable stored in the traffic signal controller FLASH memory. Fallback mode of the traffic signal controller shall be fixed timing plan. On restoration of the communication with central computer the traffic signal controller shall automatically resort to adaptive mode.</p>	Whenever Network connectivity between traffic controller and control room fails, the fallback mode needs to be as effective as ATCS mode of operation hence instead of fixed time plan mode of operation, which is the most inefficient operating mode, it is recommended that the fallback mode be vehicle actuated (VA)mode so that the junction works with efficiency close to ATCS mode, even under network failure	Refer to Addendum-1, S.No: 38 dated 08-03-2022
725	Part-2	Employer's Requirement	ER-179	Table 4-2: Functional Requirement of Controller	Requirement Fully Adaptive Mode	Suggested Text Removal: Send/Receive Text to/from Portable System Terminal	RFP condition prevails. Details of implementation for this requirement to be discussed during design stage.
726	Part-2	Employer's Requirement	ER-18	ER-18 2 Scope of Work 4. Provisioning of Network Infrastructure within the Roadside Equipment and Control Center	<p>f) The Right of Way (RoW) charges (If any) shall be borne by the Contractor and necessary approval shall be taken prior to commencement of the work.</p> <p>1. RoW will relate to the project roads including NH, SH and all other major and minor roads within the CMA subject to technical feasibility.</p> <p>2. The work will be carried as per the road cut specifications specified by GCC/HMPD/NHAI. Reinstatement (RI) charges/ Restoration Charges along with other fees have to be borne by the Contractor.</p> <p>3. Once the RoW work is finished satisfactorily, the ROW application Permission Fees pertaining to GCC shall be reimbursed by the Employer.(The cost of Road restoration charges is not included in this)</p>	As per standard practise in Large Scale project like this, RoW charges are borne by the Employer as it fall under the autjhority of the Employer itself. However, the Contractor is responisble making such application for necessary approvals. It will be helpful for the project timelines if RoW charges is waived off from the contractors scope and also bring down the Project Cost.	Refer to Addendum-1, S.No: 135 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
727	Part-2	Employer's Requirement	ER-18	Part 2, Employer's Requirement, ER-18	<p>4. Provisioning of Network Infrastructure within the Roadside Equipment and Control Center</p> <p>f) The Right of Way (RoW) charges (If any) shall be borne by the Contractor and necessary approval shall be taken prior to commencement of the work.</p> <p>1. RoW will relate to the project roads including NH, SH and all other major and minor roads within the CMA subject to technical feasibility.</p> <p>2. The work will be carried as per the road cut specifications specified by GCC/HMPD/NHAI. Reinstatement (RI) charges/ Restoration Charges along with other fees have to be borne by the Contractor.</p> <p>3. Once the RoW work is finished satisfactorily, the ROW application Permission Fees pertaining to GCC shall be reimbursed by the Employer. (The cost of Road restoration charges is not included in this)</p>	<p>As the Permissions and Approvals for Right of way and Restoration/Reinstatement involves co-ordination with multiple government agencies, we request you to kindly employer to be responsible for both approvals and charges to be paid for Right of way and Reinstatement/Restoration. So kindly amend the clause as follows:</p> <p>f) The Right of Way (RoW) charges (If any) shall be borne by the Employer Contractor and necessary approval shall be given by Employer taken prior to commencement of the work. Contractor need not consider the RoW and Restoration/Reinstatement charges in their bid price.</p> <p>1. RoW will relate to the project roads including NH, SH and all other major and minor roads within the CMA subject to technical feasibility.</p> <p>2. The work will be carried as per the road cut specifications specified by GCC/HMPD/NHAI. Reinstatement (RI) charges/ Restoration Charges along with other fees shall be have to be borne by the Employer Contractor.</p> <p>3. Once the RoW work is finished satisfactorily, the ROW application Permission Fees pertaining to GCC shall be reimbursed by the Employer. (The cost of Road restoration charges is not included in this)</p> <p>3. If there are any delays due to the permission/approvals from Employer/Other Govt. agencies pertaining to RoW & Restoration/Reinstatement, we request you to kindly confirm that contractor shall not be levied any penalty for such delay and time extension shall be provided accordingly.</p>	Refer to Addendum-1, S.No: 135 dated 08-03-2022
728	Part-2	Employer's Requirement	ER-18	Part 2 Employers Requirements pg.22 Scope of Work	<p>e) Data Exchange services among different projects with the CMA</p> <p>f) Application integration services with the above identified applications</p>	We understand that there should be integration with the existing projects, kindly provide detailed information of the existing projects and applications to be integrated.	RFP condition prevails.
729	Part-2	Employer's Requirement	ER-18	Part 2 Employers Requirements Pg. 18 2 Scope of work	c) Integration with existing project control center at data level.	Kindly provide the existing system details, Integration scope, License associated to the existing system etc.	RFP condition prevails. The bidder shall consider cross functional access or viewing licenses to be considered.
730	Part-2	Employer's Requirement	ER-18	2 Scope of Work	c) Integration with existing project control center at data level.	It is assumed that the bidder will expose the API for the integration with existing ICCC platform. Bidder will not put additional efforts for any existing project control integration. Kindly confirm.	RFP Condition Prevails. Minimum expected integration is mentioned in RFP. Kindly refer Section VII in Part-2 of RFP.
731	Part-2	Employer's Requirement	ER-18	2 Scope of Work	c) Integration with existing project control center at data level.	Kindly provide the list of integration points/ services to be integrated for the existing ICCC project. This is required to estimate the integration effort. Also, we assume that API's will be shared by the existing project owner for the integration with the proposed platform.	RFP Condition Prevails. Minimum expected integration is mentioned in RFP. Kindly refer Section VII in Part-2 of RFP.
732	Part-2	Employer's Requirement	ER-18	2 Scope of Work	c) Integration with existing project control center at data level.	<p>Kindly provide the existing Applications' details such as</p> <ul style="list-style-type: none"> - OS, Database, Java/.Net/Mainframe etc. - Make and Model of Existing Application - Provide the File Format of the existing data - Whether it support HTTP/HTTPS/REST API Integration 	<p>Successful bidder will have access to all the details related to Integration.</p> <p>Standard API integration is expected to be performed by the bidder. Required support for integration will be arranged by Employer during design stage.</p>
733	Part-2	Employer's Requirement	ER-18	Commissioning, Trial Operation, Training and Capacity Building for the Employer and any other department which includes preparation of operational manuals, training documents and capacity building support, including	Do you required design, deploy and capacity building(Training) to be given by ONLY OEM Professional services team/ OEM certified Engineers is enough?	The response will help bidder to quote the appropriate professionals along with the entire solutions.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
734	Part-2	Employer's Requirement	ER-18	Part 2 Er18, 4(f)	f) The Right of Way (RoW) charges (If any) shall be borne by the Contractor and necessary approval shall be taken prior to commencement of the work. 1. RoW will relate to the project roads including NH, SH and all other major and minor roads within the CMA subject to technical feasibility. 2. The work will be carried as per the road cut specifications specified by GCC/HMPD/NHAI. Reinstatement (RI) charges/ Restoration Charges along with other fees have to be borne by the Contractor. 3. Once the RoW work is finished satisfactorily, the ROW application Permission Fees pertaining to GCC shall be reimbursed by the Employer.(The cost of Road restoration charges is not included in this)	The bidder requests the following modifications: Kindly waive off the ROI Charges for the contractor.	RFP condition prevails.
735	Part-2	Employer's Requirement	ER-18	2 Scope of Work	3. c) Command Control Centre infrastructure including operator Video Walls, workstations, IP phones, joystick controller etc.	There is no Joystick controller mentioned in Price Schedule No.2 . Please clarify whether joystick controller is required. If yes, kindly add it in Price schedule.	Refer to Addendum-1, S.No: 109 dated 08-03-2022
736	Part-2	Employer's Requirement	ER-18	Part 2, 2 Scope of Work, ER-18	4. Provisioning of Network Infrastructure within the Roadside Equipment and Control Center c) Integration with existing project control center at data level.	Please provide the latitude & longitude of existing project control center for checking network feasibility.	Please see the location information: TIMS control center: 13.081337, 80.262562 CBS control center: 13.073790, 80.276333
737	Part-2	Employer's Requirement	ER-18	2. Scope of Work, Pg No. 22		Amongst the 2 CC, where will the Analytics application team be working from.	Details to be discussed during design stage.
738	Part-2	Employer's Requirement	ER-18	ER-18 Section VI General Requirements 4 (f)	The Right of Way (RoW) charges (If any) shall be borne by the Contractor and necessary approval shall be taken prior to commencement of the work. 1. RoW will relate to the project roads including NH, SH and all other major and minor roads within the CMA subject to technical feasibility. 2. The work will be carried as per the road cut specifications specified by GCC/HMPD/NHAI. Reinstatement (RI) charges/ Restoration Charges along with other fees have to be borne by the Contractor. 3. Once the RoW work is finished satisfactorily, the ROW application Permission Fees pertaining to GCC shall be reimbursed by the Employer.(The cost of Road restoration charges is not included in this)	RoW application should be on the name of Purchaser (CSCL) so bidder can support in liaisoning only. Requesting you to amend this clause accordingly	RFP condition prevails.
739	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller	■ The same controller shall be proposed for both Signal and Pelican locations.	As Pelican controller typically requires only 2-4 signal groups with limited features, asking for a full fledged traffic signal controller at pelican locations is not advisable hence request you to separate out traffic signal controllers and pelican controllers, as per actual requirement.	RFP condition prevails.
740	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller	Shall have in-built CPU and all required hardware to facilitate vehicle control at an intersection in a single rack.	Controller should have dual CPU which includes a safety CPU for controller safety and reliability for voltage, current, Lamp and conflict monitoring to facilitate vehicle control at an intersection in a single rack.	RFP Condition prevails. Bidder can however provide additional functionalities beyond the RFP requirement.
741	Part-2	Employer's Requirement	ER-180	Table 5-1: Hardware requirement of Controller	Table 5-1: Hardware requirement of Controller	■ The same controller shall be proposed for both Signal and Pelican locations. As Pelican controller typically requires only 2-4 signal groups with limited features, asking for a full fledged traffic signal controller at pelican locations is not advisable hence request you to separate out traffic signal controllers and pelican controllers, as per actual requirement.	RFP condition prevails.
742	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	ü Battery Voltage Monitoring	Please clarify. Is this battery voltage monitoring of UPS batteries?	Refer to Addendum-1, S.No: 34 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
743	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	n Fault Detection - The controller must employ a number of different fault checking processes, including both hardware and software checks using the processors. In general, the signal displays must be switched off within 500 milliseconds of the occurrence of a fault. There are exceptions to this as noted below.	The timeframe given here is very stern. We request authority to amend this clause as, "n Fault Detection - The controller must employ a number of different fault checking processes, including both hardware and software checks using the processors. In general, the signal displays must be switched off within 500 milliseconds 1 minute of the occurrence of a fault. There are exceptions to this as noted below."	RFP condition prevails.
744	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	n The occurrence of a conflict in signal displays will cause the signal displays to be switched to flash amber/flashing red within 150 milliseconds by the conflict monitor. Configuration faults, which cause unsafe signal displays, must cause the signal displays to be switched off within 100 milliseconds. Examples of this class of fault are: -	The timeframe given here is very stern. We request authority to amend this clause as, "n The occurrence of a conflict in signal displays will cause the signal displays to be switched to flash amber/flashing red within 150 milliseconds by the conflict monitor. Configuration faults, which cause unsafe signal displays, must cause the signal displays to be switched off within 100 milliseconds 1 minutes Examples of this class of fault are: -"	RFP condition prevails.
745	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	The vehicle actuated controller shall provide the following safety features: Battery Voltage Monitoring	weunderstand, it is meant for Battery Voltage Monitoring via external connection(e.g UPS)	Refer to Addendum-1, S.No: 34 dated 08-03-2022
746	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	The vehicle actuated controller shall provide the following safety features: Battery Voltage Monitoring	We understand, it is meant for Battery Voltage Monitoring via external connection (e.g., UPS). Kindly clarify.	Refer to Addendum-1, S.No: 34 dated 08-03-2022
747	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware requirement of Controller	■ Monitoring - The controller front panel shall display Red, Amber and Green LEDs for each phase/signal group output to allow easy monitoring of the drive signals to the signal displays. Status LEDs shall be provided to give indication of the state of the hardware and software. The status LEDs include:- ✓ CPU is operating normally ✓ Conflict detected ✓ Communications synchronised ✓ Power is OK ✓ Lamp Alarm (i.e. a lamp fault exists) ✓ System Shutdown (due to an internal system fault)	As the controller asked for is in Rack Version, very little space is available to accommodate Red, Amber and Green LEDs (48) for a single Lamp Drive card which typically supports 16 lamp outputs. Instead it is recommended to have 1 LED per phase, indicating Green Phase of that signal group which will reduce the LED placement requirement on facia from 48 to 16	RFP condition prevails.
748	Part-2	Employer's Requirement	ER-182	Part 2 Employer's Requirements, 5.1 Controller, Table 5-1: Hardware requirement of Controller, ER 182	11 Fault Detection - The controller must employ a number of different fault checking processes, including both hardware and software checks using the processors. In general, the signal displays must be switched off within 500 milliseconds of the occurrence of a fault. There are exceptions to this as noted below.	Requesting you to kindly modify the clause to the following: Fault Detection - The controller must employ a number of different fault checking processes, including both hardware and software checks using the processors. In general, the signal displays must be switched off within 1000 milliseconds of the occurrence of a fault. There are exceptions to this as noted below. Justification: 1 second is a reasonable time with respect to the speed of movement of vehicles at intersections. A lower limit of 500ms will render a number of Indian manufacturers of traffic signal controllers and other signalling hardware ineligible.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
749	Part-2	Employer's Requirement	ER-182	Part 2 Employer's Requirements, 5.1 Controller, Table 5-1: Hardware requirement of Controller, ER 182	<p>The occurrence of a conflict in signal displays will cause the signal displays to be switched to flash amber/flashing red within 150 milliseconds by the conflict monitor. Configuration faults, which cause unsafe signal displays, must cause the signal displays to be switched off within 100 milliseconds. Examples of this class of fault are: -</p> <ul style="list-style-type: none"> - An attempt to change a signal display from Green to Red without an intervening Leaving Amber display. - Premature termination of a pedestrian signal display from either pedestrian green or flashing red to the pedestrian red. - An attempt to terminate a phase Green display before expiry of the minimum green time for the phase. - Invalid site-specific data in a data or condition table. <p>It shall not be possible to alter any basic timing parameters including minimum / maxima from a handset or portable communications device/ Changing such data shall only be possible by changing the controller's EPROM.</p>	<p>Requesting you to kindly modify the clause to the following:</p> <ul style="list-style-type: none"> - The occurrence of a conflict in signal displays will cause the signal displays to be switched to flash amber/flashing red within 1000 milliseconds by the conflict monitor. Configuration faults, which cause unsafe signal displays, must cause the signal displays to be switched off within 1000 milliseconds. Examples of this class of fault are: - - An attempt to change a signal display from Green to Red without an intervening Leaving Amber display. - Premature termination of a pedestrian signal display from either pedestrian green or flashing red to the pedestrian red. - An attempt to terminate a phase Green display before expiry of the minimum green time for the phase. - Invalid site-specific data in a data or condition table. - It shall not be possible to alter any basic timing parameters including minimum / maxima from a handset or portable communications device/ Changing such data shall only be possible by changing the controller's EPROM. <p>Justification: The clocks of the various hardwares such as timers, detectors, processors are almost upto 1000 milliseconds and having a unified time for failure detection and switching will make the system consistent and stop in one go in case of any issue detection.</p>	RFP condition prevails.
750	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware Requirement of VMS Board and Controller	n Fault Detection - The controller must employ a number of different fault checking processes, including both hardware and software checks using the processors. In general, the signal displays must be switched off within <u>500 milliseconds</u> of the occurrence of a fault. There are exceptions to this as noted below.	We kindly request to modify the time limit from 500 milliseconds to 1 minute.	RFP condition prevails.
751	Part-2	Employer's Requirement	ER-182	Table 5-1: Hardware Requirement of VMS Board and Controller	n The occurrence of a conflict in signal displays will cause the signal displays to be switched to flash amber/flashing red within <u>150 milliseconds</u> by the conflict monitor. Configuration faults, which cause unsafe signal displays, must cause the signal displays to be switched off within 100 milliseconds. Examples of this class of fault are: -	We kindly request to modify the time limit from 150 milliseconds to 1 minute.	RFP condition prevails.
752	Part-2	Employer's Requirement	ER-183	Table 5-1: Hardware requirement of Controller	<p>Design Life:</p> <p>■ All components must be rated for minimum 10-year life, excluding the standby battery, which shall have a minimum life of 5 years. Also Mean Time Between Failures (MTBF) of greater than 3 years is required.</p>	Considering technological advancement and typical obsolescence cycle, it is recommended to change minimum life duration requirements for components to 7 years.	RFP condition prevails.
753	Part-2	Employer's Requirement	ER-183	Table 5-1: Hardware requirement of Controller	it states that, "...It shall not be possible to alter any basic timing parameters including minimum / maxima from a handset or portable communications device/ Changing such data shall only be possible by changing the controller's EPROM."	The point of an adaptive system with central management capability is to be able to remotely change settings – this allows for safer and more efficient operation. This requirement seems to state that certain settings can only be made remotely at the intersection. Does this requirement place a restriction on the ability to change settings remotely through a central management function?	Refer to Addendum-1, S.No: 105 dated 08-03-2022
754	Part-2	Employer's Requirement	ER-184	Table 5-1: Hardware requirement of Controller	<p>Requirement 13</p> <p>Original Text: Limiting Values – minimum green and intergreen timings shall each be protected by a single minimum value stored in FLASH memory, it shall be possible to arrange that this value is considered a standard value below or above which it shall not normally be permitted to specify. These standard values shall be user configurable at an appropriate password level or other appropriate means. Unless otherwise specified limiting values for minimum green shall be 8 seconds and for intergreens 5 seconds.</p>	<p>Revised Text: Limiting Values – Intergreen timings shall each be protected by a single minimum value, it shall be possible to arrange that this value is considered a standard value below or above which it shall not normally be permitted to specify. These standard values shall be user configurable at an appropriate password level or other appropriate means. Unless otherwise specified limiting values for minimum intergreens shall be 5 seconds.</p>	Refer to Addendum-1, S.No: 105 dated 08-03-2022
755	Part-2	Employer's Requirement	ER-185	5.2 Vehicle Detectors	Requirement 5	can you define what "refresh time" refers to?	Refresh time refers to FPS & assume refresh timing of 75ms or better, meaning 14 FPS or better.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
756	Part-2	Employer's Requirement	ER-185	5.2 Vehicle Detectors	Requirement 8 Original Text: The detector shall have capability to measure the real-time traffic flow monitoring including counting, classification, flow speed and zone occupancy.	Revised Text: The detector shall have capability to measure the real-time traffic flow monitoring including counting, classification and zone occupancy.	RFP condition prevails.
757	Part-2	Employer's Requirement	ER-185	Table 5-2: Hardware requirement of Controller cabinet	Requirement 6 Original Text: The cabinet shall be electrically and mechanically robust and shall have a degree of protection of IP65 or higher specified in "IEC60529 Degrees of Protection Provided by Enclosures (IP Code)".	Revised Text: The cabinet shall be electrically and mechanically robust and shall have a degree of protection of IP51 and IP52 or higher specified in "IEC60529 Degrees of Protection Provided by Enclosures (IP Code)".	RFP condition prevails.
758	Part-2	Employer's Requirement	ER-185	Table 5-2: Hardware requirement of Controller cabinet	Provide the housing of various equipment such as controller, detector cards, flasher, DC power supply, circuit breakers and AC power, signal monitor, switch packs, and flash transfer relay as shown below.	This diagram does not seem to be in the document. Can this be provided?	Please read as below: Provide the housing of various equipment such as controller, detector cards, flasher, DC power supply, circuit breakers and AC power, signal monitor, switch packs, and flash transfer relay.
759	Part-2	Employer's Requirement	ER-185	Table 5-2: Hardware requirement of Controller cabinet	5.3 Controller Cabinet	How it is envisioned that the RLVD Camera will connect to the traffic controller (if any integration is required)? What protocols and physical interfaces will be used?	Since bidder is providing both the systems, the bidder shall propose a suitable integration method.
760	Part-2	Employer's Requirement	ER-185	vol 2, 5.2 Vehicle Detectors Er 185		<p>For effective adaptive systems detector should have stop line and forward detection @ minimum 150 meters. Also as chennai is a sea city, unless radar technology is used it can have challenges as sea breeze gets deposited on face of camera and can provide bad data. The sensor shall have a self diagnosis feature to allow limited fail-safe capabilities, detecting for example: - Sensor blindness – Rain – Misalignment in roll or pitch angle – Detection and suppression of interference</p> <p>We request to clarify on technology of sensor and also confirm that stop line and forward alaysis is rquired. How much queue detection is required? How many vehicles simultaneously should be detected? And if sensor should work in all light conditions and weather condition and should provides to check Classification – Volume – Occupancy — Vehicle presence, Queue Length, Counting the Vehicles.</p> <p>if OEM has to have some minimum expeirence . Sir please note that Video based sensors might not work in averse weather, night , twilight and when dirty. Also they cannot see more than 35- 40 meters in night and thus cannot do queue detection which is very important for any effective ATCS</p> <p>The Vehcile detector should be 4D HD front firing sensor and should be able to monitor stop line and forward analysys at 15o meters and track vehicles for ETA, speed, traffic volume and count. It should not have any impact of heat, light conditons, twilight. The sensor OEM should have atleast sold 10,000 such sensors. The sensor should be able to track upto 4 lanes for 150 meter and should be able to track 125 vehciles simultaneoulsy. All data processing should be inside the sensor and no third party LPU shoudl be required.</p>	RFP condition prevails.
761	Part-2	Employer's Requirement	ER-185	Table 5-2: Hardware requirement of Controller cabinet	Table 5-2: Hardware requirement of Controller cabinet	<p>■ An intercom jack Please elaborate the purpose and signifiance of intercom jack inside traffic controller cabinet.</p>	Refer to Addendum-1, S.No: 37 dated 08-03-2022
762	Part-2	Employer's Requirement	ER-185	5.2 Vehicle Detectors	Additional clause	We request you to add below clause for fast and beeter communication and to avoid additioanl network hardware "The commmication from Camera to Controller shall be over BPL (Broadband over powerline)"	RFP condiion prevails. Bidder can however provide additional functionalities beyond the RFP requirement.
763	Part-2	Employer's Requirement	ER-186	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	Ethernet Interfaces 4 x 10/100/1000 Base-T PoE+ Ports auto-negotiation Plus 4 x 1000 Base-X SFP Uplink Slots (Should be loaded with 2 x 1G Single mode Industrial Grade Fiber Modules supports up to 10 Km)	<p>4 x 10/100/1000 Base-T PoE+ Ports auto-negotiation Plus 4 x 1000 Base-X SFP or 2 x 10G SFP+ Uplink Slots (Should be loaded with 2 x 1G Single mode Industrial Grade Fiber Modules supports up to 10 Km)</p> <p>The RFP need is 2 x 1G fiber uplink, our switch support 2 x 10G Fiber which can meet the requirment. Request to kindly ammend the same.</p>	Refer to Addendum-1, S.No: 45 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
764	Part-2	Employer's Requirement	ER-186	Table 5-2: Hardware requirement of Controller cabinet	5.3 Controller Cabinet Table 5-2: Hardware requirement of Controller cabinet An intercom jack	Intercom Jack is not required as there is no communication link inside controller. Instead please ask for Network Connection jack	Refer to Addendum-1, S.No: 37 dated 08-03-2022
765	Part-2	Employer's Requirement	ER-186	Table 5-1: Hardware requirement of Controller	■ An intercom jack	Please elaborate the purpose and signifiance of intercom jack inside traffic controller cabinet.	Refer to Addendum-1, S.No: 37 dated 08-03-2022
766	Part-2	Employer's Requirement	ER-186,214,240,256,271	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	IEEE 802.1, 802.3 standards, NTP, UDLD, LLDP, Unicast MAC filter, LACP, Private VLAN, Voice VLAN, VLAN double tagging (QinQ), STP, RSTP, MSTP, GARP, GMRP, GVRP, SNMPv1/v2c/v3, SNMP Inform, DHCP Server/Relay/Client, DHCP Option 66/67/82, BootP, RARP, TFTP, RMON, HTTP, HTTPS, Syslog, MRP (Client), LLDP, 802.1x, NetFlow/sFlow, port mirroring, Digital Diagnostic Monitoring (DDM)	Request to amend as "IEEE 802.1, 802.3 standards, NTP/SNTP, UDLD, LLDP, Unicast MAC filter, LACP, Voice VLAN, , STP, RSTP, MSTP, GARP/GMRP/ GVRP or equivalent ,SNMPv1/v2c/v3, SNMP Inform, DHCP Server/Relay/Client, RARP/ARP, TFTP, RMON, HTTP, HTTPS, Syslog, MRP or VRRP, LLDP, 802.1x, NetFlow/sFlow, port mirroring, Digital Diagnostic Monitoring (DDM) or Uplink interface monitoring" Justification: The protocols vary from OEM to OEM & Some of the feature can be met by equivalent . Few are specific to one OEM & restrictive for wider participation which can be removed. Private VLAN is specific to datacentre deployment only, we can restrict traffic using VLAN ACLs. QinQ GARP/GMRP/ GVRP , MRP are all service provider protocol which will not be a use case in LAN. DHCP Option Processing is not an use case in Rugged switch. We support VRRP instead of MRP & Uplink interface monitoring instead of DDM.	Refer to Addendum-1, S.No: 45 dated 08-03-2022
767	Part-2	Employer's Requirement	ER-186,214,240,256,271	Industrial Grade Layer -2 Switch - Clause No.10	12 to 56 VDC with Redundant dual power inputs with 5-PIN Lockable Terminal Block	Request to amend as "12 to 55 VDC with Redundant dual power inputs with 5-PIN/ 2x2 Pin Lockable Terminal Block" Justification: The clause is restrictive in nature & hence request to relax the same	Refer to Addendum-1, S.No: 45 dated 08-03-2022
768	Part-2	Employer's Requirement	ER-186,214,240,256,271	Industrial Grade Layer -2 Switch - Clause No.10	Reverse Polarity Protection	Request to amend as Reverse Polarity / Surge Protection Justification: Our Switches support only custom cables which cannot be cross terminated. Hence request to do the needful change	Refer to Addendum-1, S.No: 45 dated 08-03-2022
769	Part-2	Employer's Requirement	ER-186,ER-214,ER-240,ER-256,ER-271	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	IEEE 802.1, 802.3 standards, NTP, UDLD, LLDP, Unicast MAC filter, LACP, Private VLAN, Voice VLAN, VLAN double tagging (QinQ), STP, RSTP, MSTP, GARP, GMRP, GVRP, SNMPv1/v2c/v3, SNMP Inform, DHCP Server/Relay/Client, DHCP Option 66/67/82, BootP, RARP, TFTP, RMON, HTTP, HTTPS, Syslog, MRP (Client), LLDP, 802.1x, NetFlow/sFlow, port mirroring, Digital Diagnostic Monitoring (DDM)	Request to amend as "IEEE 802.1, 802.3 standards, NTP/SNTP, UDLD, LLDP, Unicast MAC filter, LACP, Voice VLAN, , STP, RSTP, MSTP, GARP/GMRP/ GVRP or equivalent ,SNMPv1/v2c/v3, SNMP Inform, DHCP Server/Relay/Client, RARP/ARP, TFTP, RMON, HTTP, HTTPS, Syslog, MRP or VRRP, LLDP, 802.1x, NetFlow/sFlow, port mirroring, Digital Diagnostic Monitoring (DDM) or Uplink interface monitoring"	Refer to Addendum-1, S.No: 45 dated 08-03-2022
770	Part-2	Employer's Requirement	ER-187 & 214,240,256,271	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	ICMP, Telnet, SSH, ARP, Syslog, SNMPv1/v2, RMON, SMTP, HTTP, HTTPS IPv4, IPv6	Request to amend "SMTP" as " SMTP/SNTP" SMTP is not an use case on these switches & we support Email allerts through NMS. Hence request to allow SNTP as an option.	Refer to Addendum-1, S.No: 45 dated 08-03-2022
771	Part-2	Employer's Requirement	ER-187 & 214,240,257,271	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	12 to 56 VDC with Redundant dual power inputs with 5-PIN Lockable Terminal Block	Request to amend as "12 to 55 VDC with Redundant dual power inputs with 5-PIN/ 2x2 Pin Lockable Terminal Block"	Refer to Addendum-1, S.No: 45 dated 08-03-2022
772	Part-2	Employer's Requirement	ER-187 & 214,240,257,271	Table 5-3: Hardware requirement of Industrial grade Layer-2 switch	Reverse Polarity Protection	Reverse Polarity / Surge Protection Our Switches support only custom cables which cannot be cross terminated. Hence request to do the needful change	Refer to Addendum-1, S.No: 45 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
773	Part-2	Employer's Requirement	ER-187, ER-215, ER-241, ER-257, ER-272,	Table 5-4: Harwadew requirement of SFP Transceiver Table 5-5: Hardware requirement of SFP Transceiver Table 5-6: Hardware requirement of SFP transceiver Table 6-5: Hardware requirement of SFP transceiver Table 5-4: Hardware requirement of SFP transceiver	Data rate 1250 Mbps	Data rate 1/10Gbps Fiber optic trancievers can support either 1 /10G . Pls amend the same.	Refer to Addendum-1, S.No: 55 dated 08-03-2022
774	Part-2	Employer's Requirement	ER-187, ER-215, ER-241, ER-257, ER-272,	Table 5-4: Harwadew requirement of SFP Transceiver Table 5-5: Hardware requirement of SFP Transceiver Table 5-6: Hardware requirement of SFP transceiver Table 6-5: Hardware requirement of SFP transceiver Table 5-4: Hardware requirement of SFP transceiver	Data rate 1250 Mbps	Request to amend as Data rate 1/10Gbps Justification: Fiber optic transceivers can support 1 /10G . Pls amend the same.	Refer to Addendum-1, S.No: 55 dated 08-03-2022
775	Part-2	Employer's Requirement	ER-187, ER-215, ER-241, ER-257, ER-272,	Table 5-4: Hardware requirement of SFP Transceiver Table 5-5: Hardware requirement of SFP Transceiver Table 5-6: Hardware requirement of SFP transceiver Table 6-5: Hardware requirement of SFP transceiver Table 5-4: Hardware requirement of SFP transceiver	Data rate 1250 Mbps	Data rate 1/10Gbps	Refer to Addendum-1, S.No: 55 dated 08-03-2022
776	Part-2	Employer's Requirement	ER-189	Table 5-7: Hardware requirement of Traffic signal pole	Cantilever Pole ■ Shall be made of Galvanized steel Class B material, complying with EN ISO 1461 standard or similar international standard. It should also comply with following minimum specifications. ✓ Dimension (H) - 6500mm above ground level including Foundation, Diameter 115mm, Thickness 4.4mm, ✓ Base Plate - Size 300 mm x 300 mm x 26 mm thick with foundation accessories ✓ Paint - Refer to General Requirement ✓ Length of Cantilever arm – 6000mm	Considering 6.5m x 6m (Horizontal Arm) on a M20/M25 Grade RCC Foundation, 26mm thick base plate requirement for cantilever pole is too high. 300 mm x 300 mm x 20 mm thick base plate on appropriate foundation is adequate to withstand extreme weather conditions with wind speed of 160-180Kmph. Hence request you to please change base plate thickness for Cantilever pole to 20mm. Also, though the length of Cantilever arm is specified as 6000mm, it's diameter & thickness is not mentioned. Please provide the same.	RFP condition prevails. A bidder shall do detailed design of all components to provide structural requirements of the Pole and other components considering the minimum specifications provided here.
777	Part-2	Employer's Requirement	ER-19	Part 2, 3 Standards, ER-19	All equipment for the project by the Contractor (included by the Contractor in the proposal) supplies shall be new and subject to the Factory Acceptance test to the satisfaction of the Engineer.	We request you to kindly confirm the list of items for which Factory Acceptance test to be carried out and also please confirm that travel charges & other expenses for Factory Acceptance test shall be borne by Employer.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
778	Part-2	Employer's Requirement	ER-19	Part 2, 3 Standards, ER-19	<p>In the absence of such standards in India, relevant clauses of international standards including but not limited to the International Electrotechnical Commission (IEC), Institute of Electrical and Electronics Engineers (IEEE), International Organization for Standardization (ISO), International Telecommunication Union Telecommunication Standardization Sector (ITU-T) shall be applied.</p> <p>In the absence of such standards in India and the international standards mentioned above, industry standards generally accepted and approved in one of the major industrialized countries such as Great Britain, Japan, U.S.A, and Germany shall be applied.</p> <p>Whenever in this Document reference is made to the Japanese Industrial Standards (JIS), British Standards (BS), American Association of State Highway Transportation Officials (AASHTO) standards, American Society for Testing and Materials (ASTM) standards, and American National Standards Institute (ANSI) standards, and the like, it shall be understood that equivalent internationally acknowledged standards will be accepted.</p>	We understand that only standards mentioned in Table3-1:List of Applicable standards in page ER-20 toER-29 shall be applicable for this tender. Please confirm.	RFP condition prevails.
779	Part-2	Employer's Requirement	ER-19	2. Scope of Work, Pg No. 23		How many Business Stake holders or Users will be required to gain access to the Analytics application	Details to be discussed during design stage.
780	Part-2	Employer's Requirement	ER-190	Table 5-7: Hardware requirement of Traffic signal pole	<p>■ Termination of signal cables may be brought to a terminal strip mounted within a pole- mounted box attached to the signal pole some 1.2 metres above ground level. Cables connected permanently in the signal heads shall also be brought through the inside of the pole into the termination box and terminated there. Earthing between the terminal and pole shall include terminal box door and internal connection arrangements. The termination box shall be rated to IP67 or better.</p>	As all other field equipments like controllers, traffic lights etc. asked for is IP65 compliant, termination box, which is going to get installed at the same location as that of Controller/Traffic Lights, also need to have Ingress protection of IP65, same as Controllers/Traffic Lights	Refer to Addendum-1, S.No: 39 dated 08-03-2022
781	Part-2	Employer's Requirement	ER-190	Table 5-7: Hardware requirement of Traffic signal pole	<p>Termination of signal cables may be brought to a terminal strip mounted within a pole- mounted box attached to the signal pole some 1.2 metres above ground level. Cables connected permanently in the signal heads shall also be brought through the inside of the pole into the termination box and terminated there. Earthing between the terminal and pole shall include terminal box door and internal connection arrangements. The termination box shall be rated to IP67 or better.</p>	It is observe red that junction boxes get stolen/ tampered/ damaged and hence a request you to amend with " Termination of signal cables may be brought to a terminal assembly on top of the pole with FRP cover on standard pole and embedded junction box on cantilever pole. Cables connected permanently in the signal heads shall also be brought through the inside of the pole into the termination box and terminated there. Earthing between the terminal and pole shall include terminal box door and internal connection arrangements. The termination box shall be rated to IP67 or better.	RFP condition prevails.
782	Part-2	Employer's Requirement	ER-191	Table 5-9: Harware requirement of Traffic signal aspect	300mm RED BALL LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm RED BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
783	Part-2	Employer's Requirement	ER-191	Table 5-9: Harware requirement of Traffic signal aspect	ü 300mm RED ARROW LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm RED ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
784	Part-2	Employer's Requirement	ER-191	Table 5-9: Harware requirement of Traffic signal aspect	ü 300mm AMBER BALL LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm AMBER BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
785	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm AMBER ARROW LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm AMBER ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
786	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN BALL LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm GREEN BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
787	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN ARROW LED aspect 24V DC with inbuilt voltage / current regulator 200 mA Max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm GREEN ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
788	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN U-TURN LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	Please amend as: 300mm GREEN U-TURN LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
789	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm RED BALL LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	300mm RED BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
790	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	ü 300mm RED ARROW LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	300mm RED ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
791	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN BALL LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	300mm GREEN BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
792	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN ARROW LED aspect 24V DC with inbuilt voltage / current regulator 200 mA Max. including dust and waterproof Polycarbonate housing and clamps	300mm GREEN ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
793	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm GREEN U-TURN LED aspect 24 V DC with inbuilt voltage / current regulator 400 mA max. including dust and waterproof Polycarbonate housing and clamps	300mm GREEN U-TURN LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
794	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	Additional clause	The cables from the signal heads to the termination box of pole should go through the bracket in to pole. No conduit or cable should be exposed outside the signal head.	Successful bidder shall follow best industry best practices for installation. This item forms one of them.
795	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	Additional clause	The OEM for traffic lights should have supplied minimum 25,000 lights globally.	RFP condition prevails.
796	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	ü 300mm AMBER BALL LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	300mm AMBER BALL LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
797	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	300mm AMBER ARROW LED aspect 24V DC with inbuilt voltage / current regulator 400mA max. including dust and waterproof Polycarbonate housing and clamps	300mm AMBER ARROW LED aspect 24 VDC / 230 VAC with inbuilt voltage / current regulator with max. power consumption of 8 W including dust and waterproof Polycarbonate housing and clamps	RFP condition prevails.
798	Part-2	Employer's Requirement	ER-191	Table 5-9: Hardware requirement of Traffic signal aspect	The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm).	The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm). The Test certificate of EN 12368 certificate from EN notified Lab should be submitted as proof of certification. Phantom 5 class test report should be provided as it covers the requirements of clause no. 8	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
799	Part-2	Employer's Requirement	ER-192	Bidding Document Part 2,, 5 Hardware Requirement, 5.11 Traffic Signal Aspect, Clause 7	■ LED Aspects shall be central/single source and have a lifespan of more than 10 years (greater than 80,000 hours)	Since central/single source (Hi Flux) type LED aspects are not manufacutre in India, they need to be imported from overseas OEMs and involves unpresidented delays in its delivery due to COVID Pandamic Impact. As against this, there are many OEMs for EN12368 certified Hi-Brite /5mm Discrete LED based aspects within India with quick deliveries. Hence request you to please change central/single source LED aspects to Hi-Brite LED Aspects	RFP condition prevails.
800	Part-2	Employer's Requirement	ER-192	Table 5-9: Harware requirement of Traffic signal aspect	■ The materials used and the form of construction used shall be such as to ensure that the signal head (including visors, which are required) has adequate mechanical strength and durability to withstand the conditions of installation, operation and maintenance. It shall be capable of withstanding winds of up to 180 km/h for 3 seconds. The color of the signal body and visors shall be black UV stabilized high impact or impact modified Polypropylene. The lenses shall be acrylic, and reflectors shall be polycarbonate with stainless steel or Polypropylene fixings.	Please change the acrylic lens requirement to acrylic or polycarbonate.	Refer to Addendum-1, S.No: 41 dated 08-03-2022
801	Part-2	Employer's Requirement	ER-192	Table 5-9: Harware requirement of Traffic signal aspect	The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm).	Please amend as: The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm). The Test certificate of EN 12368 certificate from EN notified Lab should be submitted as proof of certification. Phantom 5 class test report should be provided as it covers the requirements of clause no. 8	RFP condition prevails.
802	Part-2	Employer's Requirement	ER-192	Table 5-9: Harware requirement of Traffic signal aspect	The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm).	The provision of LED signal heads shall be to the specifications detailed in EN12368 (European standard) and the further detailed requirements of TR2206A or other equivalent International Standard appropriate for use in India. The LED signal heads are to be compliant with Class A (-15 to 60) for use in a class A environment, provide a luminosity of intensity of 400cd, have a medium intensity distribution, a luminous uniformity of 1:10, phantom class 5 and an impact resistance of 0.51kg dropped from IR3 (1300mm). The Test cerificate of EN 12368 certificate from EN notified Lab should be submitted as proof of certification. Phantom 5 class test report should be provided as it covers the requirements of clause no. 8	RFP condition prevails.
803	Part-2	Employer's Requirement	ER-192	Table 5-9: Harware requirement of Traffic signal aspect	■ Power factor of the LED aspects shall be greater than 0.9	Since power factor is applicable to AC inputs only and as the input asked for traffic signal aspects is 24V DC, this parameter needs to be removed for 24V DC input signal aspects Please clarify	Refer to Addendum-1, S.No: 40 dated 08-03-2022
804	Part-2	Employer's Requirement	ER-193	Table 6-1: Communication Requirements of ATCS	6 Communication Requirement The Communication requirements for ATCS are shown in the table below Table 6-1: Communication Requirements of ATCS Communication between the roadside equipment of ATCS and the ATCS server at Chennai Traffic Information and Management Centre shall be wired connectivity provided by a single communication company. If required MPLS VPN to be provided.	As per DOT norms buyer needs to sign a tri party agreement with contracor & service provider . Please confirm same shall be executed.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
805	Part-2	Employer's Requirement	ER-193	7 Installation Requirement	7 Installation Requirement Table 7-1: Installation requirement of ATCS Restoration Work of Road and Sidewalk ■ The Contractor shall ensure the permanent restoration of the road to its original conditions. To do so, the Contractor shall contact the relevant authorities and follow their requirement.	Please helps all bidders by providing applicable norms of restoration	Bidder shall ensure that the restoration shall be at the satisfactory level of respective stakeholder such as GCC, Highways Department, TNRDC, and NHAI. PI refers clause 4.f). Section-VI General Requirements of RFP Part-2.
806	Part-2	Employer's Requirement	ER-193	Table 5-9: Hardware requirement of Traffic signal aspect	✓ Audio: Beep buzzer ✓ Working voltage: 12 Volts DC ✓ Body Material: Metal GI Powder coated. ✓ Push button shall be pole mounted as per IRC	As the pelican pushbutton is to be interfaced with Ped Red & Ped Green outputs of traffic controller and which are 24V DC hence please change the Pelican push button working voltage from 12V DC to 24V DC.	Refer to Addendum-1, S.No: 42 dated 08-03-2022
807	Part-2	Employer's Requirement	ER-193	Table 5-10: Hardware requirement of Pedestrian pelican push button and buzzer	Audio: Beep buzzer ✓ Working voltage: 12 Volts DC ✓ Body Material: Metal GI Powder coated. ✓ Push button shall be pole mounted as per IRC	Request you to amend with Audio: Tactile Sound ✓ Working voltage: 12 Volts DC / 24VDC/230VAC ✓ Body Material: Die cast aluminium/PC-ABS. ✓ Push button shall be pole mounted as per IRC: Contact Less push button Shall also have LED indication like WAIT sign similar	Refer to Addendum-1, S.No: 42 dated 08-03-2022
808	Part-2	Employer's Requirement	ER-194	Part 2, Employee Requirement, 8 Intersection Improvement Requirement, ER-194	Table 8-1: Intersection improvement requirement of ATCS 1 Removal of Sidewalk and/or median 2 Restoration Work of Sidewalk and/or median 3 Road Marking, Signages, Footpath & Median extension	We request you to kindly descope the following from contractor scope: 1 Removal of Sidewalk and/or median 2 Restoration Work of Sidewalk and/or median 3 Road Marking, Signages, Footpath & Median extension	RFP condition prevails.
809	Part-2	Employer's Requirement	ER-194	7 Installation Requirement	7 Installation Requirement Table 7-1: Installation requirement of ATCS Restoration Work of Road and Sidewalk ■ The Contractor shall ensure the permanent restoration of the road to its original conditions. To do so, the Contractor shall contact the relevant authorities and follow their requirement.	As per standard practice in Large Scale project like this, RoW charges are borne by the Employer as it falls under the authority of the Employer itself. However, the Contractor is responsible making such application for necessary approvals. It will be helpful for the project timelines if RoW/Restoration charges are waived off from the contractor's scope and also bring down the Project Cost.	RFP condition prevails.
810	Part-2	Employer's Requirement	ER-195	8 Intersection Improvement Requirement	8 Intersection Improvement Requirement Table 8-1: Intersection improvement requirement of ATCS 7 Footpath and Median extension	Though document refers to layout drawings of footpath /median extension, it is industry standard that civil work is quantified in square meter area measurement. Additionally given drawings are not able to provide required work area. Hence it would be difficult to estimate efforts and costs associated with this work. We request to provide lumpsum square meter area of work for footpath and median extension. Further schedule format for bid (financial BOQ) may be updated with this item so as all bidders may factor same quantity. Payment may be done on actual work done basis.	RFP condition prevails. Bidder to conduct their own site survey of the locations to estimate the quantities.
811	Part-2	Employer's Requirement	ER-195	8 Intersection Improvement Requirement	8 Intersection Improvement Requirement Table 8-1: Intersection improvement requirement of ATCS 7 Footpath and Median extension	Please provide the reference drawings of footpath and median detailing dimensions, material specifications required for estimating efforts and costs.	RFP condition prevails. Bidder to conduct their own site survey of the locations to estimate the quantities.
812	Part-2	Employer's Requirement	ER-20	Table 3-1: List of Applicable Standards	Request for clarification	Kindly provide information about applicable standards against the BOQ line item wise as what ISO standard is needed against what product/component. Mentioning such a large list of applicable standards in the RFP might create confusion in between multiple participating stakeholders which eventually lead to bid mismanagement at the later stage. Please provide actual standard applicable against BOQ line item wise.	For each BOQ line items shall comply with respective specifications mentioned in Part-2 of RFP.
813	Part-2	Employer's Requirement	ER-20	Table 3-1: List of Applicable Standards	Request for clarification	The required ISO standards of the products are given in collective manner which is confusing and misleading. We request to mention standards required for each BOQ items in item wise list.	For each BOQ line items shall comply with respective specifications mentioned in Part-2 of RFP.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
814	Part-2	Employer's Requirement	ER-205	Table 4-1: Functional Requirement of TIDS	<p>The following items shall be detected by the system.</p> <ul style="list-style-type: none"> ■ Wrong-way Driving ■ Stopped Vehicle ■ Traffic Slowdown/Congestion ■ Slow vehicle / Speed Drop ■ Crowding Detection ■ Pedestrian ■ Collision /Accident ■ Cattles /Animal ■ Object Detection on the Road (Debris, Obstacles, etc.) ■ Camera Tampering ■ The number of detection zone in the image shall be greater than 90 Multi incident detection at a time at the LPU level. 	<p>VA use cases which are mentioned, we request you to please provide the itemise break up of all use cases which we can consider for solution i.e., junction wise camera wise VA license quantities.</p>	<p>RFP condition prevails.</p> <p>All camera shall support all analytics mentioend in RFP. Employer has right to decide the analytics based on the requirements, time to time.</p>
815	Part-2	Employer's Requirement	ER-205	Chapter 2-4 Requirements of Traffic Incident Detection System	Slow vehicle/speed drop	<p>It is very common in traffic junction, and it will lead to many false alerts which will increase the nuisance value of the system. We request authorities to kindly reconsider purpose/objective of the analytics.</p>	<p>Please refer to RFP, TIDS systems are proposed at merging location as defined in section-VII of Part-2.</p>
816	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS	<p>TIDS central application shall have data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio.</p>	<p>Request department to consider a Hardware Security Module which acts as Root Of Trust along with backup solution to protect your data from unauthorised persons.</p>	<p>RFP Condition prevails.</p> <p>However the bidder shall take into consideration for necessary security measures in order to prevent any security threat</p>
817	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS Metadata support & Storage	<p>TIDS central application shall have data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio.</p>	<p>Would a Hardware Security Module which acts as Root Of Trust to protect the data from unauthorised persons needs to be factored?</p>	<p>RFP Condition prevails.</p> <p>However the bidder shall take into consideration for necessary security measures in order to prevent any security threat</p>
818	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS	<p>TIDS central application shall have data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio.</p> <p>Would a Hardware Security Module which acts as Root Of Trust to protect the data from unauthorised persons needs to be factored?</p>	<p>We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate)</p> <p>The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust.</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	<p>RFP condition prevails.</p> <p>However bidder can considered adequate security measures.</p>
819	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS	<p>Metadata support & Storage</p>	<p>TIDS central application shall have data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio. We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate)</p> <p>The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust. Justification: Request department to consider a Hardware Security Module which acts as Root Of Trust along with backup solution to protect your data from unauthorised persons.</p>	<p>RFP condition prevails.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
820	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS Metadata support & Storage	light and strong video database encryption option, using AES256 encryption algorithm.	<p>Request Department to consider strong and robust solution for video database encryption with detailed specifications</p> <p>We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications.</p> <p>It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration.</p> <p>Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	RFP condition prevails.
821	Part-2	Employer's Requirement	ER-206	Table 4-1: Functional Requirement of TIDS Metadata support & Storage	TIDS central application shall have data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio.	<p>Would a Hardware Security Module which acts as Root Of Trust to protect the data from unauthorised persons needs to be factored?</p> <p>We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate)</p> <p>The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust.</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	RFP condition prevails.
822	Part-2	Employer's Requirement	ER-207	Table 4-1: Functional Requirement of TIDS	light and strong video database encryption option, using AES256 encryption algorithm.	Request Department to consider strong and robust solution for video database encryption with detailed specifications	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
823	Part-2	Employer's Requirement	ER-207	Table 4-1: Functional Requirement of TIDS	Table 4-1: Functional Requirement of TIDS 7)Image Recording and Retrieval and Recording servers ■ TIDS shall be able to allow more cameras to be run on a single recording server using 64-bit recording server.	Server hardware needs to be quantified before design and procurement , bidders need number of additional cameras that would be connected on single recording server . So as server hardware can be accordingly designed .Please provide how many more cameras would be coonected on recording server?	Please refer to Section-VII of Part-2

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
824	Part-2	Employer's Requirement	ER-207	Table 4-1: Functional Requirement of TIDS	light and strong video database encryption option, using AES256 encryption algorithm. Request Department to consider strong and robust solution for video database encryption with detailed specifications	We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications. It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration. Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection. Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy	RFP condition prevails. However bidder can considered adequate security measures.
825	Part-2	Employer's Requirement	ER-207	Table 4-1: Functional Requirement of TIDS	Metadata support & Storage-light and strong video database encryption option, using AES256 encryption algorithm.	Request Department to consider strong and robust solution for video database encryption with detailed specifications Justification: We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications. It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration. Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments	RFP condition prevails.
826	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of SLVD Application	Alerting and notification System shall be able to show live health status of each field component, sup components in control center and system shall be able to generate alert and display in the control room for following status but not limited: a. Power status (Law power, UPS), b. Low battery alert, c. Cabinet door Open, Close d. Connectivity status e. Temperature status f. Camera status g. LPU alert etc.	As per RFP Same Alerting and notification functionality is mentioned in other components functional requirements also such as RLVD, TIDS, ATCC etc. For rest components also our understanding is same. Please confirm.	Refer to Addendum-1, S.No: 110 dated 08-03-2022
827	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	9. Evidence export TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format with dedicated player application included.	We request you to kindly amend the clause as- "TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format."	RFP condition prevails.
828	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of SLVD Application	Integration options ■ Supports display of MIP SDK plug-in items on the Smart Map ■ The SLVD application shall be able to enable integrations to third-party Mobile or Web applications at the data level. ■ Application's Driver Framework enables device manufacturers to develop their drivers for SLVD applications using their SDK.	We request you please clarify on below points for better understanding 1. Please explain the use case for integrating MIP SDK plugin on the smart map. 2. Please explain the use case for driver framework integration As per the RFP Such integration requirements are mentioned in TIDS, RLVD, SLVD etc. components also. Please clarify the above points & also mentioned that this clarification shall be applied where applicable in the tender. Please confirm.	Bidder need to ensure solution provided related to SLVD application and services shall be deployed within LPU and central server at DC and DR and solution proposed shall meet functional requirement. Refer to Addendum-1, S.No: 47 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
829	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	9. Evidence export TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format with dedicated player application included.	Exporting videos/images in encrypted format is ok to ask as this includes evidential data related to infractions/incidents. But to incorporate dedicated player application while exporting is not safe practice as generally exported players are .exe (executable) files which can corrupt the evidence data as well as potable media due to virus attack while plugged in external PC/System. It is always advisable that exported evidential data shall be encrypted & can be played separately on general available or already installed players in the system. Hence, we request you to kindly amend the clause as mentioned below "TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format."	RFP condition prevails.
830	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	16. Alerting and notification System shall be able to show live health status of each field component, sup components in control center and system shall be able to generate alert and display in the control room for following status but not limited: a. Power status (Law power, UPS), b. Low battery alert, c. Cabinet door Open, Close d. Connectivity status e. Temperature status f. Camera status g. LPU alert etc.	We understand that mentioned "Alerting & notification" functionality not related to TIDS components such as Low battery, cabinet door open/close etc. shall be in the scope of EMS application provider as EMS manages the health monitoring of the 3rd party devices. Being a TIDS OEM, it should provide the alerts & notifications related to TIDS components only. Same Alerting and notification functionality is mentioned in other components functional requirements also such as RLVD, SLVD, ATCC etc. in the RFP. For rest components also our understanding is same. If yes, it should be amended wherever applicable in the RFP. Please confirm.	Refer to Addendum-1, S.No: 110 dated 08-03-2022
831	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	Integration options ■ Supports display of MIP SDK plug-in items on the Smart Map ■ The SLVD application shall be able to enable integrations to third-party Mobile or Web applications at the data level. ■ Application's Driver Framework enables device manufacturers to develop their drivers for SLVD applications using their SDK.	We request you please clarify on below points for better understanding 1. What needs to be achieved by integrating MIP SDK plugin on the smart map ? 2. What are the devices here which requires driver framework integration and what is the use case for the same ? Such integration requirements are mentioned in TIDS, RLVD, SLVD etc. components also. Please clarify the above points & also mentioned that this clarification shall be applied where applicable in the tender. We understand that TIDS/SLVD/RLVD/ATCC central applications can be easily integrated with any 3rd party application via API to meet the functional requirement of the RFP. Hence, there is no need of such integration options. Please confirm.	Bidder need to ensure solution provided related to TIDS, RLVD & SLVD application and services shall be deployed within LPU and central server at DC and DR and solution proposed shall meet functional requirement. Refer to Addendum-1, S.No: 46 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
832	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	Alerting and notification System shall be able to show live health status of each field component, sup components in control center and system shall be able to generate alert and display in the control room for following status but not limited: a. Power status (Law power, UPS), b. Low battery alert, c. Cabinet door Open, Close d. Connectivity status e. Temperature status f. Camera status g. LPU alert etc.	We understands that mentioned "Alerting & notification" functionality not related to SLVD components such as Low battery, cabinet door open/close etc. shall be in the scope of EMS application provider as EMS manages the health monitoring of the 3rd party devices. Being a TIDS OEM, it should provide the alerts & notifications related to TIDS components only. Same Alerting and notification funcitonality is mentioned in other components functional requirements also such as RLVD, TIDS, ATCC etc. in the RFP. For rest components also our understanding is same. If yes, it should be amended wherever applicable in the RFP. Please confirm.	Refer to Addendum-1, S.No: 110 dated 08-03-2022
833	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	9. Evidence export TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format with dedicated player application included.	Since the dedicate player option is not safe and there is more chance of file getting errors/corrupted, we request you to kindly amend the clause as mentioned below "TIDS central application shall be able to deliver authentic evidence to public authorities by exporting video and images to various formats, including video from multiple cameras in encrypted format."	RFP condition prevails.
834	Part-2	Employer's Requirement	ER-208	Table 4-1: Functional Requirement of TIDS	Alerting and notification System shall be able to show live health status of each field component, sup components in control center and system shall be able to generate alert and display in the control room for following status but not limited: a. Power status (Law power, UPS), b. Low battery alert, c. Cabinet door Open, Close d. Connectivity status e. Temperature status f. Camera status g. LPU alert etc.	We understands that mentioned "Alerting & notification" functionality not related to SLVD components such as Low battery, cabinet door open/close etc. shall be in the scope of EMS application provider as EMS manages the health monitoring of the 3rd party devices. Being a TIDS OEM, it should provide the alerts & notifications related to TIDS components only. Same Alerting and notification funcitonality is mentioned in other components functional requirements also such as RLVD, TIDS, ATCC etc. in the RFP. For rest components also our understanding is same. If yes, it should be amended wherever applicable in the RFP. Please confirm.	Refer to Addendum-1, S.No: 110 dated 08-03-2022
835	Part-2	Employer's Requirement	ER-211	ER-211 / Live View	Live view digital zoom allows a full view of recordings while the operator can digitally zoom in to see details	We understand that while operator is doing the digital zoom in LIVE View, for the same interval recording could happen in full View. Please Clarify	Yes. Your understanding is correct.
836	Part-2	Employer's Requirement	ER-211	ER-211 / Live View	Application shall be able to show live video from 1-100 cameras per computer monitor/view at a time.	This functionality is available but For this 10x10 matrix has to set but operator will not be able to see and justify the live view as the tile size is very small.	RFP condition prevails.
837	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	JPEG, MPEG-4, H.264	H.264 is an advanced compression method than MPEG-4 and which is more efficient and it's high compression rate supports to record more information on the same hard disk. Thus, Kindly remove MPEG-4 and consider H.265 / H.264 or better	Refer to Addendum-1, S.No: 85 dated 08-03-2022
838	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Video Resolution VGA or better	Please give clarification of recording parameters for surveillance i.e. resolution, FPS, no of days recording for a camera. As TIDS Incident video will be store for 1 year, as required Please clarify	Refer to Addendum-1, S.No: 85 dated 08-03-2022
839	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	3. Scanning area 4.8 mm (H) x 3.6 mm (V)	Please clarify this scanning area dimensions are mean by CMOS dimensions or different.	Refer to Addendum-1, S.No: 85 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
840	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Video Resolution :VGA or better	Request for change : Video Resolution :2MP or better,3-9 mm lens Clarification : Given resolution is very low ,Request to change to 2MP and also mention the focal length fo the camera .	Refer to Addendum-1, S.No: 85 dated 08-03-2022
841	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Frame Rate :25 FPS	Frame Rate :25 FPS or better	Refer to Addendum-1, S.No: 85 dated 08-03-2022
842	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Compression system :JPEG, MPEG-4, H.264	Request for change ::Compression system :MPEG-4, H.264 & H.265	Refer to Addendum-1, S.No: 85 dated 08-03-2022
843	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Power Requirements :12 V ±10% DC	Request for change :Power Requirements :12 V ±10% DC / POE	Refer to Addendum-1, S.No: 85 dated 08-03-2022
844	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Power Consumption :100 VA	Power Consumption: 12.95 W or better	Refer to Addendum-1, S.No: 85 dated 08-03-2022
845	Part-2	Employer's Requirement	ER-212	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Reliability and maintainability:MTBF: 30,000 hours MTTF: 1.0 hour	Please Confirm on MTFF what is mean here .	Refer to Addendum-1, S.No: 85 dated 08-03-2022
846	Part-2	Employer's Requirement	ER-213	Table 5-3: Hardware Requirement of Controller-LPU	Request for addition	ITMS LPU's are specific industrial grade devices validated for optimized performance of ANPR, RLVD and other Traffic Analytics unlike other general purpose compute devices available in open market. Also, MIL-STD-810G standard for LPUs are preferred to protect electronics failure at outdoor locations due to vibrations & shocks produced due to movement of heavy vehicles & earth movers on the roads. Hence, we request you to kindly add the clauses as mentioned below in addition to the technical specifications of Local Processing Unit wherever applicable in the RFP. <ul style="list-style-type: none"> ■ The LPU should be capable of withstanding shock & vibrations as per MIL-STD-810G. ■ Proposed LPU should have CE certificate ■ Proposed LPU should be from same RLVD, ANPR, SLVD, ATCC/VDC OEM for seamless integration & better compatibility. 	RFP condition prevails.
847	Part-2	Employer's Requirement	ER-213	Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	14.Power Requirements-12 V ±10% DC	Normally PTZ camera requires 24V AC power for operations. Please change the power requirements accordingly.	Refer to Addendum-1, S.No: 86 dated 08-03-2022
848	Part-2	Employer's Requirement	ER-213	Table 4-2: Functional Requirement of LPU	Lane Coverage 10. ■ Rader and ANPR camera system shall cover at least multiple three (3) lane.	Please clarify that the 3 lanes coverage mentioned for single camera or LPU should have the compatiplity to cover the multiple 3 lanes.	At a location, single LPU shall support Radar and ANPR camera for multiple lanes.
849	Part-2	Employer's Requirement	ER-213	Table 4-2: Functional Requirement of LPU	<ul style="list-style-type: none"> ■ Radar shall be capable to detect speed of vehicle form more than 120 meters. 	Very few RADAR system only having this detection range of 120 meters However considering the chennai environment, looking at the traffic and road situation, detection range of vehicle from 120 mtrs may not be accurates. Hence request you to kindly modify the clause as "Radar shall be capable to detect speed of vehicle form more than 90 meters"	Refer to Addendum-1, S.No: 113 dated 08-03-2022
850	Part-2	Employer's Requirement	ER-213	Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	JPEG, MPEG-4, H.264	H.264 is an advanced compression method than MPEG-4 and which is more efficient and it's high compression rate supports to record more information on the same hard disk. Thus, Kindly remove MPEG-4 and consider H.265 / H.264 or better	Refer to Addendum-1, S.No: 86 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
851	Part-2	Employer's Requirement	ER-213	Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	12 V \pm 10% DC	PTZ cameras has multiple motors built in within the housing and it need more power to do it's operations like pan, tilt, and zoom. Thus, kindly request to consider 24 VAC / Hi-PoE or better.	Refer to Addendum-1, S.No: 86 dated 08-03-2022
852	Part-2	Employer's Requirement	ER-213	Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	3.8 to 114 mm or longer	The purpose of ptz camera's is to see far objects cleary which required bigger lens size. Also, The requested lens size is specific to few OEMs whereas every OEMs has different standard of Lens size. Thus, request to consider lens size as +/- 2mm with existing lens size or better.	Refer to Addendum-1, S.No: 86 dated 08-03-2022
853	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	9. Tilt driving range +5 (upward) to -90 (downward) degree, maximum speed 120 deg./sec	The tilt driving range should be -5(upward) to +90(downward) degree, at maximum speed of 120 degree/sec. Please chage it accordingly.	Refer to Addendum-1, S.No: 85 dated 08-03-2022
854	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	21 Zoom Factor 3.8 to 114 mm or longer	Please include 3.8mm to 114mm / 4.7mm to 147mm / relevant to 30X Optical zoom lense.	Refer to Addendum-1, S.No: 85 dated 08-03-2022
855	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Tilt driving range : +5 (upward) to -90 (downward) degree, maximum speed 120 deg./sec	Tilt driving range :Tilt: 180°, 0.1° - 350°/s	Refer to Addendum-1, S.No: 85 dated 08-03-2022
856	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Compression system :JPEG, MPEG-4, H.264	Request for change ::Compression system :JMPEG-4, H.264 & H.265	Refer to Addendum-1, S.No: 85 dated 08-03-2022
857	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Power Requirements :12 V \pm 10% DC	Request for change :Power Requirements :12 V \pm 10% DC / POE-IEEE 802.3at, Type 2 Class 4	Refer to Addendum-1, S.No: 85 dated 08-03-2022
858	Part-2	Employer's Requirement	ER-213	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	Power Consumption :100 VA or less	Camera consumption: typical 10.5 W/ max 19 W or better	Refer to Addendum-1, S.No: 85 dated 08-03-2022
859	Part-2	Employer's Requirement	ER-216	ER-216 / Table 4-2: Functional Requirement of LPU (Local Processing Unit)	If the connectivity to Control Center is not established, then all data pertain to the incidents shall be stored at least 7 days on site and will be transferred once the connectivity is re-established automatically. If when the data storage reaches capacity, the image processor shall automatically over-write the oldest data. The Contractor shall make the provision for no data loss.	Please Clarify more on this	When connectivity is lost between field to data center then LPU at field shall have stoage capacity for 7 days. When LPU storage is full, it shall overwrite the oldest data (FIFO).
860	Part-2	Employer's Requirement	ER-217	Table 5-2: Hardware Requirement of Camera Type 2 -PTZ Camera	Zoom Factor: 3.8 to 114 mm or longer	Request approval for 4.25mm ~ 170mm	Refer to Addendum-1, S.No: 86 dated 08-03-2022
861	Part-2	Employer's Requirement	ER-220	4 System Functional Requirement	Some messages should be automatically displayed, without the intervention of an operator; for instance, congested level and travel time indications based on automatically obtained traffic data.	Please remove this Automatic message requirement. Convert it to Manually uploading Event based autoamation in message displaying is not possible.	RFP condition prevails.
862	Part-2	Employer's Requirement	ER-222	Table 4-1: Functional Requirement of VMS	Message Creation and Editing Functions	Please modify this complete requirement (sub topics 1 to 7) to Manual uploadig of messages. Automatic configuring of messages or automatic uploading of messages is not possiblein VMS software.	RFP condition prevails.
863	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Character height	What's the character resolution of Hindi and local language ? The resolution of English character is 7H x 5 W pixels. This question will help us decide the suitable pitch size. Let's say the resolution of Hindi character is 24x24 pixels, then pitch size would be 300/24=12 mm	Refer to Addendum-1, S.No: 87 dated 08-03-2022
864	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Pixel Pitch 10mm or less	12mm or less, we think 12mm are enough for VMS application. 10 mm and less are used in commercial displays.	Refer to Addendum-1, S.No: 87 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
865	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	VMD Size & Active Area Customized	What's the character resolution of Hindi and local language? How many characters in one line? This information will help us decide the suitable resolution. If there is no min & max active size, anyone is allowed to propose any size, then there will be gaps between prices.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
866	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Colour Temperature 6000K-95000 K	This is the requirement for LED light (cold white) not for traffic application, please delete this one. From D12 above, it already requires C2 (EN12966 standard for VMS). This requirement has conflict with C2.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
867	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Refresh rate <=1920 hertz	This requirement is for LED commercial display, not for traffic application, not within EN12966 standard either (page 225) – please delete. Refresh rate is not suitable for traffic application to create distraction to the road users to decrease road safety	Refer to Addendum-1, S.No: 87 dated 08-03-2022
868	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Defect Ratio ≤0.1%	Does it mean LED failure rate? Please clarify	Refer to Addendum-1, S.No: 87 dated 08-03-2022
869	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Video Interface Supports RJ45 and DVI	Videos are not allowed as per global road safety guidelines as they distract motorist causing serious accidents. VMS is for traffic application and not for commercial application.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
870	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Viewing Angle Horizontal ≥120° / Vertical ≥60°	≥120° / Vertical ≥60° (not within EN12966 standard) According to EN12966. B3 is horizontal -10 - +10 and 0- -5 (page 226). The tender requires EN12966, so please delete Viewing Angle: Horizontal ≥120° / Vertical ≥60°. I would advise B4 or B6 since India has wider road.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
871	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	Door Alarm The System should be capable of detecting the unauthorized access of the display door and must send the alert to the central control centre on the exact location of the failed LEDs.	With door sensors, okay	Refer to Addendum-1, S.No: 87 dated 08-03-2022
872	Part-2	Employer's Requirement	ER-224	Table 5-1: Hardware Requirement of VMS Board and Controller	The LED Cluster consist of individual LED's encapsulated in a resonated plastic housing proving protection to the elements. Housing - Powder coated housing with ingress protection class P2 as per EN12966;	LED cluster with plastic housing is very very very old technology, like 20+ years old not suitable for traffic application anymore and it has much higher possibility to have water issue. We propose new SMD LEDs technology where the LED's are encapsulated in UV resistant polycarbonate oval lens.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
873	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	The System should be capable of detecting the failure of Single or multiple LEDs (Red, Blue, Green separately) and has to send the alert to the CCC on the exact location of the failed LEDs	LED Failure is normally claimed for pixel and not individual LEDs within pixel hence request you to change this criteria from individual (Red, Green, Blue) LED to Pixel failure.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
874	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 14.Best Viewing Distance 300m or more, Character size of 300m	We believe there is typo error. Character size should be 300mm . Please review & update specifications 5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 14.Best Viewing Distance 300 m or more, Character size of 300 mm	Refer to Addendum-1, S.No: 87 dated 08-03-2022
875	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 28.Operating Windows for site processor Windows 10 OS	Asking a particular make /model is favouring a particular OEM . We request to change criteria as below 28.Operating System as per proposed solution to meet tender requirements	Refer to Addendum-1, S.No: 87 dated 08-03-2022
876	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 33. Flat Cable, SMPS Voltage: The System should be capable of showing the health status of FRC cable & SMPS Voltage etc.	Technically it is more possible to monitor flat cable health .Further VMS live status is already being monitored . This requirement is overlapping monitoring requirements & is not adding any value. Instead looks like it is favoring particular OEM . We request to remove this.	Refer to Addendum-1, S.No: 87 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
877	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 36. VMS Controller 19) Temperature and humidity sensor shall be inbuilt in controller.	Asked requirement is specific to OEM. We request to remove this and consider below criteria 36. VMS Controller 19) Temperature and humidity sensor shall be inbuilt/intefaced with controller.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
878	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 20) The LED Cluster consist of individual LED's encapsulated in a resonated plastic housing proving protection to the elements. Housing - Powder coated housing with ingress protection class P2 as per EN12966;	Asked requirement is specific to OEM. We request to remove this	Refer to Addendum-1, S.No: 87 dated 08-03-2022
879	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	Video Interface - Supports RJ45 and DVI	Please remove DVI requirement DVI port is an old technology & now a days the controllers do have DVI ports.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
880	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	Operating Windows for site processor - Windows 10 OS	Please remove this Windows 10 OS requirement. The controller of our VMS product does not work on Windows OS.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
881	Part-2	Employer's Requirement	ER-225	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 36. VMS Controller 16) Minimum 4 GB RAM and 64 GB Flash, 1.66 GHZ	Asked requirement is specific to OEM. We request to remove this and consider below criteria 36. VMS Controller 16) RAM and FLASH ,Frequency as per solution requirement to meet SLA	Refer to Addendum-1, S.No: 87 dated 08-03-2022
882	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	36. VMS Controller 1)The Software should run on Microsoft Windows Platform: Windows 7 Embedded or Required OS to meet SLA & Functionality	Request to change the software to any platform as some controller works on Linux software	Refer to Addendum-1, S.No: 87 dated 08-03-2022
883	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	36. VMS Controller 3) The Software powers off the unit during the closing hours of the Station.	These points are customisable requirements. So request you to accept the same.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
884	Part-2	Employer's Requirement	ER-226	ER-226	36. VMS Controller 4) No Personnel should be required to either switch on, switch off, power off, log in or log out procedures. All the above functions should function automatically as scheduled.		No query provided.
885	Part-2	Employer's Requirement	ER-226	ER-226	36. VMS Controller 5) Multiple Screen Layouts & independently schedulable Zones.		No query provided.
886	Part-2	Employer's Requirement	ER-226	ER-226	36. VMS Controller 9) Remote Shutdown, Reboot Mode.		No query provided.
887	Part-2	Employer's Requirement	ER-226	ER-226	36. VMS Controller 19) Temperature and humidity sensor shall be inbuilt in controller.		No query provided.
888	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	21)Vertical Clearance for fixed VMS is at least 5.5 meter which can bear wind load up to 200kmph and the concrete pedestal for gantry support column should not exceed more than 1.5m	As per EN 12966 Standards, applicable windload is W9 which is 180Kmph hence request you to change windload bearing capacity from 200kmph to 180kmph as specified in EN12966 Standards.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
889	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	30) Life of Components of VMS should be more than 10 years	Considering technological advancement and typical obsolance cycle, it is recommended to change minimum life duration requirement for components to 7 years.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
890	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	5.1 VMS Board and Controller Table 5-1: Hardware Requirement of VMS Board and Controller 36. VMS Controller 16) Minimum 4 GB RAM and 64 GB Flash, 1.66 GHZ	Asked requirement is specific to OEM. We request to remove this and consider below criteria 36. VMS Controller 16) RAM and FLASH ,Frequency as per solution requirement to meet SLA 16) Minimum 4 GB RAM and 64 GB Flash, 1.66 GHZ or More	Refer to Addendum-1, S.No: 87 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
891	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	42.Others 28) VMS processor should be able to showcase dynamic animations based on the weather conditions in real time for weather content slides.	These VMS units are proposed to be deployed on road for guiding vehicles & drivers.Having dynamic animations or video content is likely to distract drivers & may result in fatality . Considering safety it is advised for steady images & messages. Hence we request to remove this requirement.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
892	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	VMS Controller - The Software should run on Microsoft Windows Platform: Windows 7 Embedded or Required OS to meet SLA & Functionality	Please remove this Windows OS requirement. The controller of our VMS product does not work on Windows OS.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
893	Part-2	Employer's Requirement	ER-226	Table 5-1: Hardware Requirement of VMS Board and Controller	VMS Controller - No Personnel should be required to either switch on, switch off, power off, log in or log out procedures. All the above functions should function automatically as scheduled.	Please remove this requirement of automation in switching ON/OFF or Log in/out procedures. Swtiing on/off cannot be automated. Also, Log in/out funtcion cannot become automatic. This automation is very risky.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
894	Part-2	Employer's Requirement	ER-227	Table 5-1: Hardware Requirement of VMS Board and Controller	42.Others 29) LED OEM Bin certification for each used LED in VMS board shall submit by Contractor.	VMS displays are manufactured in large units to get competitive pricing thru economy of scale.LED/LED modules are generic by design to fit any display & not unique , it is not possible to record and track individual LED bin number. Hence we request to delete this requirement.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
895	Part-2	Employer's Requirement	ER-228	Table 5-2: Hardware Requirement of Outdoor UPS	■ The cabinet/VMS Board shall be electrically and mechanically robust and shall have a degree of protection of IP65 or higher specified in "IEC60529 Degrees of Protection Provided by Enclosures (IP Code)".	As per EN 12966 Standard, front will be IP65 while entire cabinet IP54	Refer to Addendum-1, S.No: 87 dated 08-03-2022
896	Part-2	Employer's Requirement	ER-228	Table 5-4: Hardware Requirement of Cabinet/VMS Board	■ The cabinet/VMS Board shall be electrically and mechanically robust and shall have a degree of protection of IP65 or higher specified in "IEC60529 Degrees of Protection Provided by Enclosures (IP Code)".	Please remove IP65 enclosure requirement. VMS cabinet assemblies are IP65 from front while IP54 from rear side. Because the VMS are fan cooled asemblies & for taking in the fresh air & throwing out the hot air; the rear doors of VMS are provided with louver/grills with dust filter arrangement which in turn becomes a IP54 enclosure from Rear side.	Refer to Addendum-1, S.No: 87 dated 08-03-2022
897	Part-2	Employer's Requirement	ER-231	Part 2 Employer's Requirements/Chapter 2-6 Requirements of Speed Limit Violation Detection SystemRadar system to record a digitized image/ video frame of the violation	Radar can only detect the speed of the vehicles and always dependent on video technology for capturing image of the number plate of the vehicle. This makes the entire system more bulky and expensive. Considering the weather conditions of the Chennai the best firt would be Video based speed enforcement technology. Hence we request to allow Video based sensors in this RFP as an option to Radar for all systems, wherever applicable in this project.	RFP condition prevails.
898	Part-2	Employer's Requirement	ER-234	Table 4-1: Functional Requirement of SLVD Application	■ The system shall be able to show the live health status of each field component, subcomponents in the control center, and the system shall be able to generate alerts and display in the control room for the following status but not limited: h. Power status (Raw power, UPS), i. Low battery alert, j. Cabinet door Open, Close k. Connectivity status l. Temperature status m. Camera status n. LPU alert etc	The mentioned health status is functionality mapped by the EIS/NIS Systems. The RLVD applications provide camera and LPU level status. Battery cabinet, network, temperature related alerts are handled by EIS/NIS systems. We request you kindly amend the clause as: The system shall be able to show the live health status of each field component, subcomponents in the control center, and the system shall be able to generate alerts and display in the control room for the following status but not limited: m. Camera status n. LPU alert etc	Refer to Addendum-1, S.No: 110 dated 08-03-2022
899	Part-2	Employer's Requirement	ER-234	Table 4-1: Functional Requirement of SLVD Application	All outstation units should be configurable using the software at the Central location. ■ The operator at the back office should be able to get an alarm of any possible fault(s) at the camera site (outstand) (e.g., sensor failure, camera failure, failure of linkage with radar, connectivity failure, Camera tampering, sensor tampering).	We request you to please amend this clause as " The operator at the back office should be able to get an alarm of any possible fault (s) at the camera site (outstand) (e.g. - Sensor Failure/camera failure, failure of linkage with radar/connectivity failure and camera tampering/sensor tampering.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
900	Part-2	Employer's Requirement	ER-234	Table 4-1: Functional Requirement of SLVD Application	<p>Integration options</p> <ul style="list-style-type: none"> ■ Supports display of MIP SDK plug-in items on the Smart Map ■ The SLVD application shall be able to enable integrations to third-party Mobile or Web applications at the data level. ■ Application's Driver Framework enables device manufacturers to develop their drivers for SLVD applications using their SDK. 	<p>We request you please clarify on below points for better understanding</p> <p>1. What needs to be achieved by integrating MIP SDK plugin on the smart map ?</p> <p>2. What are the devices here which requires driver framework integration and what is the use case for the same ?</p> <p>Such integration requirements are mentioned in TIDS, RLVD, SLVD etc. components also. Please clarify the above points & also mentioned that this clarification shall be applied where applicable in the tender. We understands that TIDS/SLVD/RLVD/ATCC central applications can be easily integrated with any 3rd party application via API to meet the functional requirement of the RFP. Hence, there is no need of such integration options.</p> <p>Please confirm.</p>	<p>Bidder need to ensure solution provided related to TIDS, RLVD & SLVD application and services shall be deployed within LPU and central server at DC and DR and solution proposed shall meet functional requirement.</p> <p>Refer to Addendum-1, S.No: 47 dated 08-03-2022</p>
901	Part-2	Employer's Requirement	ER-234	Table 4-1: Functional Requirement of SLVD Application	✓ Shall be expandable up to 50 location	This should be expandable upto 200 locations	RFP condition prevails.
902	Part-2	Employer's Requirement	ER-234	Table 4-1: Functional Requirement of SLVD Application	Supports display of MIP SDK plug-in items on the Smart Map	Require more details about interfaces of MIP SDK and Smart Map.	Refer to Addendum-1, S.No:47 dated 08-03-2022
903	Part-2	Employer's Requirement	ER-235	Table 4-1: Functional Requirement of SLVD Application	<p>E-Challan Coordination</p> <p>The SLVD system Including ANPR capabilities should be integrated with the various application and Databases like VAHAN, and e-Challan application (to be integrated under this project), etc. such that e-Challans can be generated by the system through an automated process.</p>	<p>More than 50 smart/safe cities have already been deployed and are already integrated with E-challan system with "Vahan database of NIC" in India. It is advisable such OEM criteria shall be added in the RFP as an E-challan OEM prequalification to ensure the quality participation & proven technology deployment.</p> <p>Hence, we request you to kindly amend the clause as mentioned below</p> <p>"Proposed E-challan system should be easily integrated to Vahan database of NIC and should have existing integration with Vaahan database of NIC in at-least 05 Smart City/ ITMS project in India. An undertaking on OEM letterhead along with E-challan notices should be submitted along with the bid. Any updates of the software (OS, Application Software including any proprietary software), shall be updated free of cost during the contract period by the MSI."</p>	RFP condition prevails.
904	Part-2	Employer's Requirement	ER-235	Table 4-1: Functional Requirement of SLVD Application	<p>E-Challan Coordination 10</p> <ul style="list-style-type: none"> ■ The SLVD system Including ANPR capabilities should be integrated with the various application and Databases like VAHAN, and e-Challan application (to be integrated under this project), etc. such that e-Challans can be generated by the system through an automated process. ■ The data shall be transferred to the CCC in real-time for verification of the inspection and processing of E-challan. ■ The system shall be integrated with the RTO database/Vahan to fetch required information as per client requirements. ■ The system shall be able to track the entire life cycle of Challan from beginning to end (Offence Evidence, Generation, Authorize By, Penalty amount status, Dispatch detail, Challan status, etc.) 	Require support from Traffic Authority for access to VAHAN portal.	Yes, it will be arranged
905	Part-2	Employer's Requirement	ER-236	Table 4-2: Functional Requirement of LPU	<ul style="list-style-type: none"> ■ The system should be capable of detecting violations of over-speeding by using Doppler radar-based system (locally at LPU) only. The accuracy rate of the speed limit violation detection shall be 92% or better. 	Camera/video-based sensors can also meet the functionality. Kindly amend the specs as " The system should be capable of detecting violations of over-speeding on a trigger from the camera-based sensor (locally at LPU) only. The accuracy rate of the speed limit violation detection shall be 92% or better.	RFP Condition Prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
906	Part-2	Employer's Requirement	ER-236	Table 4-2: Functional Requirement of LPU	■ The system should be able to detect the speed of multiple vehicles traveling in different lanes covered in the camera view simultaneously.	It is recommended to detect the speed of any vehicle along number plate considering ANPR camera per lane for traffic enforcement/E- challan purpose to achieve maximum accuracy. We request you to please kindly amend the clause as "The system should be able to detect the speed of multiple vehicles traveling in ANPR Field of view on Single Lane covered in the camera view simultaneously."	RFP condition prevails.
907	Part-2	Employer's Requirement	ER-236	Table 4-2: Functional Requirement of LPU	■ Measurement may be made by using non-intrusive technology such as Radar integrated camera or individual radar and homologation certificate from Ministry of Traffic or equivalent department from respective country of origin, document authenticated by Indian Embassy (to authenticate those systems are legalized and tested for infractions to avoid legal issues) or Certificate from internationally accredited metrology laboratories (approved for speed calibration) is acceptable	This is specific to Radar technology; therefore, we request you to please kindly change the clause to "The system should be certified by NABL accredited labs such as ARAI. The speed test certificates should be available with the OEM. Only NABL certified systems are considered valid in India from evidence perspective."	Refer to Addendum-1, S.No: 131 dated 08-03-2022
908	Part-2	Employer's Requirement	ER-236	Table 4-2: Functional Requirement of LPU	7. Measurement may be made by using non-intrusive technology such as Radar integrated camera or individual radar and homologation certificate from Ministry of Traffic or equivalent department from Indian Embassy (to authenticate that systems are legalized and tested for infractions to avoid legal issues) or Certificate from internationally accredited metrology laboratories (approved for speed calibration) is acceptable.	Since Speed measurement/enforcement system shall be used for challaning purpose which also includes judicial process. Moreover, Captured screenshot of the running vehicle do not prove the speed infraction or there is no visible/live evidence to prove the case. System should be certified & tested against speed detection accuracy to authenticate that systems are legalized and tested for infractions to avoid legal issues. Hence, we request you to kindly amend the clause as mentioned below "With reference to latest G.S.R and amendment in section 167 of Central Motor Vehicle Rule,1989, the electronic enforcement device used for issuance of a challan shall have an approval certificate from nominated government agencies. Proposed Speed measurement system should have an accuracy of more than 220 Kmph +/- 2%, certified from an agency notified by Government under Rule 126 of Central Motor Vehicle Rules,1989. The speed sensor/Radar OEM should have proper certifications or approvals in accordance to frequency approvals in India"	RFP condition prevails. It is to clarify that any change in the Government regulation regarding enforcement shall be followed as required during the project period without any additional cost.
909	Part-2	Employer's Requirement	ER-236	Table 4-2: Functional Requirement of LPU	The system should be capable of detecting violations of over-speeding by using Doppler radar-based system	Simple doppler radar cannot differentiate between different vehicles and cannot provide reference point and thus speed of vehicle detection in multiple vehicle scenarios is difficult. In case if sensor is 4D HD and can provide speed specific coordinate (x & y) and elevation specific vehicle can be detected. The tracking of vehicle is very important as unless 6 cycles are not confirmed speed might not be good enough for speed enforcement. Also we strongly suggest that certification (as per international standards of Legal metrology norms issued by labs who have this mandate for issuing fines) of the Sensor and its minimum references should be asked . Please note system made of non certified systems cannot be certified in certified metrological labs . Normally 50 ms refresh time is must for speed else not enough cycle can be generated. Please also confirm if the quoted system with same components should already be certified and already in use .. Else MSI can quote completely new solutions which can be a challenge for police and government. Simple doppler should be removed with FMCW forward firing certified speed radar which can provide inhouse firmware for speed detection as per legal metrology standards.	Refer to Addendum-1, S.No: 75 dated 08-03-2022
910	Part-2	Employer's Requirement	ER-237	Table 4-2: Functional Requirement of LPU	■ Radar shall be capable to detect speed of vehicle from more than 120 meters.	This is specific to Radar technology; therefore, we request you to please kindly change the clause as " Radar/Camera-based technology shall be capable to detect the speed of vehicle in-camera FOV/ or capable to detect the speed of the vehicle for more than 120 meters.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
911	Part-2	Employer's Requirement	ER-237	Table 4-2: Functional Requirement of LPU	Radar and ANPR camera system shall cover at least multiple three (3) lane.	It is possible to cover at least multiple three lanes however this will cause poor accuracy of the system Therefore, we request you to please kindly amend the clause as "Radar and ANPR camera system shall cover single camera per lane based on camera-based technology or shall cover at least multiple three lanes"	RFP condition prevails. In case of SLVD, ANPR camera shall be able to capture multiple lanes.
912	Part-2	Employer's Requirement	ER-237	Table 4-2: Functional Requirement of LPU	10. Rader and ANPR camera system shall cover at least multiple three (3) lane.	We understands that single Radar can capture multiple lanes (3-4) for capturing speed of the vehicles. Whereas ANPR camera is equipped with 5-50 mm lens & focused in such a manner to capture single lane only i.e. 3.5 mtrs width. Please confirm whether our understanding is correct or not. If yes, please provide us the exact count of the ANPR cameras required lane wise for SLVD component.	RFP condition prevails.
913	Part-2	Employer's Requirement	ER-237	Table 4-2: Functional Requirement of LPU	10. Rader and ANPR camera system shall cover at least multiple three (3) lane.	ANPR camera with 5-50mm lens can capture single lane only. So please provide us the exact count of the ANPR cameras required lane wise for SLVD component.	Refer to Addendum-1, S.No: 88 dated 08-03-2022
914	Part-2	Employer's Requirement	ER-238	Table 4-2: Functional Requirement of LPU	■ Entire functionalities define under this section shall be executed only at the LPU level and shall not be an effect due to communication interruption with Server	In order to improve the accuracy and keep the LPU cost minimal, application architectures utilize multi-level processing. This also ensures that the violation is not missed even in case of the connectivity failure from LPU to DC.	RFP condition prevails.
915	Part-2	Employer's Requirement	ER-238	Table 5-1: Hardware Requirement of SLVD Radar	Type - Advanced Tracking Doppler Radar-K Band 24GHz FMCW (Frequency Modulated Continuous Wave)	The radar should also have option of multilane 3D/4D monopulse radar with option of Band of 77 GHZ which is the frequency for traffic solutions	Refer to Addendum-1, S.No: 75 dated 08-03-2022
916	Part-2	Employer's Requirement	ER-238	Table 5-1: Hardware Requirement of SLVD Radar	Type - Advanced Tracking Doppler Radar-K Band 24GHz FMCW (Frequency Modulated Continuous Wave)	Request you to please change this as Advanced Tracking Doppler Radar-K Band 24GHz or 77GHz FMCW (Frequency Modulated Continuous Wave).	Refer to Addendum-1, S.No: 75 dated 08-03-2022
917	Part-2	Employer's Requirement	ER-238	Table 5-2: Hardware requirement of Speed display (Radar based)	Type - Dual Direction K-Band 24GHz	Request you to please change this as Dual Direction 24GHz or 77 GHZ	Refer to Addendum-1, S.No: 76 dated 08-03-2022
918	Part-2	Employer's Requirement	ER-238	Table 5-2: Hardware requirement of Speed display (Radar based)	Detection range - 150 Meters	Request you to please change this as 80 meters	Refer to Addendum-1, S.No: 76 dated 08-03-2022
919	Part-2	Employer's Requirement	ER-238	Table 5-1: Hardware Requirement of SLVD Radar	1. Type - Advanced Tracking Doppler Radar-K Band 24GHz FMCW (Frequency Modulated Continuous Wave) 4. Interface - Ethernet/CAN/integrated 6. Drift - Negligible, no re-calibration needed over 10-year life.	Please add K Band / ISM Band 24 - 24.25 GHZ for better competition. Please include Ethernet/CAN/integrated/USB Interface Please include Negligible, no re-calibration/Self Calibration needed over 10-year life.	Refer to Addendum-1, S.No: 75 dated 08-03-2022
920	Part-2	Employer's Requirement	ER-239	Table 5-3: Hardware Requirement of ANPR Camera	H.264, H.265 / H.265+ Triple & Individual Configurable, At least 1 stream at 2MP	Request you to change this as H.264, H.265 / H.265+, MJPEG	Refer to Addendum-1, S.No: 88 dated 08-03-2022
921	Part-2	Employer's Requirement	ER-239	Table 5-3: Hardware Requirement of ANPR Camera	1 port (BNC) / Ethernet 1Vp-p, 75 Ohm	Request you to change this as 1 port Ethernet	Refer to Addendum-1, S.No: 88 dated 08-03-2022
922	Part-2	Employer's Requirement	ER-239	Table 5-3: Hardware Requirement of ANPR Camera	The camera should be ONVIF Profile S & G Conformant for both present & future generation cameras of OEM	Request you to change this as ONVIF Profile S	Refer to Addendum-1, S.No: 88 dated 08-03-2022
923	Part-2	Employer's Requirement	ER-239 & ER-255	Table 5-3: Hardware Requirement of ANPR Camera & Table 6-2: Hardware Requirement of ANPR Camera	1/ 2.8" Progressive Scan CCD / CMOS	Or better should be added	Refer to Addendum-1, S.No: 88 & 90 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
924	Part-2	Employer's Requirement	ER-239 & ER-255	Table 5-3: Hardware Requirement of ANPR Camera Table 6-2: Hardware Requirement of ANPR Camera	UL, EN, CE, FCC, BIS	Recommended to be UL/CE/FCC and BIS Certification as main, as BIS is for India and others from different countries	Refer to Addendum-1, S.No: 88 & 90 dated 08-03-2022
925	Part-2	Employer's Requirement	ER-239 & ER-255	Table 5-3: Hardware Requirement of ANPR Camera Table 6-2: Hardware Requirement of ANPR Camera	The camera should be ONVIF Profile S & G Conformant for both present & future generation cameras of OEM	The ONVIF compliance should also be allowed to be met through NVR especially the high resolution cameras	Refer to Addendum-1, S.No: 88 & 90 dated 08-03-2022
926	Part-2	Employer's Requirement	ER-239 & ER-255	Table 5-3: Hardware Requirement of ANPR Camera & Table 6-2: Hardware Requirement of ANPR Camera	1/ 2.8" Progressive Scan CCD / CMOS	Request you to change this as Minimum 1/ 2.8" Progressive Scan CCD / CMOS	Refer to Addendum-1, S.No: 88 & 90 dated 08-03-2022
927	Part-2	Employer's Requirement	ER-239, ER-255	Table 5-3: Hardware Requirement of ANPR Camera Table 6-2: Hardware Requirement of ANPR Camera	ANPR Camera - Video Interface - 1 port (BNC) / Ethernet 1Vp-p, 75 Ohm ANPR Camera - Video Interface - 1 port (BNC) / Ethernet 1Vp-p, 75 Ohm	BNC Pin not required for IP cameras , Most of the OEMs not complying for this clause. Request to remove this clause .	Refer to Addendum-1, S.No: 88 & 90 dated 08-03-2022
928	Part-2	Employer's Requirement	ER-244	1 General	The RLVD system is a system for capturing details of vehicles that have crossed the stop line at the junction while the traffic light is red. The system should be capable to detect red light status and red-light violation by video analytics method. The camera should also be used for evidence snap generation. The information so captured shall be used to issue challans to the violators. The general requirements of the system are specified below.	As it is observed in most of the metropolitan cities that accidents do occur at the junctions itself, during late/early hours due to high speed. Hence in addition to stop line and red light violation detection at junctions, let speed violation detection through radar also be one of the requirements. Hence request you to change the system requirement of video analytics to RADAR and Camera based STOP LINE - RED LIGHT/Speed Violation Detection System at junctions.	RFP condition prevails.
929	Part-2	Employer's Requirement	ER-248	5 System Functional Requirement	The RLVD units shall be connected to the Central control room and RLVD back-office application shall run on centrally hosted servers with the ability of the control center staff to use the application. The system shall send the evidence information in an XML or other standard format keeping in mind the future extensibility and interoperability requirements. It should be possible for several such Capture Point Units to be connected to the same Central control room. The RLVD system shall capture evidence of violations that are legally admissible in court. The requirement shall have follows.	The RLVD system should be able to process the violations locally by the outdoor unit with more than 256 bit encryption and should send the violation packages to the central control room for processing	RFP condition prevails.
930	Part-2	Employer's Requirement	ER-250	Table 5-1: Functional Requirement of RLVD Application	Application's Driver Framework enables device manufacturers to develop their drivers for RLVD applications using their SDK.	The requirement is not understood. The RLVD software is independent of the devices such as Local processing units, cameras (ANPR and Evidence) etc. There is no role of device manufacturers developing application with RLVD. Request you to please kindly confirm.	Refer to Addendum-1, S.No: 47 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
931	Part-2	Employer's Requirement	ER-250	Table 5-1: Functional Requirement of RLVD Application	<p>■ The system shall be able to show the live health status of each field component, sup components in the control center, and system shall be able to generate alert and display in the control room for the following status but not limited:</p> <p>o. Power status (Law power, UPS), p. Low battery alert, q. Cabinet door Open, Close r. Connectivity status s. Temperature status t. Camera status u. LPU alert etc</p>	<p>The mentioned health status is functionality mapped by the EIS/NIS Systems. The RLVD applications provide camera and LPU level status. Battery cabinet, network, temperature related alerts are handled by EIS/NIS systems. We request you kindly amend the clause as :</p> <p>■ The system shall be able to show the live health status of each field component, sup components in the control center, and system shall be able to generate alert and display in the control room for the following status but not limited:</p> <p>o. Camera status p. LPU alert etc</p>	Refer to Addendum-1, S.No: 110 dated 08-03-2022
932	Part-2	Employer's Requirement	ER-251	Table 5-1: Functional Requirement of RLVD Application	<p>■ The system shall be configurable for bulk approval options for nondescript data.</p>	<p>Kindly elaborate the requirement. In case the authorities are looking at auto - challan function, we request you to Kindly put the requirements for ANPR confidence level driven echallan generation. All the violation with ANPR conversion confidence beyond 90% or 95% is automatically selected for echallan generation</p>	RFP condition prevails. Yes, your understanding is correct.
933	Part-2	Employer's Requirement	ER-251	Table 5-1: Functional Requirement of RLVD Application	<p>■ The system shall be able to upload bulk data at the cloud/E-Challan server</p>	<p>Kindly elaborate the requirement. Is it meant that the echallan server will be hosted on cloud?</p>	Bidder have option to choose cloud or on-preimes
934	Part-2	Employer's Requirement	ER-252	Part 2 Employers Requirements Table 5-2: Functional Requirement of LPU	<p>■ ANPR camera shall cover road width of 3.5 meter or 7 meter and above. ■ RLVD camera shall cover three (3) lanes and above</p>	<p>It is possible to cover 7 metres or 2 lanes and above with single camera. However, in case of 2 wheelers, the accuracy drops down for the single camera. We request you to kindly amend the clause to provision one ANPR camera for 3.5 meters road width.</p>	Bidder shall consider one ANPR camera for each lane and RLVD camera as required in order to meet the functional requirement.
935	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of LPU	<p>Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage.</p>	<p>Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors.</p>	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
936	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of LPU	<p>■ System shall be able to show live health status of each field component, subcomponents in control center and system shall be able to generate alert and display in the control room for following status but not limited:</p> <p>a. Power status (Law power, UPS), b. Low battery alert, c. Cabinet door Open, Close d. Connectivity status e. Illuminator Status f. Temperature status g. Camera status h. LPU alert etc.</p>	<p>The mentioned health status is functionality mapped by the EIS/NIS Systems. The RLVD applications provide camera and LPU level status. Battery cabinet, network, temperature related alerts are handled by EIS/NIS systems. We request you kindly amend the clause as:</p> <p>■ System shall be able to show live health status of each field component, subcomponents in control center and system shall be able to generate alert and display in the control room for following status but not limited:</p> <p>a. Camera status b. LPU alert etc.</p>	Refer to Addendum-1, S.No: 110 dated 08-03-2022
937	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of LPU Security	<p>Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage.</p>	<p>Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors.</p>	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
938	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of RLVD	<p>Security</p> <p>Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage.</p>	<p>Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors.</p>	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
939	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of LPU	<p>Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage.</p> <p>Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors.</p>	<p>We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate)</p> <p>The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
940	Part-2	Employer's Requirement	ER-253	Table 5-2: Functional Requirement of LPU	Security	Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage. Justification: Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors.	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
941	Part-2	Employer's Requirement	ER-254	Table 5-2: Functional Requirement of LPU	Entire functionalities define under this section shall be executed only at the LPU level and shall not be an effect due to communication interruption with Server	In order to improve the accuracy and keep the LPU cost minimal, application architectures utilize multi-level processing. This also ensures that the violation is not missed even in case of the connectivity failure from LPU to DC	RFP condition prevails.
942	Part-2	Employer's Requirement	ER-254	Table 6-1: Hardware Requirement of RLVD Camera (Overview Camera)	Power 12 VDC or PoE IEEE 802.3af Class 1	Power 12 VDC or PoE IEEE 802.3af Class 1 or better	Refer to Addendum-1, S.No: 89 dated 08-03-2022
943	Part-2	Employer's Requirement	ER-255	Table 6-2: Hardware Requirement of ANPR Camera	UL, EN, CE, FCC, BIS	Recommended to be UL/CE/FCC and BIS Certification as main, as BIS is for India and others from different countries	Refer to Addendum-1, S.No: 90 dated 08-03-2022
944	Part-2	Employer's Requirement	ER-255	Table 6-2: Hardware Requirement of ANPR Camera	Minimum 128 GB Memory card in a Memory card slot. In the event of failure of connectivity to the central server the camera shall record video locally on the SD card automatically to storage video at 2MP, 25 fps for minimum 7 days. After the connectivity is restored, these recordings shall be automatically merged with the server recording such that no manual intervention is required to transfer the SD card-based recordings to server. The SD storage shall be expandable up to 1TB.	To record cameras in requested recording parameters (2MP, 25 fps at 7 days) need 150 GB, 21 GB/day in H.265 compression. Also this is specific to few OEMs in the business market, Thus request to consider SD card storage of min. 256GB or better.	Refer to Addendum-1, S.No: 90 dated 08-03-2022
945	Part-2	Employer's Requirement	ER-255	Table 6-2: Hardware Requirement of ANPR Camera	1 port (BNC) / Ethernet 1Vp-p, 75 Ohm	Request you to change this as 1 port Ethernet	Refer to Addendum-1, S.No: 90 dated 08-03-2022
946	Part-2	Employer's Requirement	ER-255	Table 6-2: Hardware Requirement of ANPR Camera	The camera should be ONVIF Profile S & G Conformant for both present & future generation cameras of OEM	Request you to change this as ONVIF Profile S	Refer to Addendum-1, S.No: 90 dated 08-03-2022
947	Part-2	Employer's Requirement	ER-256	Table 6-4: Hardware requirement of Industrial grade Layer-2 switch	Table 6-4: Hardware requirement of Industrial grade Layer- 2 switch	Bill of materials does not specify Industrial grade Layer-2 switch Quantities required	Refer to Addendum-1, S.No: 45 dated 08-03-2022
948	Part-2	Employer's Requirement	ER-270	Table 5-1: Hardware Requirement of Image Recognition Detector and Processing Unit	2.Effective pixels: 640(H) x 480(V) or more	Please amend the clause as- "2.Effective pixels: 5 MP or more"	Refer to Addendum-1, S.No: 91 dated 08-03-2022
949	Part-2	Employer's Requirement	ER-270	Table 5-1: Hardware Requirement of Image Recognition Detector and Processing Unit	2.Effective pixels: 640(H) x 480(V) or more	VGA resolution ((640(H) x 480(V))is very outdated resolution now a days which do not offer picture clarity in all weather scenario even in day time. Eventually will lead to inaccurate data related to count & classification of the vehicles. Proposed system should be of latest technology & future ready. Hence, we request you to kindly amend the specs of the Image recognition detector as mentioned below "2.Effective pixels: 5 MP or more"	Refer to Addendum-1, S.No: 91 dated 08-03-2022.
950	Part-2	Employer's Requirement	ER-275	ER-275 Chapter 3- 1.1.k Requirements of Command Control Centre for City Bus System	k) Transmitting of all the outputs to the corresponding ITS units at stations or on-board of the buses in real-time through wired / wireless communication system	What type of output will be transmitted to ITS units at stations & in buses in real time. Please elaborate.	Required data from application to onboard computer in bus and PIS boards at bus station/terminal/stop to perform it's operation.
951	Part-2	Employer's Requirement	ER-275	ER-275 Chapter 3- 1.1.l Requirements of Command Control Centre for City Bus System	Transfer necessary information to the concerned agencies like police, GCC and CUMTA authorities	Transfer of information will be manually as & when required. Please confirm.	RFP condition prevails. Selected bidder need to setup data transfer mechanism through proper means as approved during design period by Employer/ Engineer.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
952	Part-2	Employer's Requirement	ER-275	ER-275 Chapter 3- 1 Requirements of Command Control Centre for City Bus System	(f) Each depot will be equipped with the Depot Management System (DMS) to enable and manage their effective operation. This software will manage service scheduling, crew rostering, vehicle dispatch, crew attendance, and business intelligence/reporting.	Should the contractor assume 31 different deployments or one deployment with multitenant features? In the latest, what kind of data segregation is requested? Are depot sharing users, vehicles, drivers, rules and configurations or each depot has its own users, vehicles, rules and configurations?	Each depot has its own users, vehicles, employees, etc. All the rules and configuration shall be customizable as per depot/branch manager requirement.
953	Part-2	Employer's Requirement	ER-275	Part 2 Employers Requirements, Pg. 279, 4.3 Disaster Recovery	The Contractor shall propose the suitable disaster recovery plan for the System. ■ The minimum following two (2) servers of City Bus System which will be critical for operation at a time of disaster shall be protected by replicating them on cloud.	Kindly clarify what all applications/solutions to be replicated in disaster recovery at the time of disaster. Also clarify the production capacity of the same (Eg: 50%, 100%)	Refer to Addendum-1, S.No: 130 dated 08-03-2022
954	Part-2	Employer's Requirement	ER-275	Part 2 Employers Requirements - Chapter 3-1 Requirements of Command Control Centre for City Bus System - ER-275	Transfer necessary information to the concerned agencies like police, GCC and CUMTA authorities	1. We understand the mode of communication is through mobile app/portal or through SMS. Also, if there is any integration required through API kindly specify the same. 2. Kindly provide the number of users license required for Police, GCC and CUMTA authorities	Selected bidder need to setup data transfer mechanism through proper means as approved during design period by Employer/ Engineer.
955	Part-2	Employer's Requirement	ER-275	Chapter 3-1 Requirements of Command Control Centre for City Bus System	(b) Each bus shall be equipped with an On-Board Unit (OBU) for location tracking that incorporates cellular data communications and sends frequent periodic location reports to the central operations management system at the CBS Command Control Centre.	What protocol will be used? And how often will the positioning update?	No propriety protocols to be used. All the communication and data exchange mechanism shall be open standards.
956	Part-2	Employer's Requirement	ER-278	Figure 4-1: System Server Architecture the System	Internet Server for data sharing (Application & Database) x2	Please provide full functional specifications of internet server	Refer to Addendum-1, S.No: 74 dated 08-03-2022
957	Part-2	Employer's Requirement	ER-278	Figure 4-1: System Server Architecture	Control Centre Management Server (Application & Database) x2	Please provide full functional specifications of Control Centre Management Server	Refer to Addendum-1, S.No: 74 dated 08-03-2022
958	Part-2		ER-279	Table 4-2: Functional requirement of Security	Page no 283/391 Table 7-4: Functional requirement of Security: Endpoint security refers to cybersecurity services for network endpoints. These services include antivirus, email filtering, web filtering, and firewall services.	Request to confirm number of users for web security and number of Email Boxes for Email Security	Bidder shall provide the requisite number of end point security based on the solution proposed.
959	Part-2		ER-279	Table 4-2: Functional requirement of Security	Page no 283/391 Table 7-4: Functional requirement of Security: For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	Request to consider dedicated server security solution for Servers instead of Endpoint security as security requirement and its priorities are completely different for servers which are running with critical applications. Request to consider attached Annexure Server Security sheet for Server security specifications	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
960	Part-2	Employer's Requirement	ER-279	Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	Keeping in mind the mandates from regulatory bodies (UIDAI, PDP) to protect the sensitive / critical data, should a encryption and key management solution be factored to achieve this functionality. If yes, then please give some indicative specifications.	Refer to Addendum-1, S.No: 46 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
961	Part-2	Employer's Requirement	ER-279	Table 4-2: Functional requirement of Security	<p>Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files</p> <p>Keeping in mind the mandates from regulatory bodies (UIDAI, PDP) to protect the sensitive / critical data, should a encryption and key management solution be factored to achieve this functionality. If yes, then please give some indicative specifications.</p>	<p>We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications.</p> <p>It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration.</p> <p>Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	Refer to Addendum-1, S.No: 46 dated 08-03-2022
962	Part-2	Employer's Requirement	ER-279	Table 4-2: Functional requirement of Security	Security requirement	<p>Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files</p> <p>Justification: As we, all know that, there are mandates from regulatory bodies (UIDAI, PDP) to protect the sensitive / critical data, hence request department to consider a proper encryption and key management solution along with backup solution to protect your data from unauthorised persons.</p>	Refer to Addendum-1, S.No: 46 dated 08-03-2022
963	Part-2	Employer's Requirement	ER-279	Table 4-2: Functional requirement of Security	<p>Page no 283/391 Table 7-4: Functional requirement of Security:</p> <p>For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.</p>	Request to consider dedicated server security solution for Servers instead of Endpoint security as security requirement and its priorities are completely different for servers which are running with critical applications.	RFP condition prevails. The bidder may propose suitable solution.
964	Part-2	Employer's Requirement	ER-279	4.4 Security	Physical or virtual network appliance that monitors 360 degrees of network to create complete visibility into all aspects of targeted attacks, advanced threats, and ransomware.		Query is not clear.
965	Part-2	Employer's Requirement	ER-279	Part 2, 4.4 Security, ER-279	For Control Center End point security is essential to any device that is physically an end point on a network. Laptops, desktops, mobile phones, tablets, servers can all be termed as endpoints.	<p>A. Request to clarify all devices classified as endpoints.</p> <p>B. Do IoT devices like Cameras, Traffic controllers, VMDs, etc. fall under endpoints?</p>	RFP condition prevails.
966	Part-2	Employer's Requirement	ER-279	Part 2, 4.4 Security, ER-279	Endpoint Sensor	Request to clarify all devices classified as endpoint sensors.	<p>RFP condition prevails.</p> <p>The details to be discussed during design stage.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
967	Part-2	Employer's Requirement	ER-279 & ER-108	Table 7-4: Functional requirement of Security & Table 4-2: Functional requirement of Security	Behavior Monitoring Incl. Ransomware Protection (Win PC only) - Behavior Monitoring protects endpoints from unauthorized changes to the operating system, registry entries, other software, or files and folders. Protect documents against unauthorized encryption or modification, automatically back-up and restore files changed by suspicious programs, Block processes commonly associated with ransomware, enable program inspection to detect and block compromised executable files	<p>Considering the increased risks from various Ransomware and Malware attacks that are happening worldwide including India. Should an encryption and protection solution to protect software, files, folders or documents from unauthorized persons. incorporate be factored in the solution.</p> <p>Please suggest some indicative specifications for the same.</p> <p>We request and suggest to incorporate transparent encryption that delivers data at rest encryption, privileged user access controls and detailed data access audit logging without requiring changes to existing applications.</p> <p>It enables IT organizations to setup policies to prevent rogue processes and unauthorized users from encrypting your most sensitive data and prevent sensitive data exposure upon exfiltration.</p> <p>Thereby protecting organizations from ransomware attacks. Agents protect data in files, volumes, and databases on Windows, AIX and Linux OS's across physical and virtual servers in cloud and big data environments</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	Refer to Addendum-1, S.No: 46 dated 08-03-2022
968	Part-2	Employer's Requirement	ER-280,103	Table 5-23: Hardware requirement of Indoor fixed dome camera at CCC	5 MP or better / 2. Video Resolution 1080p or better	In Table 4-2: Functional requirement of Security the Camera resoluion is mentioned 5MP, but in technical specification its mentioned only 2MP. Please clarify that the indoor fixed doom camera resolution requirement is 2MP or 5MP.	Refer to Addendum-1, S.No: 115 dated 08-03-2022
969	Part-2	Employer's Requirement	ER-286	Table 5-1: Hardware requirement of Controller	Requirement 11	Suggested Text Remove: It shall not be possible to alter any basic timing parameters including minimum / maxima from a handset or portable communications device/ Changing such data shall only be possible by changing the controller's EPROM.	Refer to Addendum-1, S.No: 105 dated 08-03-2022
970	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	<p>* Bidder to propose integrated systems / blade chassis, rack-mountable, capable of accommodating minimum 8 or higher nodes/blades</p> <p>* Have the capability for installing industry-standard flavors of operating system including Microsoft Windows, Enterprise RedHat Linux OS, Oracle Linux as well as virtualization solutions as per proposed solution requirement and compatibility matrix</p>	<p>1. Solution Approach based on Blade Chassis is an legacy approach. We recommend Chennai Smart City to consider integrated systems approach which provides better performance, better consolidation, better integration, better availability, ease of management & better support,</p> <p>2. Blade Server Specifications favours only few OEMs which will limit the number of OEMs participating in the RFP and hence it creates an unfair competition. We request to remove Blade Chassis Specifications and allow bidders to quote for latest technology based innovative solutions which can be a best fit for proposed technology stack catering to CSC requirements</p> <p>3. Asking for VMware explicitly limits the fair competition. We request to amend this and ask for certified/compatible virtualisation software for the proposed solution</p> <p>4. DVD-ROM is a security risk in servers and technology had caught up in remote installation in a more secured way</p>	Refer to Addendum-1, S.No: 92 dated 08-03-2022
971	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	<p>Network interface</p> <p>Minimum of 40 Gbps bandwidth across redundant LAN ports for providing Ethernet connectivity</p> <p>Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity (As required by solution proposed)</p>	<p>1. 20 Gbps is not an industry standard Switching Speed. 4 * 10 Gbps or 4 * 25 Gbps is industry Standard network speed</p> <p>2. Integrated Solutions offers high speed low latency 100 Gbps Network for both LAN & Storage Requirements</p>	Refer to Addendum-1, S.No: 92 dated 08-03-2022
972	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum of 2 Nos of PCIe 3.0 slots	Blade Specific Clause. Request to amend this to make it generic	Refer to Addendum-1, S.No: 92 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
973	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum of 1 Internal USB 3.0 port	SD Slot is not required since Virtualisation Software will be installed in Local HDDs	Refer to Addendum-1, S.No: 92 dated 08-03-2022
974	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Must have port level or card level redundancy	1. Blade/Node based system have limited PCIe Slots and hence card level redundancy is not possible in certain configurations. 2. RFP also asks for 2 PCI Slots Only	Refer to Addendum-1, S.No: 92 dated 08-03-2022
975	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	<ul style="list-style-type: none"> Microsoft Windows Server (latest version) Latest Version of RHEL or Suse Linux or Oracle Linux Feature-rich virtualization software supporting solution design & stack 	1. Since the RFP asks for Virtualised Solution, OS Support for bare metal blade server / node is unnecessary. 2. Requesting for VMware is OEM Specific and creates a unfair competition. Hence we request to allow bidders to quote for equivalent Enterprise level Hypervisors compatible to host the proposed solution stack	Refer to Addendum-1, S.No: 92 dated 08-03-2022
976	Part-2	Employer's Requirement	ER-286 & ER-110	Table 8-1: Hardware requirement of Servers & Table 5-1: Hardware requirement of Servers	Minimum 6U size, rack-mountable, capable of accommodating minimum 8 or higher hot-pluggable blades <ul style="list-style-type: none"> Have the capability for installing industry-standard flavors of Microsoft Windows, and Enterprise RedHat Linux OS as well as virtualization solutions such as VMware. DVD ROM shall be available in chassis, can be internal or external, which can be shared by all the blades allowing remote installation of software 	* Bidder to propose integrated systems / blade chassis, rack-mountable, capable of accommodating minimum 8 or higher nodes/blades * Have the capability for installing industry-standard flavors of operating system including Microsoft Windows, Enterprise RedHat Linux OS, Oracle Linux as well as virtualization solutions as per proposed solution requirement and compatibility matrix	Refer to Addendum-1, S.No: 92 dated 08-03-2022
977	Part-2	Employer's Requirement	ER-287	Table 5-2: Hardware requirement of Video wall	Number of pixels : 1920×1080 (full HD), 16:9 Widescreen	Please change to : Total resolution of 74 Mega Pixel for Videowall in the matrix with 9 cubes (3 cubes in column and 3 cubes in row) Justification : Since large volume of data needs to put on video wall High resolution will help user to put multiple data on the video wall to analyze at the same time & increase the efficiency of the operation	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
978	Part-2	Employer's Requirement	ER-287	Table 5-2: Hardware requirement of Video wall	Access to the Cube : Front/Rear access	Access to the Cube : Front/Rear access with cube Depth less than 575 mm Justification : Space is of utmost importance in control room applications. Making the depth as 575 mm will result in a compact solution for customer & help save a lot of space.	RFP condition prevails.
979	Part-2	Employer's Requirement	ER-287	Table 5-2: Hardware requirement of Video wall	Number of pixels : 1920×1080 (full HD), 16:9 Widescreen	Please change to : Total resolution of 384 Mega Pixel for another Video wall in matrix with 48 cubes Justification : Since large volume of data needs to put on video wall High resolution will help user to put multiple data on the video wall to analyze at the same time & increase the efficiency of the operation	RFP condition prevails.
980	Part-2	Employer's Requirement	ER-289 & ER-118	Table 5-6: Hardware Requirement of Data Storage & Table 8-12: Hardware Requirement of Data Storage	Modular design to support controllers and disk drives expansion	Request consider clause as below inline to above ask. "Modular design to support disk drives expansion"	RFP condition prevails.
981	Part-2	Employer's Requirement	ER-289 & ER-118	Table 5-6: Hardware Requirement of Data Storage & Table 8-12: Hardware Requirement of Data Storage	The controllers / Storage nodes should be upgradable seamlessly, without any disruptions/downtime to production workflow for performance, capacity enhancement, and software/firmware upgrades.	Request to consider HDDs scalability without any disruption to operations. "The Storage capacity should be upgradable seamlessly, without any disruptions/downtime to production workflow for performance, capacity enhancement, and software/firmware upgrades."	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
982	Part-2	Employer's Requirement	ER-289 ER-118	Table 5-6: Hardware Requirement of Data Storage Table 8-12: Hardware Requirement of Data Storage	* Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data. * RAID solution offered must protect against double-disc failure. * Disks should be preferably minimum of 8 TB capacity * To store all types of data (Data, Voice, Images, Video, etc) * Storage system capable of scaling vertically or horizontally	Horizontal Scaling (More Controllers) are required for large scale requirements and hence this clause is limiting the number of OEMs.	Refer to Addendum-1, S.No: 93 dated 08-03-2022
983	Part-2	Employer's Requirement	ER-289,118	Part 2 Employers Requirements, Pg.293, 5.6 Data Storage	Storage Capacity should be a minimum of 50 TB (usable, after configuring in offered RAID configuration) for online and Near-line data.		No query provided.
984	Part-2	Employer's Requirement	ER-29	Part 2 Employers Requirements Pg.29 4.1.1 Implementation Stage	(h) Replacement of existing equipment such as signal poles, signal lamps devices, equipment's, Gantry etc. and move to place where the Employer instructed.	Kindly provide clarity on these clauses. Also, provide detailed responsibility matrix and store details for handing over of dismantled equipment's.	Employer will arrange necessary space to keep dismantled equipment within CMA area.
985	Part-2	Employer's Requirement	ER-29	Part 2 Employers Requirements Pg.29 4.1.1 Implementation Stage	(i) Remove obstacles from the project site.	Kindly provide clarity on these clauses. Also, provide detailed responsibility matrix and store details for handing over of dismantled equipment's.	Employer will arrange necessary space to keep dismantled equipment within Chennai city.
986	Part-2	Employer's Requirement	ER-29	4.1.1 Implementation Stage	(g) All arrangements and costs (customs, transportation, electricity, communication, etc.) till taking over certificate for each component.	If any Junction or solution is operationalised publicly for more than 1 month than reference recurring charges of Electricity / Communication should be borne by client. Hence we request to consider the request as in such large scale projects 100% of implementation might get delayed due to third party concerns such as cross-government approval delay, public involvement etc.	RFP condition prevails.
987	Part-2	Employer's Requirement	ER-29	4 Responsibility 4.1 Responsibility of the Contractor 4.1.1 Implementation Stage	(g) All arrangements and costs (customs, transportation, electricity, communication, etc.) till taking-over certificate for each component.	This project is spread across many months/years. It would be difficult to estimate electricity and communications costs as both are regulated by government policies which have impact on pricing. Hence we request to take electricity & communication charges in buyers scope and make payment at actuals on running bill basis as per service provider . Contractor shall coordinate for buyer department with service provider agency. This is standard practice in all smart city & safe city projects.	RFP condition prevails.
988	Part-2	Employer's Requirement	ER-29	4 Responsibility 4.1 Responsibility of the Contractor 4.1.2 Operation and Maintenance Stage	(e) Provision for Power Supply, Last mile connectivity, Data exchange with other agency etc.	This project is spread across many months/years. It would be difficult to estimate electricity and communications costs as both are regulated by government policies which have impact on pricing. In none of the similar project executed has the electricity bills/Connectivity charges covered under the scope of Bidder and the same is taken care by the Employer with the view that it a Govt. project. Therefore, request you to please remove the scope of recurring electricity bill/Connectivity payment from the scope of the Contractor We request to take electricity & Connectivity communication charges in buyers scope and make payment as actual on running bill basis as per service provider	RFP condition prevails.
989	Part-2	Employer's Requirement	ER-290	Table 5-7: Hardware requirement of Backup software	Backup Software Should support backup hardware like tape, virtual tape, optical disk,	Please consider without optical disk as this is one single vendor specific.	Refer to Addendum-1, S.No: 57 dated 08-03-2022
990	Part-2	Employer's Requirement	ER-291	Table 5-8: Hardware requirement of Tape library	Library shall be able to back up the encrypted keys in a redundant fashion	Library shall be able to back up the encrypted keys in a redundant fashion either through hardware or backup software	Refer to Addendum-1, S.No: 78 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
991	Part-2	Employer's Requirement	ER-292,122	Table 5-11: Hardware requirement of SAN switch & Table 8-17: Hardware requirement of SAN switch	Request to make this segment as optional as per proposed solution requirement	1. Since 16 Gbps FC Card is asked as an optional Item and Storage is not defined as FC Only, we request SAN Switch also to be made as an optional item. 2. Integrated / Converged Systems can offer high speed & low latency network for Application/User/ Storage traffic	Refer to Addendum-1, S.No: 77 dated 08-03-2022
992	Part-2	Employer's Requirement	ER-292,122	Table 5-11: Hardware requirement of SAN switch & Table 8-17: Hardware requirement of SAN switch	Table 8-17: Hardware requirement of SAN switch	Request to make this segment as optional as per proposed solution requirement	Refer to Addendum-1, S.No: 77 dated 08-03-2022.
993	Part-2	Employer's Requirement	ER-293	Table 5-11: Hardware requirement of SAN switch	Request to make this segment as optional as per proposed solution requirement	1. Since 16 Gbps FC Card is asked as an optional Item and Storage is not defined as FC Only, we request SAN Switch also to be made as an optional item. 2. Integrated / Converged Systems can offer high speed & low latency network for Application/User/ Storage traffic	Refer to Addendum-1, S.No: 77 dated 08-03-2022
994	Part-2	Employer's Requirement	ER-294	Section 5.13 & 8.19 Firewall Management - SNMPV1	Management - SNMPV2/ SNMPV3	Please include latest SNMP V2C and SNMP V3 support in the FW platform because SNMPV1 is an old SNMP unsecured version of communication where the messages are sent in clear text. SNMPV1 is obsolete considering current deployment scenarios	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
995	Part-2	Employer's Requirement	ER-294	Section 5.13 & 8.19 Firewall Encrypted Next Generation Firewall Throughput: minimum 20 Gbps for internet and 20 Gbps for intranet firewall"	Next Generation Firewall Throughput required with all features enabled from day 1 (IPS, App-ID, AV, AntiSpyware, Sandboxing, DNS Sec, File blocking & Logging enabled) : minimum 5 Gbps for internet and 5 Gbps for intranet firewall"	Please mention the desired NG Firewall throughput required with all features enabled from day 1 rather than raw firewall throughput i.e. IPS, App-ID/AVC, antivirus, anti-spyware, Sandboxing, DNS Security, file blocking, and logging enabled on day 1. Mentioning all feature enabled throughput will enable department to make the right product/OEM comparisons while technical evaluation	RFP condition prevails. Bidder may assess the requirement and propose the equal or better solution.
996	Part-2	Employer's Requirement	ER-294	Section 5.13 & 8.19 Firewall Concurrent connections: up to 100,000	Concurrent connections: up to 2,000,000	Considering the Smart City Traffic Management Project CC Setup, the device shall be capable to handle at least 2 Million Concurrent sessions	RFP condition prevails.
997	Part-2	Employer's Requirement	ER-295	Table 5-16: Hardware requirement of Wi-Fi equipment	New Spec to add	802.11ax Certified on dual radio	Refer to Addendum-1, S.No: 81 dated 08-03-2022
998	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Supported Extensions: Analog, Digital and IP	ISDN digital phone is Obsoleted technology. Kindly make it optional and change the clause to, "Supported Extensions: Analog, Digital/IP"	Refer to Addendum-1, S.No: 107 dated 08-03-2022
999	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Technology: PCM-TDM , IP, Non-blocking	Request to revise the clause as Technology: SIP, PCM-TDM , IP, Non-blocking (SIP is the primary technology that must be supported by all IP PABX)	Refer to Addendum-1, S.No: 51 dated 08-03-2022
1000	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Type of Interface: ISDN interface for digital, basic interface for Analog lines	Request to revise the clause as Type of Interface: RJ-45, ISDN E1, FXS/FXO for Analog lines (Kindly rephrase to ensure all latest interfaces are mentioned as original clause only mentions TDM based interfaces)	Refer to Addendum-1, S.No: 51-54, 107 dated 08-03-2022
1001	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Max. loop resistance for analog trunk lines: 1200 ohms at –48 Volts DC	Please remove this clause (This parameter is only applicable to analog/TDM based PABX and not supported by IP Phones or IP PABX. Please remove this clause for IP PABX systems to comply)	Refer to Addendum-1, S.No: 52 dated 08-03-2022.
1002	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Expansion of Extensions: Multiples of 8/16	Please remove this clause (This parameter is only applicable to analog/TDM based PABX that are legacy card based systems, where there was limitation to add extensions. Software based IP PABX do not have such limits on creating extensions as these are software defined. Please remove clause for IP PABX systems to comply)	Refer to Addendum-1, S.No: 53 dated 08-03-2022.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1003	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	No. of lines - ,ISDN PRI lines & Analog / Digital Extensions: 2 PRI, 32 Extensions (IP / Analog / Digital)	Please rephrase this clause to: "No. of lines - ,ISDN PRI lines & IP Extensions: 2 PRI, 60 IP Extensions (Since the solution is IP Based, hence request to rephrase to state IP based extensions Also please increase value from 32 to atleast 50 to ensure 40 IP Phones(Audio or mix of Audio & Video) & 20 Contact Center agents can be supported.)	Refer to Addendum-1, S.No: 54 dated 08-03-2022
1004	Part-2	Employer's Requirement	ER-296	Table 5-17: Hardware requirement of EPABX	Design of EPABX System: Rack mountable	Please rephrase this clause to: "Design of EPABX System: Rack mountable, Software based OS, virtualized" (Please modify clause to support latest IP PABX and to ensure rack mountable and support latest virtualization technology)	Refer to Addendum-1, S.No: 51-54, 107 dated 08-03-2022
1005	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Network: IPv4 & IPv6 support Please include IPv6 support as per latest Government of India Guidelines stating all network components must support IPv6	RFP condition prevails. The bidder may propose equal or better system.
1006	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Display: Minimum 3 inch screen 3 inch display must be bare minimum to ensure that the phones display can support caller ID and show atleast 3 lines within phone	RFP condition prevails. The bidder may propose equal or better system.
1007	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Must support registration to IP PABX over Internet without need of a VPN This is latest feature of IP PABX systems and can be used when connectivity from a remote location. This helps to ensure communication is not impacted due to issue/break in MPLS/WAN network to the DC/DR.	RFP condition prevails. The bidder may propose equal or better system.
1008	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Landline Phone must be from same OEM as IP PABX, however PABX must support third-party Phones if required This is to support tight integration and ensure smooth operations	RFP condition prevails. The bidder may propose equal or better system.
1009	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Video Camera Resolution & Protocol: 720p or better, H.264 Since as per RFP page 355 K2 & Page 357 point K42, Landline Phones need to be Video IP Phones, please do mention the Video Quality & standard requirements	RFP condition prevails. The bidder may propose equal or better system.
1010	Part-2	Employer's Requirement	ER-297	Part 2 Employer's Requirement ER-297 5.18 Landline Phone Table 5-18: Hardware requirement of Landline phone	Additional	Camera must be adjustable tiltable & have physical privacy shutter Since as per RFP page 355 K2 & Page 357 point K42, Landline Phones need to be Video IP Phones. Please add following clause due to following reasons: Video IP Phones need to have Tiltable camera allows to adjust camera Privacy shutter so one can close the shutter when not on video for security reasons.	RFP condition prevails. The bidder may propose equal or better system.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1011	Part-2	Employer's Requirement	ER-297	Table 5-18: Hardware requirement of Landline phone	The system shall support minimum 100 IP Phones with at least 50 concurrent sessions with features like	Please allow this IP PABX requirement to be served by the same IP PABX mentioned in Section 5.17, as this will reduce compleity of managing multiple IP PABX systems (One of the major advantages of software based IP PABX is to expand across geographical location and support mutiple operations on a single IP PABX system. Hence one can simply add all IP Phones, Video IP Phones, Analog & Call Center Phones to a single centralized IP PABX which can be designed to work in distributed architecture)	Refer to Addendum-1, S.No: 116 dated 08-03-2022
1012	Part-2	Employer's Requirement	ER-297	Table 5-19: Hardware requirement of VoIP and EPABX	Table 5-19: Hardware requirement of VoIP and EPABX	Please allow this IP PABX requirement to be served by the same IP PABX mentioned in Section 5.17, as this will reduce complexity of managing multiple IP PABX systems (One of the major advantages of software based IP PABX is to expand across geographical location and support mutiple operations on a single IP PABX system. Hence one can simply add all IP Phones, Video IP Phones, Analog & Call Center Phones to a single centralized IP PABX which can be designed to work in distributed architecture)	Refer to Addendum-1, S.No: 116 dated 08-03-2022
1013	Part-2	Employer's Requirement	ER-299	Workstation for AVL & PIS. Table 5-22: Hardware requirement of Workstation for AVL & PIS	Display ports:- 4 Display Port / mini Display Ports	Desktop computer comes with default 2 DP ports and AMD Radeon RX640, 4 GB, GDDR5 comes with 2mDP & 1DP port. And GPU maximum resolution is 5120 x 2880. with regards to Display ports, kindly amend as total of 4DP/mDP ports.	RFP condition prevails.
1014	Part-2	Employer's Requirement	ER-299	Table 5-23: Hardware requirement of Indoor fixed dome camera at CCC	Lens# Auto IRIS 2.8-10mm	Lens# Auto IRIS 2.8-10mm or better	Refer to Addendum-1, S.No: 115 dated 08-03-2022
1015	Part-2	Employer's Requirement	ER-299	Table 5-23: Hardware requirement of Indoor fixed dome camera at CCC	Wide Dynamic Range True WDR upto 80 db	Wide Dynamic Range True WDR upto 120 db	Refer to Addendum-1, S.No: 115 dated 08-03-2022
1016	Part-2	Employer's Requirement	ER-299	Table 5-23: Hardware requirement of Indoor fixed dome camera at CCC	Casing NEMA 4X / IP-66 rated & IK 09	Casing IP52 rated & IK 10	Refer to Addendum-1, S.No: 115 dated 08-03-2022
1017	Part-2	Employer's Requirement	ER-30	4.1.2 Operation and Maintenance Stage	On the job training for the Employer	Kindly clarify training requirement like number of personal, cost for the training and venue scope.	Refer to Addendum-1, S.No: 43 dated 08-03-2022
1018	Part-2	Employer's Requirement	ER-30	Part2 , Employer Requirements, 4.2.1 Implementation Stage, ER 30	(d) Storage or disposal of the existing equipment after the replacement (signal pole, signal lamp device, equipment's, Gantry etc.)	Kindly specify the location where the disposed materials should be kept in order to calculate the logistics cost.	Employer will arrange necessary space to keep dismantled equipment within CMA area.
1019	Part-2	Employer's Requirement	ER-30	Vol2 5 Schedule of the Project -5 Schedule of the Project	Table 5-1: Contents and Duration	Where SI incurs additional cost due to a delay to the date of completion (need to be agreed) from the date of PO/Work Order caused by Customer Name or their suppliers or their sub-contractors then SI shall be entitled to claim extension of time along with additional delay costs for such delay. Such conditions could be unavailability of site/partial availability of site/delay in getting ROW/delay in getting electrical meter etc.	RFP condition prevails.
1020	Part-2	Employer's Requirement	ER-30	Table 5-1: Contents and Duration		Please confirm on the commisioning of Analytics Software and period of implementation	Details to be discussed during design stage.
1021	Part-2	Employer's Requirement	ER-300	Table 5-23: Hardware requirement of Indoor fixed dome camera at CCC	Power 802.3af PoE (Class 0) and 12VDC/24AC	Power 802.3af PoE (Class 0) or better and 12VDC/24AC	Refer to Addendum-1, S.No: 115 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1022	Part-2	Employer's Requirement	ER-305	ER-305 Equipment Location and Type Chapter 3-2, par. 3	There will be additional 560 onboard ITS devices will be supplied and installed by another agency to be integrated by selected contractor with CAD/AVL, PIS and DMS.	Please clarify whether the bidder is required to supply AVL frontend SW UI for the 560 3rd party ITS devices too or only support integration?	For 560 number onboard software GUI to be supplied and supported by the selected bidder as part of this tender. Only hardware will be provided by another agency. Application/ software UI running in onboard computer shall be provided as part of this contract up to 6000 vehicles without any additional cost. Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakeholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1023	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	6. Contractor shall provide all software and hardware that comprise the overall central system, including the <u>required number of licenses for all users</u> . The CAD/AVL software shall be provided outright with perpetual, royalty free license.	Kindly specify, 1. How many perpetual license is required? 2. What will be total user count for CAD/AVLS solution ? 3. How many concurrent user will be there for CAD/AVLS solution?	1. One perpetual license for CAD/AVL to be provided to MTC. 2. Minimum of 200 users considering 31 depots, control room and central office. 3. Minimum of 200 concurrent users.
1024	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	GPS location data shall be transmitted using a 3G/GPRS connection to the <u>central system software</u> within 1 minute for all the vehicles.	These clauses are contradict each other. Is should be at internal of every 10 seconds or 1 minutes? <u>Please clarify</u> .	Refer to Addendum-1, S.No: 27 dated 08-03-2022
1025	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	The onboard computer will send the location <u>data every 10 seconds</u> or at a user configurable value, which central system software shall capture and process.	These clauses are contradict each other. Is should be at internal of every 10 seconds or 1 minutes? <u>Please clarify</u> .	Refer to Addendum-1, S.No: 28 dated 08-03-2022
1026	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	All applications proposed for City Bus System scope shall be web based applications. Depot Management System - System functional requirements	Based on RFP requirements, we understand that CSCL intends to have solutions which can be accessed through cloud. Kindly confirm if our understanding is correct.	Bidder free to choose both DC and DR on cloud or DC on-prem and DR on cloud.
1027	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	GPS location data shall be transmitted using a 3G/GPRS connection to the <u>central system software</u> within 1 minute for all the vehicles.	We understand that the these clauses are contradict each other. Is should be at internal of every 10 seconds or 1 minutes? Kindly clarify.	Location data at every 10 seconds and shall be configurable.
1028	Part-2	Employer's Requirement	ER-305	Table 4-1: System functional requirement of CAD/AVL	GPS location data shall be transmitted using a 3G/GPRS connection to the central system software within 1 minute for all the vehicles.	3G/GPRS are discontinued standards, please change to 4G.	Refer to Addendum-1, S.No: 27 dated 08-03-2022
1029	Part-2	Employer's Requirement	ER-305	GENERAL	The CAD/AVL system shall transmit the location data every 10 seconds to the probe processing module of Integrated Traffic Management System (ITMS) of Chennai Traffic Information and Management System Command Control Centre (TIMS-CCC) with suitable data format for the module.	Please specify what is considered as "suitable data format" for transmitting the location data.	Both GTFS and GTFS-Realtime
1030	Part-2	Employer's Requirement	ER-306	ER-306 System functional requirement of CAD/AVL Chapter 3-2, Point no.25	Two-way voice communication from Vehicle to CCC: All the calls shall land in EPABX/VoIP or similar Employer approved system so that multiple calls at CCC can be handled by the dispatchers.	Please clarify whether the bidder is required to provide speakers and mic for driver Functionality is demanded but the devices are not in BOQ scope and it is not clear if driver speakers are already on the buses.	Yes, speaker and mic to be provided by the bidder.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1031	Part-2	Employer's Requirement	ER-306	ER-306	System Functional Requirement Table 4-1: System functional requirement of CAD/AVL 30. CAD/AVL system shall be capable of sharing the bus probe data in GTFS format with the probe processing module of Integrated Traffic Management System (ITMS) of Chennai Traffic Information and Management System Command Control Centre (TIMS-CCC). The bus probe data shall contain the following data items as minimum. (a) Minimum Items to be shared ✓ Harsh Braking ✓ Vehicle Health & Monitoring parameter	Pls provide parameters involved in VHMD; also we assume all bus can provide this data on CAN interface	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakeholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1032	Part-2	Employer's Requirement	ER-306	ER-306	System Functional Requirement Table 4-1: System functional requirement of CAD/AVL 33. The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	We request you to kindly allow Google Maps or HereMaps or other Maps	Any GIS maps from reputed OEM will be suitable to propose.
1033	Part-2	Employer's Requirement	ER-306	Volume-2 Clause 4.1 System Functional Requirement of CAD/AVL, Page- 310 (ER-306), Point-28	CAD/AVL system shall interface with other ITS systems mentioned below and in the document. Contractor need to share the relevant data generated from CAD/AVL and DMS with other systems mentioned below and receive & integrate with data that are required during the design stage. • Incident Management System • Human Resource Management System • Fare collection system • Route rationalization • Maintenance management system • Workshop management system	We understand that these applications are already deployed in bidders' scope & only integration is required. Please provide the details of these applications to work out the exact requirement for the proposed solution.	The bidder shall estimate the scope, since most of the points are part of the bidder solution. Scope not covered should be estimated using industry best practices.
1034	Part-2	Employer's Requirement	ER-307	ER-307	System Functional Requirement Table 4-1: System functional requirement of CAD/AVL 36. The client shall be able to develop additional overlay map layers to the external source map that shall include polygons (e.g., municipal boundaries, fare zones), lines (e.g., route traces) and points (e.g., landmarks, transfer locations, time-points, stops), with the color, shape and thickness being selectable.	We request you to kindly allow Google Maps or HereMaps or other Maps	Any GIS maps from reputed OEM will be suitable to propose.
1035	Part-2	Employer's Requirement	ER-307	Table 4-1: System functional requirement of CAD/AVL	The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	What base map needs to be developed. Predominantly, base maps are from Google, Here, ESRI, government agencies. Could you please elaborate further on this requirement	The selected bidder shall assess to arrange required data and GIS Platform from reputed OEM.
1036	Part-2	Employer's Requirement	ER-307	ER-307 / Point no 33	The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	we understand that GIS maps for Chennai City has to be develop by Bidder. Please including this item in BoQ (Break Down of Price Schedules)	Bidder free to add additional BOQ in Break Down of Price Schedule No. 2 and 3 as required
1037	Part-2	Employer's Requirement	ER-307	ER-307	Map shall have a tool to measure the distance through mouse clicks.	Need more clarity on this. Distance to measure what, please elaborate use case	Distance measurement on Map
1038	Part-2	Employer's Requirement	ER-307	Pageno#82 33.The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally		How many users are envisaged for creating the basemap and the source data for basemap creation?	Please refer to Section-VII of Part-2
1039	Part-2	Employer's Requirement	ER-307	Table 4-1: System functional requirement of CAD/AVL	The Bidder shall develop a GIS based base map for the project at a scale of at least 1:2500 or better resolution operationally.	For the development of GIS base map at a scale of 1:2500, high resolution satellite images of spatial resolution of 0.6 m is required, Who will going to provide/procure the satellite data and What is the total study area?	There is no requirement of satellite image.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1040	Part-2	Employer's Requirement	ER-308	ER-308 / 51	Based on configurable thresholds, the system shall use the observed headways to report to dispatcher using a real-time alert when headways are shorter or longer than desired range of headway.	Need more clarity on this .please explain and elaborate on the use case	CAD/AVL feature on Dispatcher point of view.
1041	Part-2	Employer's Requirement	ER-308	ER-308 / 52	The system shall highlight the vehicle IDs of those vehicles operating with out of tolerance headway, using tabular and map displays to indicate the current headway adherence status.	Need more clarity on this .please explain and elaborate on the use case	CAD/AVL feature on Dispatcher point of view.
1042	Part-2	Employer's Requirement	ER-308	ER-308 / 53	The tabular display entries and the map display symbols for these vehicles shall use distinct and configurable colour codes for short headways and long headways status	Need more clarity on this .please explain and elaborate on the use case	CAD/AVL feature on Dispatcher point of view.
1043	Part-2	Employer's Requirement	ER-308	ER-308 / 62	All the alerts shall meet MTC business requirements. Various alert types as explained below, shall be discussed and finalized during design stage.	Need more clarity on this .How do we estimate on this total effort	This is related to alert functionality
1044	Part-2	Employer's Requirement	ER-308	ER-308 / 66	Alert window shall have option to show recent alerts for specified preceding time, that entire day or for preceding 3 months.	Need more clarity on this .This can be provided in a report format for each vehicle	This is related to alert functionality
1045	Part-2	Employer's Requirement	ER-309	ER-309 / 81	All incoming and outgoing data shall be stored for retrieval, analysis, display and printing.	Need more clarity on this .Duration needs to be specified.	Two years data shall be accessible
1046	Part-2	Employer's Requirement	ER-309	ER-309 / 82	The system shall allow all such data to be retrieved, even if it has been archived.	Need more clarity on this .Archival period, of the historical data needs more inputs	Archival period: 2 Years and Historical period: 3 years
1047	Part-2	Employer's Requirement	ER-309	ER-309 / 83	This historical information shall include all reported and derived data for vehicles (including at minimum the date/time, vehicle, schedule, route, trip, location data, schedule adherence data, headway adherence data, station/stop arrival predictions); and all central software user logons and logoffs.	Need more clarity on this .Archival period, of the historical data needs more inputs	Archival period: 2 Years and Historical period: 3 years
1048	Part-2	Employer's Requirement	ER-309	ER-309 / 84	The system shall include a means of archiving transaction data, or restoring data from an archive, while the system is in operation	Need more clarity on this .Archival period, of the historical data needs more inputs on transactional data	Archival period: 2 Years and Historical period: 3 years
1049	Part-2	Employer's Requirement	ER-31	5.2 Tentative Schedule		What is the overall Implementation Timelines Envisaged for BI & Analytics Platform?	RFP condition prevails.
1050	Part-2	Employer's Requirement	ER-310	ER-310 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 96	Multiple configurable views using the GUI shall be available for the dispatcher, available for retrieval through a dropdown list.	Please specify the expected types of views.	Each user able to save different configurable GUI views (application) for easy use of operation.
1051	Part-2	Employer's Requirement	ER-310	ER-310 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 97	The hover features should be present giving an indication of the main vehicle movement characteristics in real-time, which shall include at minimum the current speed, distance travelled, next nearest stop, delay if any, trip number etc. These parameters should be also configurable easily, to display system features as required by the Employer.	Please confirm our understanding is correct: in AVL GUI table view, when user hovers over a bus, configurable parameters should be displayed in the hover baloon? If not, please clarify.	Yes. Your understanding is correct.
1052	Part-2	Employer's Requirement	ER-310	Table 4-1: System functional requirement of CAD/AVL	The system shall use the real time location and schedule adherence data to create a continuously updated table, XML data feed and GTFS real-time data stream of the last reported location for all vehicles and the next arrival predictions within the Employer's configurable upcoming time window for all stations/stops	XML is an outdated standard that would add unnecessary complexity to integration and usability, please change to the industry-standard JSON format for data feed.	Refer to Addendum-1, S.No: 120 dated 08-03-2022
1053	Part-2	Employer's Requirement	ER-310	Table 4-1: System functional requirement of CAD/AVL	The system shall provide this data table and XML data feed and GTFS real-time data feed to which the Employer and designated third parties have the right to perpetual and royalty- free access, for the purposes for integration with future Passenger Information System (PIS) or other public information methods and importing data into the long term database.	XML is an outdated standard that would add unnecessary complexity to integration and usability, please change to the industry-standard JSON format for data feed.	Refer to Addendum-1, S.No: 122 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1054	Part-2	Employer's Requirement	ER-310	Table 4-1: System functional requirement of CAD/AVL	The Bidder shall also provide a data dictionary and Entity Relationship Diagram for the data tables and XML schema documentation.	XML is an outdated standard that would add unnecessary complexity to integration and usability, please change to the industry-standard JSON format for data feed.	Refer to Addendum-1, S.No: 121 dated 08-03-2022
1055	Part-2	Employer's Requirement	ER-310	ER-310 / 92	All screens with paging data shall open and populate with the initial data in 3 seconds and thereafter page updates shall be retrieved within 1 second.	Need more clarity on this .Dependency on type of connectivity as well	RFP condition prevails.
1056	Part-2	Employer's Requirement	ER-310	Table 4-1: System functional requirement of CAD/AVL	All screens with paging data shall open and populate with the initial data in 3 seconds and thereafter page updates shall be retrieved within 1 second.	Response to fetch the initial data depends on Internet Connectivity, Network used by edge device. Secondly, It also depend upon PC configuration and other third party software related parameters may create hassle in between. Hence, we request you to amend this clause as, "All screens with paging data shall open and populate with the initial data in <u>3 seconds</u> 10 seconds and thereafter page updates shall be retrieved within <u>1 second</u> . 5 seconds"	RFP condition prevails. Network connectivity also part of bidder's scope.
1057	Part-2	Employer's Requirement	ER-311	Table 4-1: System functional requirement of CAD/AVL	The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption.	Request department to consider a proper encryption and key management solution along with backup solution to protect your data at Rest and Data in Motion.	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
1058	Part-2	Employer's Requirement	ER-311	Table 4-1: System functional requirement of CAD/AVL SYSTEM SECURITY REQUIREMENTS	The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption.	Would a proper encryption and key management solution along with backup solution to protect your data at Rest and Data in Motion needs to be considered.	RFP Condition prevails. However the bidder shall take into consideration for necessary security measures in order to prevent any security threat
1059	Part-2	Employer's Requirement	ER-311	Table 4-1: System functional requirement of CAD/AVL	The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption. Would a proper encryption and key management solution along with backup solution to protect your data at Rest and Data in Motion needs to be considered.	We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate) The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust. Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection. Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection. Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy	RFP condition prevails. However bidder can considered adequate security measures.
1060	Part-2	Employer's Requirement	ER-311	Table 4-1: System functional requirement of CAD/AVL	SYSTEM SECURITY REQUIREMENTS-The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption.	The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption. Justification: Request department to consider a proper encryption and key management solution along with backup solution to protect your data at Rest and Data in Motion. We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate) The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1061	Part-2	Employer's Requirement	ER-311	SYSTEM SECURITY REQUIREMENTS	The system security shall provide features to maintain data integrity, including error checking, error monitoring, error handling, and encryption.	<p>Would a proper encryption and key management solution along with backup solution to protect your data at Rest and Data in Motion needs to be considered.</p> <p>We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate)</p> <p>The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust.</p> <p>Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection.</p> <p>Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy</p>	RFP condition prevails.
1062	Part-2	Employer's Requirement	ER-313	MIS REPORTS REQUIREMENTS (BUSINESS INTELLIGENT APPLICATION), Pg No 317	The Contractor shall be able to collect all the required data from the onboard computer to generate the required PIS display data and MIS reports.	<p>Request you to please confirm the expected volumes which would be required for MIS reports.</p> <p>Expected nos. of users and concurrent users who would access the reports.</p>	Data volume to be considered as per proposed solution by the bidder and concurrent user may be at least 200 internal MTC users.
1063	Part-2	Employer's Requirement	ER-313 ER-340	Table 4-1: System functional requirement of CAD/AVL Table 4-1: Functional requirement of Depot Management System	All reports must use standard reporting tools similar to Apache Spark, Hadoop, IBM IoT framework, Microsoft Azure, and have the ability to export data into file formats that can be exported to and edited with standard office software (e.g., Microsoft Word and Excel, Adobe Acrobat .PDF)	As per our understanding, this requirement is reference to visualization and reporting tool provides a in-memory based features for faster visualization and provides capability to export data into various formats such as Excel, PDF etc. Please confirm	Refer to Addendum-1, S.No: 31 & 32 dated 08-03-2022
1064	Part-2	Employer's Requirement	ER-314	MIS REPORTS REQUIREMENTS (BUSINESS INTELLIGENT APPLICATION), Pg No 318	The Central System shall provide sufficient summarized and detailed data, including features to generate standard reports based on pre-established criteria, as well as as-required reports based on a user-definable set of search criteria.	Please confirm the requirement is referring to set of defined standard reports & adhoc reports which would be available to users to views based on their defined roles.	Yes. Your understanding is correct.
1065	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	The onboard computer shall send the current location report as determined by the GPS receiver over the 3G/GPRS network to the Central System, at an interval specified by the Employer. The Employer shall be able to choose a location report interval, with a minimum of 10 seconds.	3G/GPRS are discontinued standards, please change to 4G.	Refer to Addendum-1, S.No: 28 dated 08-03-2022
1066	Part-2	Employer's Requirement	ER-316	ER-316 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 181	Contractor shall provide connectivity between the onboard computer and the existing vehicle CANbus to enable the onboard computer to monitor CANbus messages.	Will the bus EOM provide access to CAN bus?	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1067	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	• BDC interface shall mainly be graphical and shall support both the language <u>Tamil and English</u> to be selected between by crew at their convenience.	Regional language such as Tamil will not have user friendly usage interface. Hence, we request authority to amend this clause as, "• BDC interface shall mainly be graphical and shall support both the language <u>Tamil and</u> English to be selected between by crew at their convenience."	RFP condition prevails.
1068	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	• BDC shall provide basic map of Chennai city and Rural. Using that crew can see the vehicle location.	The purpose of BDC in ITS Solution is to get robust touch screen for driver which can withstand in bus environment and operation condition. It is also not advisable and widely accepted to have basic map on BDC. Hence, we request authority to delete this clause.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1069	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	180. Interface shall be developed by the Contractor to integrate the SCU and BDC with central system software to display information in <u>Tamil or</u> in simple enough graphical form that the Crew can comprehend it with minimal training.	Regional language such as Tamil will not have user friendly usage interface. Hence, we request authority to amend this clause as, " 180. Interface shall be developed by the Contractor to integrate the SCU and BDC with central system software to display information in <u>Tamil or English</u> in simple enough graphical form that the Crew can comprehend it with minimal training."	RFP condition prevails.
1070	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	• BDC interface shall mainly be graphical and shall support both the language <u>Tamil and English</u> to be selected between by crew at their convenience.	Since the regional language (sucha as Tamil) user interface is not user friendly, we request to keep only English language.	RFP condition prevails.
1071	Part-2	Employer's Requirement	ER-316	Table 4-1: System functional requirement of CAD/AVL	180. Interface shall be developed by the Contractor to integrate the SCU and BDC with central system software to display information in <u>Tamil or</u> in simple enough graphical form that the Crew can comprehend it with minimal training.	Since the regional language (sucha as Tamil) user interface is not user friendly, we request to keep only English language.	RFP condition prevails.
1072	Part-2	Employer's Requirement	ER-317	ER-317 Chapter 3-2 4.1.187 System functional requirement of CAD/AVL	Currently MTC is planning to buy additional buses which will have UBS II specifications similar to SCU and BDC mentioned in this document. Selected bidder is expected to integrate along with this scope of work	These new buses will be having pre fitted devices installed as per UBSII & bidder has to intgrate that devices with AVL system. Please confirm.	Yes. Your understanding is correct.
1073	Part-2	Employer's Requirement	ER-317	ER-317 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 185	In-bus route boards shall display Expected Time of Departure (ETD) while buses standing at the terminals.	Do we understand correctly that Departure time is PREDICTED as opposed to planned? Please clarify why the buses wouldn't leave the terminal at planned/scheduled times.	RFP condition prevails. In case buses running ontime will have planned scheduled time of departure (STD) which will be same as ETD. If the bus is running late then ETD shall be time of arrival + layover time. Further input will be discussed during design stage.
1074	Part-2	Employer's Requirement	ER-317	ER-317 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 186	Currently safe city project being implemented in MTC for 2500 buses. Selected bidder is expected to integrate Onboard Computer (SCU) with Mobile NVR installed in the bus to transfer the Video data to control centre where Video Management System is running.	Is the Ethernet interface available on the Mobile NVR unit? Under which protocol is the integration planned?	Refer to Addendum-1, S.No: 132 dated 08-03-2022
1075	Part-2	Employer's Requirement	ER-317	ER-317 System functional requirement of CAD/AVL Chapter 3-2, par. 4, req. no. 187	Currently MTC is planning to buy additional buses which will have UBS II specifications similar to SCU and BDC mentioned in this document. Selected bidder is expected to integrate along with this scope of work.	How many vendors are planned for integration? We understand there will be 560 devices, but there is no specification of how many vendors will supply this pool of devices.	SCU and BDU specifications will be as per UBS II or equivalent from different vendors. However application / software running in onboard computer shall be provided as part of this contract up to 6000 vehicles without any additional cost. Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1076	Part-2	Employer's Requirement	ER-317	Table 4-1: System functional requirement of CAD/AVL	Single Control Unit shall be capable of storing at least 8000 schedules in it.	Please explain what is meant by "storing at least 8000 schedules".	Refer to Addendum-1, S.No: 124 dated 08-03-2022
1077	Part-2	Employer's Requirement	ER-317	Table 5-1: Hardware requirement of Onboard ITS device (SCU & BDC)	Operating system: embedded Windows/Linux with programming software (Windows 7 or latest at the time of calling the tenders)	Please confirm Android OS as the new standard for automotive applications is acceptable.	Refer to Addendum-1, S.No: 23 dated 08-03-2022
1078	Part-2	Employer's Requirement	ER-317	ER-317 Table 5-1: Hardware requirement of Onboard ITS device (SCU & BDC)	In built /external two channel amplifier minimum 10 Watts rms each suitable for 4 ~8 Ohm impedance with input for external microphone	Please confirm an external amplifier unit is acceptable.	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1079	Part-2	Employer's Requirement	ER-317	Table 4-1: System functional requirement of CAD/AVL	Single Control Unit shall be capable of storing at least 8000 schedules in it.	The CAD/AVL central software will have such schedules data. Information can be pushed by central software to SCU as required. Additionally, it is not feasible as per industrial standards to store such large schedule date in SCU. Hence, we request you to delete this clause.	RFP condition prevails. The details to be discussed during design stage.
1080	Part-2	Employer's Requirement	ER-317	Table 5-1: Hardware requirement of Onboard ITS device (SCU & BDC)	n Interface protocols: as specified elsewhere in this document	Please specify protocols required for the said clause	No proprietary protocols shall be used, if any proprietary protocol used then source code and all data, communication, etc to be shared with Employer without any additional cost. Preferably all the communication and data exchange mechanism shall be open standards.
1081	Part-2	Employer's Requirement	ER-317	Table 4-1: System functional requirement of CAD/AVL	Contractor need to develop and customize onboard computer application to support the integration of following components without any additional cost as on when required. • Vehicle Health Monitoring and Diagnostic device using CAN bus protocol	We understand vehicle health parameters will be provided based on compatibility on respective vehicle and data available/shared by vehicle manufacturer as in many case vehicle is not capable to provide all such parameters and/or vehicle health parameter is confidential data (like engine parameter etc.) which is not shared by many vehicle manufacturer is not sharing such parameters. Additionally, It support and data required from vehicle manufacturer will be made available by MTC/CSSL. <u>Please confirm.</u>	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakeholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1082	Part-2	Employer's Requirement	ER-317	Table 4-1: System functional requirement of CAD/AVL	Contractor need to develop and customize onboard computer application to support the <u>integration of following components</u> without any additional cost as on when required. • Existing Variable Message Boards installed in Chennai	Kindly provide Make & Model and Quantity for existing Variable Message Boards(VMDs) and make & model of all other hardware components with contractor need to integrate the system. Also, support if required from existing hardware manufacturer will be facilitate by the authority. <u>Please confirm.</u>	API will be provided to successful bidder to interface with VMB application.
1083	Part-2	Employer's Requirement	ER-317	ER-317	Single Control Unit (SCU) / Bus Driver Console (BDC) 184. Contractor need to develop and customize onboard computer application to support the integration of following components without any additional cost as on when required. • In-bus PIS board • In-bus Surveillance and analytics • Vehicle Health Monitoring and Diagnostic device using CAN bus protocol • In-bus announcement system • In-bus Route boards • Existing Variable Message Boards installed in Chennai	This can be achievable only if existing vendors can make modifications (if required) in their devices. So request employer's support for the same.	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakeholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate. Refer to Addendum-1, S.No: 127 dated 08-03-2022
1084	Part-2	Employer's Requirement	ER-317	Table 4-1: System functional requirement of CAD/AVL	Contractor need to develop and customize onboard computer application to support the integration of following components without any additional cost as on when required. • Vehicle Health Monitoring and Diagnostic device using CAN bus protocol	We understand vehicle health parameters will be provided based on compatibility on respective vehicle and data available/shared by vehicle manufacturer as in many case vehicle is not capable to provide all such parameters and/or vehicle health parameter is confidential data (like engine parameter etc.) which is not shared by many vehicle manufacturer is not sharing such parameters. Additionally, It support and data required from vehicle manufacturer will be made available by MTC/CSSL. Please confirm. Vehicle Health monitoring and diagnostic have dependencies on vehicle manufacturer which often creates delay for functionalities. Hence, we request authority that such CAN bus protocol integration should not link with System Go-Live. Please confirm.	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakeholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1085	Part-2	Employer's Requirement	ER-317	Table 4-1: Sr.No. 184	Contractor need to develop and customize onboard computer application to support the integration of following components without any additional cost as on when required.	How many variant/make of different componets are currently there? When shall be the protocol document of all the component provided?	Onboard computer (SCU and BDC) will be provided by the different agency as per UBS II specification. However onboard software GUI to be supplied and supported by the selected bidder as part of this tender.
1086	Part-2	Employer's Requirement	ER-317			Vehicle Health monitoring and diagnostic have dependencies on vehicle manufacturer which often creates delay for functionalities. Hence, we request authority that such CAN bus protocol integration should not link with System Go-Live. Please confirm.	Devices, Required setup to integrate with installed devices, Protocol and Integration support by MTC along with respective stakholder shall be provided at least 6 months before the Commissioning test. In case if the required integration and support is not provided then selected bidder may proceed for Commissioning test and taking over certificate.
1087	Part-2	Employer's Requirement	ER-318	Table 5-1: Hardware requirement of Onboard ITS device (SCU & BDC)	"Technical Specification: BDC a. Display i Size 8" diagonal minimum ii Full color graphic TFT-640 x 480 dots minimum, capable of showing minimum 10 lines in English. iii Viewing angle (horizontal) 60°/75° (right/left)/ (vertical) 60°/75° (up and down)"	Is it possible to propose a 7" BDC device that is compliant with all other requirements?	RFP condition prevails.
1088	Part-2	Employer's Requirement	ER-319	7 Installation Requirement	During Operation & Maintenance stage contractor require to <u>uninstall and reinstall</u> the onboard device as required by MTC.	The clause is very open in nature. We request authority to provide capping limit as such clause will restrict the participation. Kindly amend this clause as, "During Operation & Maintenance stage contractor require to uninstall and reinstall the onboard device as required by MTC <u>up to 5% at free of cost any thing beyond this will be considered as Change Request and can be discussed with the authority and successful contractor"</u>	Refer to Addendum-1, S.No: 24 dated 08-03-2022
1089	Part-2	Employer's Requirement	ER-319	7 Installation Requirement	During Operation & Maintenance stage contractor require to <u>uninstall and reinstall</u> the onboard device as required by MTC.	Kindly provide capping limit for this clause and it can be amended as, "During Operation & Maintenance stage contractor require to uninstall and reinstall the onboard device as required by MTC <u>up to 5% at free of cost any thing beyond this will be considered as Change Request and can be discussed with the authority and successful contractor"</u>	Refer to Addendum-1, S.No: 24 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1090	Part-2	Employer's Requirement	ER-32	6.1.2 Consortium	The Prime Contractor of the consortium shall be fully responsible for any fault of the other constituent firms of the consortium. The Prime Contractor shall undertake the entire obligations under the Contract to the Employer just as though it had executed the Contract as one single Contractor for the Works.	<p>As per Part-2 6.1.2 Consortium & 6.1.3 Joint Venture clause, responsibility of the Prime contractor is already defined where "The Prime Contractor of the consortium shall be fully responsible for any fault of the other constituent firms of the consortium"</p> <p>Apart from the same A Joint Venture or Consortium Agreement between the parties are exclusive terms and conditions agreed upon between them for the performance of respective scope of work therein.</p> <p>It is in the best interest of the Employer to hold only Lead Bidder / Lead Partner responsible for the non-performance of the work instead of getting into the genuineness of the dispute between the JV Partners / Consortium Members. Moreover, Lead Bidder / Lead Partner will be more cautious and diligent towards the performance of the work since he has undertaken the liability of the JV Partners / Consortium Members. Hence we request to amend the clause as follow</p> <p>Hence we request to amend the clause of Part-3 Condition of Contract and Contract Forms, 1.14 Joint Several Liability as follow:</p> <p>1.14 Joint Several Liability If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons: (a) these persons <u>The Lead Bidder / Lead Member / Prime Contractor shall be deemed to be jointly and severally, solely liable</u> to the Employer for the performance of the Contract;</p>	Refer to Addendum-1, S.No: 133 dated 08-03-2022
1091	Part-2	Employer's Requirement	ER-32	Part-2 6.1.3 Joint Venture	The Leader of the joint venture shall act on the execution of the obligations under the Contract just as the Prime Contractor under the case of consortium described above. The representative officers of such joint venture company shall concurrently be senior members of the Prime Contractor. In case any of the joint venture company become bankrupt or insolvent, or have a receiving order made against it, or compound with his creditors, or be a corporation commencing to be wound up, or be under any situation the Employer would feel uneasy to leave the execution of the Contract to their hands, then the Leader shall take over the entire obligations independently under the Contract just as though it were the single Contractor under the Contract.		No query provided.
1092	Part-2	Employer's Requirement	ER-33	ER-33 6.2 Contractor's Personnel	In case of any variation or change in the manpower / person proposed in the Technical Proposal and manpower / person deployed upon successful award of the works, minimum 20% remuneration of the proposed role for the total contract period shall be deducted. The substitute proposed by the Contractor must have more experience than the proposed candidate in all respect (no. of years of relevant experience, no. of similar projects executed, qualification of the replacement candidate, etc.).	Request you to remove this clause as retaining a personnel under various unavoidable circumstances such as separation, death sickness, Willingness of the personnel for deployment at the project site etc. is beyond the control of the Bidder and as per this clause the bidder gets penalized for such unforeseen conditions. Moreover, since the RFP conditions define the qualification criteria for these personnels, the bidder here undertakes to provide the substitute with equivalent or more experience than the proposed candidate. So request you to not levy any penalty for the same.	<p>RFP condition prevails.</p> <p>This applies to O&M phase for section 4 and section 5.</p>
1093	Part-2	Employer's Requirement	ER-33	Part 2,6.2, pg no 37	In case of any variation or change in the manpower / person proposed in the Technical Proposal and manpower / person deployed upon successful award of the works, minimum 20% remuneration of the proposed role for the total contract period shall be deducted.	The required remuneration asked is very high and is not generally asked in similar projects of such high volume where Contractor is investing huge amount of money, hence we kindly request to please remove this clause.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1094	Part-2	Employer's Requirement	ER-33	Part2 , Employer Requirements,6.2 Contractor's Personnel, ER 33	In case of any variation or change in the manpower / person proposed in the Technical Proposal and manpower / person deployed upon successful award of the works, minimum 20% remuneration of the proposed role for the total contract period shall be deducted.	Please delete this clause.	RFP condition prevails.
1095	Part-2	Employer's Requirement	ER-33	Part 2 Er 33	In case of any variation or change in the manpower / person proposed in the Technical Proposal and manpower / person deployed upon successful award of the works, minimum 20% remuneration of the proposed role for the total contract period shall be deducted. The substitute proposed by the Contractor must have more experience than the proposed candidate in all respect (no. of years of relevant experience, no. of similar projects executed, qualification of the replacement candidate, etc.).	The bidder requests the following modifications: In case of any variation or change in the manpower / person proposed in the Technical Proposal and manpower / person deployed upon successful award of the works, the substitute proposed by the Contractor must have same / more experience than the proposed candidate in all respect (no. of years of relevant experience, no. of similar projects executed, qualification of the replacement candidate, etc.).	RFP condition prevails.
1096	Part-2	Employer's Requirement	ER-33	6.2 Contractor's Personnel	6.2 Contractor's Personnel The substitute proposed by the Contractor must have more experience than the proposed candidate in all respect (no. of years of relevant experience, no. of similar projects executed, qualification of the replacement candidate, etc.).	Any candidate proposed or substitute should meet asked criteria.We request to change as below The substitute proposed by the Contractor must have similar experience than the proposed candidate in all respect (no. of years of relevant experience, no. of similar projects executed, qualification of the replacement candidate, etc.).	RFP condition prevails.
1097	Part-2	Employer's Requirement	ER-330	Table 4-1: Functional requirement of PIS	Content can include –Transportation Information (Bus schedules, alerts, etc.), safety information, localized community information, GPS driven localized data, Environmental data, <u>advertising (still images, animation, video)</u> , tourist information.	The PIS display asked under the 'Passenger Information System (PIS) scope of work' are LED based Line Boards (2 lines, 4 lines and 10 lines). In such PIS display, advertisement such as still images, animation, video can not be possible. Only text based advertisement can be possible. Hence, we request you to amend this clause as, "Content can include –Transportation Information (Bus schedules, alerts, etc.), safety information, localized community information, GPS driven localized data, Environmental data, <u>advertising (still images, animation, video-text based)</u> , tourist information." "13 PIS shall support alphanumeric, video, image, animations and graphics. "	Refer to Addendum-1, S.No: 25 dated 08-03-2022
1098	Part-2	Employer's Requirement	ER-330	Part 2, 4 System Functional Requirement Table 4-1: Functional requirement of PIS	13 PIS shall support <u>alphanumeric, video, image, animations and graphics.</u>	Hence, we request you to amend this clause as, "Content can include –Transportation Information (Bus schedules, alerts, etc.), safety information, localized community information, GPS driven localized data, Environmental data, advertising (text based), tourist information." "13 PIS shall support alphanumeric content"	RFP condition prevails.
1099	Part-2	Employer's Requirement	ER-331	ER-331 Chapter 3-3 4.1.44 Functional requirement of PIS	The mobile application/website shall have at least following features both in Tamil and English : • Identify nearest parking location • Integration with other mode of transport	• If Integration with Parking management system is required. Please provide the details. • Please specify the mode of transport which is required to be integrated.	Mobile app shall have feature to identify parking location. Such parking location details will be provided to the successful bidder during design stage. MTC buses along with Metro train and Sub-urban train, parking and as required by Employer during design stage.
1100	Part-2	Employer's Requirement	ER-331	Table 4-1: Functional requirement of PIS	The Contractor shall be responsible for integration and setup of the website and <u>source code</u> of the website shall be submitted by the Contractor.	Source code is the intellectual property of the bidder (in our case, solution provider) or Subcontractors/manufacturers. Perpetual license of software application can be property of authority. Hence, we request you to amend this clause as, "The Contractor shall be responsible for integration and setup of the website and <u>source code perpetual license</u> of the website shall be submitted by the Contractor." " <u>Source code perpetual license</u> of the Mobile application shall be submitted by the Contractor"	Since continuous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1101	Part-2	Employer's Requirement	ER-331	Table 4-1: Functional requirement of PIS	The mobile application/website shall have at least following features both in Tamil and English : • Smart card recharge	We assume Mobile Application will be only worked as Interface to charge the smart card. Backend functionalities such as top-up data etc. will be taken care by AFCS (i.e., Fare Collection System) solution provider. <u>Please confirm.</u>	Yes. Your understanding is correct.
1102	Part-2	Employer's Requirement	ER-331	Table 4-1: Functional requirement of PIS	The mobile application/website shall have at least following features both in Tamil and English : • <u>Vehicle location finder</u>	Please clarify, Is this for all buses which is under the scope of work.	Yes. Your understanding is correct.
1103	Part-2	Employer's Requirement	ER-331	Table 4-1: Functional requirement of PIS	The mobile application/website shall have at least following features both in Tamil and English : • <u>Display ETA for the selected bus station</u> , buses arrive in next 15 minutes	ETA can't e derived for bus station. We understand that ETA for particular bus station will be provided for which buses arrive in next 15 minutes on that particular bus station and buses having operation route at that periocular bus station. <u>Please confirm if our understanding is correct.</u>	RFP condition prevails. Set of buses routes will pass through few bus station. In such scenario ETA to be displayed at bus stations.
1104	Part-2	Employer's Requirement	ER-331	Part 2, Employee Requirement, 4 System Functional Requirement	35. The Contractor shall be responsible for integration and setup of the website and source code of the website shall be submitted by the Contractor	As per our understanding, the source code with respect to customization required in the RFP, will be shared by the contractor. Kindly confirm	Since continous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
1105	Part-2	Employer's Requirement	ER-331	ER-331	Mobile Application The mobile application/website shall have at least following features both in Tamil and English : Smart card recharge Integration with other mode of transport Source code of the Mobile application shall be submitted by the Contractor.	(1) Source code cannot be shared as it is intellectual property of the solution provider; (2) Smart card re-charge can be done if APIs are provided to update the Smart cards (3) Pls clarify who will be the payment gateway service provider (4) Expand on scope of work in Integration with other transport (5) Please provide details of Smart card - if it is NCMC card, Chennai Metro Card, etc	1. Since continous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor. 2. Yes, your understanding is correct 3. Selected bidder need to consider payment gateway 4. Metro and sub-urban trains to be integrated 5. NCMC standard
1106	Part-2	Employer's Requirement	ER-331	ER-331	PIS displays shall be managed locally without workstation or server.	Please provide clarity on this point. The PIS display has to fetch data from the server	PIS shall have inbuilt processor and memory and communicated through GPRS enabled SIM card.
1107	Part-2	Employer's Requirement	ER-331	Table 4-1: Functional requirement of PIS	The mobile application/website shall have at least following features both in Tamil and English : • Smart card recharge	We assume Mobile Application will be only worked as Interface to charge the smart card. Backend functionalities such as top-up data etc. will be taken care by AFCS (i.e., Fare Collection System) solution provider. Kindly clarify.	Bidder need to provide feature in Mobile application that user is able to recharge the smart card.
1108	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	<u>Source code</u> of the Mobile application shall be submitted by the Contractor	Source code is the intellectual property of the bidder (in our case, solution provider) or Subcontractors/manufacturers. Perpetual license of software application can be property of authority. Hence, we request you to amend this clause as, "The Contractor shall be responsible for integration and setup of the website and <u>source code perpetual license</u> of the website shall be submitted by the Contractor." " <u>Source code perpetual license</u> of the Mobile application shall be submitted by the Contractor"	Since continous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
1109	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	• Provide option for commuter to share the photos taken in case of any problem they found on the bus service limited to project jurisdiction (Chennai)	Please clarify, Is it similar like Grievances redressal system?	Yes. Your understanding is correct.
1110	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	Notification on the predefined alerts	Please clarify on below point to understand the scope of work, Which types of alerts we are required by authority in detailed manner?	Commuter able to set his/her prefrrd route/schedule in their mobile app.
1111	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	• Identify nearest parking location	Please clarify on below points, From which place nearest parking location is to be derived? Whether is it from my current location or any searched bus station?	Any location that is placed on map
1112	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	• Integration with other mode of transport	We understand it will be integration only using APIs to existing/new transport solution authority may have during entire contract period. Any thing beyond APIs share and API integration will be considered in Change Request.	Integration using API to be considered and no change request will be accepted.
1113	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	• Provide option for commuter to share the photos taken in case of any problem they found on the bus service limited to project jurisdiction (Chennai)	Kindly confirm, Is it similar like Grievances redressal system?	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1114	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	Notification on the predefined alerts	Kindly clarify the type of alert required by the authority.	Commuter able to set his/her preferred route/schedule in their mobile app.
1115	Part-2	Employer's Requirement	ER-332	Table 4-1: Functional requirement of PIS	• Identify nearest parking location	From which place nearest parking location is to be derived? Whether is it from my current location or any searched bus station? Kindly clarify.	Any location that is placed on map
1116	Part-2	Employer's Requirement	ER-333	ER-333	Table 5-1: Hardware requirement of LED display board 3. Luminance Class: L-3 as per EN 12966	Request to change to BIS standards - not all conditions of EN12966 is relevant for Chennai conditions	RFP condition prevails.
1117	Part-2	Employer's Requirement	ER-333	Table 5-1: Hardware requirement of LED display board	Display Area - Type A, Type B, Type C displays	Please mention the pitch between the LEDs in the display units - as this has impact on costs	Refer to Addendum-1, S.No: 119 dated 08-03-2022
1118	Part-2	Employer's Requirement	ER-334	Table 5-2: Hardware requirement of Laser printer – A4	5.2 Laser Printer – A4	We assume consumable will be in authority's scope during implementation and O&M phase. <u>Please confirm.</u>	It is in bidders scope.
1119	Part-2	Employer's Requirement	ER-336	Chapter 3-1 Requirements of Command Control Centre for City Bus System	(a) Each depot will be equipped with the Depot Management System (DMS) to enable and manage their effective operation. This software will manage service scheduling, crew rostering, asset management and maintenance, vehicle fuelling/availability, crew attendance, and business intelligence/reporting.	asset management and maintenance: does this mean that bidder has to implement depot work shop and central workshop functionality for BUS and other assets. Functionality may cover: 1. Scheduled Maintenance 2.Breakdowns 3. Tyre management 4. Life for units and parts and other related functionalities. Kindly confirm	No, please read RFP document completely
1120	Part-2	Employer's Requirement	ER-336	Chapter 3-1 Requirements of Command Control Centre for City Bus System	(a) Each depot will be equipped with the Depot Management System (DMS) to enable and manage their effective operation. This software will manage service scheduling, crew rostering, asset management and maintenance, vehicle fuelling/availability, crew attendance, and business intelligence/reporting.	vehicle fuelling/availability: Does this mean that bidder has to implement Fuel sheets and SO4, SO3 functionality for all fuel types and all the vehicles operated by depots and workshops. Kindly Confirm.	No, please read RFP document completely
1121	Part-2	Employer's Requirement	ER-336	2 System Configuration	The system configuration of DMS is shown in the figure below.	Is all Hardware and network connecting depot and internal to depot part of the scope of RFP ? Kindly Confirm	Yes. Your understanding is correct.
1122	Part-2	Employer's Requirement	ER-337	Table 4-1: Functional requirement of Depot Management System	The system shall be able to support operations for a minimum of 6000 buses.	What would be the max number of Buses to be covered in the software licenses, only minimum has been mentioned.	Software capability and license to be considered for 6,000 buses without any additional cost for the entire project period. However application shall be capable to scale upto 10,000 buses without much change in IT infrastrucutre.
1123	Part-2	Employer's Requirement	ER-337	RFP Part 2; Pg-340, 341	Table 4-1: Functional requirement of Depot Management System	As per the RFP and Functional requirements mentioned under Depot Management System, we understand that all the following components to be provided in an integrated manner: * Bus and Crew Scheduling * Roster * Transit Operation (including dispatch etc) * Charter * Leave Management * Workshop and Maintenance Management * Crew Kiosks * Performance Monitor, and * Business Intelligence Kindly confirm if our understanding is correct.	Please read RFP completely.
1124	Part-2	Employer's Requirement	ER-338	ER-338 Chapter 3-4 Functional requirement of Depot Management System	5. The application shall provide feature for creating vehicles in one depot and process for transferring vehicles to other depots.	Could the employer provide more information about the requested feature?	Vehicle may get transfer from depot to depot or depot to other STU's. DMS shall have provision to incorporate such changes.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1125	Part-2	Employer's Requirement	ER-338	ER-338 Chapter 3-4 Functional requirement of Depot Management System	9. The charter trips should be reflected into the operation module for rostering and dispatch functions.	Are the charter drivers the same as the public transit service?	Yes. Your understanding is correct.
1126	Part-2	Employer's Requirement	ER-338	ER-338 Chapter 3-4 Functional requirement of Depot Management System	14. System should support user defined event definition for sending alerts and message	Would it be possible provide example of events for alerts and message?	Events and alerts shall be customizable to send it to role wise.
1127	Part-2	Employer's Requirement	ER-338	ER-338 Chapter 3-4 Functional requirement of Depot Management System	15. System should be able to send alerts and email based on certain conditions/events/transactions.	Would it be possible provide example of conditions/events/transactions?	Events and alerts shall be customizable to send it to role wise.
1128	Part-2	Employer's Requirement	ER-338	ER-338 Chapter 3-4 Functional requirement of Depot Management System	19. The ability to import and export master data such as nodes detail with its respective GIS data to the Map, Crew, Vehicle, Schedule, Routes with stop, etc.	The assumption is that the DMS is the master database for Map, Crew, Vehicle, Schedule, Route, etc data, so the requirement is related to ability to export data. Could the employer confirm?	For some of the data CAD/AVL may have master data. So contractor need to consider flexibility in providing or sharing the master database across the systems.
1129	Part-2	Employer's Requirement	ER-338	Table 4-1: Functional requirement of Depot Management System	14. System should support user defined event definition for sending alerts and message	We have the following queries: 1. By message is it meant SMS on mobile phones or on the application, 2. In case of SMS will the SMS gateway be provided by bidder or customer. Kindly confirm	1. Both including Email alert. 2. Bidder need to provide SMS gateway.
1130	Part-2	Employer's Requirement	ER-338	Vehicle Scheduling & Dispatching & Crew Rostering	Dispatch	Dispatch related requirement are not available in the RFP scope, request you to please specify the requirements /functionalities required for: 1. Depot operations 2. Starter (Dispatcher) 3. Timing point functionalities 4. Change in crew or bus and they will impacting the CAD AVLS data 5. crew assigned on other duties such ground duties etc. 6. Crew from one depot operating in other depot for a day 7. other relevant requirement which are handled by depot operations dispatcher	Yes. Your understanding is correct.
1131	Part-2	Employer's Requirement	ER-339	ER-339 Chapter 3-4 Functional requirement of Depot Management System	41. The system shall support existing MTC employee rules. The Contractor is expected to study before the bid submission.	Could the employer provide existing MTC rules?	During design stage same shall be discussed in detail.
1132	Part-2	Employer's Requirement	ER-339	ER-339 Chapter 3-4 Functional requirement of Depot Management System	43. System shall have ability to create crew scheduling as per the Motor Vehicle Act followed by MTC.	Could the employer provide Motor Vehicle Act documents?	During design stage same shall be discussed in detail.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1133	Part-2	Employer's Requirement	ER-339	RFP Part 1, Pg-50, Section 1.1.3 Details Evaluation RFP Part 2, Pg 343, Depot Management System	<u>Details Evaluation</u> Bidders must achieve a minimum 80% marks (80 out of 100 marks). The bidder who does not achieve such minimum total points will be rejected. <u>Depot Management System</u> The Bidder shall provide a Crew Rostering Software, already used by Public Transport Operators	<u>We understand that to score a minimum of 80% marks, the proposed solutions must meet the core objectives of this Project. Solutions capabilities can be accessed only through product demonstration. This is missing in the overall evaluation process.</u> We request CSCL to kindly ask for product demonstrations on live running system and also allocate technical marks (min 30 marks). Major components for Demonstration would be: # Traffic Components # CAD / AVLS System Software # Depot Management System Software - Responsible for all core functionalities for bus transport activities. <u>Demonstration will also help ensuring if the proposed Depot Management System / Crew Rostering Software is being used by any Public Transport Operator as mentioned in the RFP Part 2.</u> CSCL may also provide scripts for demonstration as per the requirements of CSCL. This will further help CSCL to get an idea on the overall proposed solution and experiencing their suitability & robustness themselves	RFP condition prevails.
1134	Part-2	Employer's Requirement	ER-339	RFP Part 2, Pg 343, Depot Management System	Depot Management System--> The Bidder shall provide a Crew Rostering Software, already used by Public Transport Operators	We understand that CSCL intends to have robust, scalable and tried & tested solutions being used by Public Transport Operators globally for Depot Management System / Crew Rostering Software meeting their requirements as mentioned in the RFP. Kindly confirm if our understanding is correct.	RFP condition prevails.
1135	Part-2	Employer's Requirement	ER-339	Vehicle Scheduling & Dispatching & Crew Rostering	The system shall support existing MTC employee rules. The Contractor is expected to study before the bid submission.	Request you to kindly provide the copy of MTC employee rules.	Bidders to contact MTC to understand the current operations and propose the solution that meets MTC requirements.
1136	Part-2	Employer's Requirement	ER-340	ER-340 Chapter 3-4 Functional requirement of Depot Management System	64. System should have provision to utilise drivers from other Depots	Could the contractor assume that the same set of employee rules apply to all the drivers?	Yes. Your understanding is correct.
1137	Part-2	Employer's Requirement	ER-340	Vehicle Scheduling & Dispatching & Crew Rostering, Pg No 344	All reports shall be generated using a query language and standard query engine (to be approved by MTC) that provides flexibility for future updates, and for creation of new reports.	Please confirm & elaborate more on the requirements for query language?	Query tool shall provide flexibility to run the query as required. There should not be any restriction on requirement.
1138	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	The mobile application shall have at least following minimum features both in Tamil and English: • For crew, fleet Schedule and vehicle details, license renewal, <u>request for leave, attendance</u>	We understand that for leave and attendance purpose authority already have existing system (as mentioned in "Figure 2-3: Typical Integration of Depot Management System with other systems") bidder just need to integrate Mobile Application with HRMS portal and such operations can be done by crew in HRMS native application. <u>Please confirm.</u>	There is no existing leave and attendance system. Leave and attendance are part of this tender document.
1139	Part-2	Employer's Requirement	ER-341	Part 2 Employers Requirements, Pg. 345, Bill of Quantity, vi Network Bandwidth	A 58, Redundant Bandwidth Cost (For Edge Equipment)	Kindly clarify whether redundant network connectivity is required at every junction location. If yes, please clarify whether the redundant connectivity is required from the same service provider or from two different service provider.	Redundant network connectivity from two different service provider
1140	Part-2	Employer's Requirement	ER-341	RFP Part 2, Pg 345, pt-103	All modules/sub-modules of the Depot Management System shall be seamlessly integrated	We understand that all modules of Depot Management system (Scheduling, Roster, Dispatch, Charter, leave, Performance monitor, and MIS amongst others) should be from the same supplier to ensure seamless integration & accountability of entire Depot Management Modules / Submodules with an objective to remove data duplication, as per the RFP. Kindly confirm if our understanding is correct.	RFP condition prevails.
1141	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	88. The proposed application shall store employee related master details without any limitation.	"without any limitation." is an open statement. We request to kindly elaborate the requirement and remove this clause.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1142	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	96. System shall Maintain leave and holidays as per MTC list or as desired by the Employer time to time. 98. Staff shall be able to check available vacation and sick leave using the system.	Please elaborate if leave that proposed solution should have leave application functionality integrated with MTC leave management to 1. accept leave application in proposed solution 2. Processing of leave application based on rule and available balance to be done MTC leave management system. Final result to be available in proposed solution for updating dispatch and other module 3. Display balance for as per data available in MTC leave management system.	Yes. Your understanding is correct.
1143	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	Other duties	for capturing attendance and complete dispatcher activities please let us know the functionalities required when crew is assigned on other duties (example ground duties) to be handled	Details to be discussed during design stage.
1144	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	95. Overtime and festival working remuneration shall be calculated automatically by the System.	Please elaborate "remuneration" as this may require payroll management or this is overtime Hours and festival working	No, just overtime and festival working hours.
1145	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	95. Overtime and festival working remuneration shall be calculated automatically by the System.	festival working : does this require compensatory off and/or extra time treated as over time, please elaborate the requirement	Details to be discussed during design stage.
1146	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	99. Application shall support deputation for emergency and required time.	is it required for handling crew transfers in following scenarios: 1. Permanent Transfers 2. Temporary transfers(Loan to other depots/dept) 3. Crew working on other depots duties for a day Kindly confirm	Yes. Your understanding is correct.
1147	Part-2	Employer's Requirement	ER-341	Table 4-1: Functional requirement of Depot Management System	102. The proposed systems shall be interfaced with ITS systems as mentioned in this RFP document.	Please elaborate on the envisaged/proposed integration points.	Please read RFP completely.
1148	Part-2	Employer's Requirement	ER-341	Vehicle Scheduling & Dispatching & Crew Rostering, Pg No 345	System shall have integrated Optimization Tool for vehicle and crew based on various constraints and preferences	As per our understanding, we would have to provide a COTS based optimization solution which would be utilized for vehicle & Crew scheduling using out of box optimization solvers such as linear programming, Mixed interger programming, non linear programming etc. Please confirm.	Industry proven solution which meets MTC requirement.
1149	Part-2	Employer's Requirement	ER-343	Part 2 Employers Requirements pg.347 Installation Requirement	A smart card reader (with associated camera to capture image of the person using) will be installed near each entry and exit of the depot to log attendance times within the facility. These devices will be powered by UPS backup to ensure smooth and continuous operation.	Please suggest if this will be facial smart reader or a combination of access control and CCTV surveillance-based solution. In case of later, kindly provide the BOQ for the cameras to be installed in the entry and exit of the depot. Also, we understand that it is only surveillance requirement without any analytics. Please confirm the same.	This is an smart card reader with camera at the entry/exit to capture the attendance without analytics.
1150	Part-2	Employer's Requirement	ER-344	1 Supply of Plant/Equipment and Spare parts	A25 Provision for Sanitization Lot 1	Kindly clarify, What is the exact requirement under this line item? Does authority required Sanitiser with Sprinkler for entire contract period ?	Yes. Your understanding is correct.
1151	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	ITMS (ICCC Functional Requirements)	Kindly provide the total no. of required for TIMS ICCC	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2
1152	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	CBS (ICCC Functional Requirements)	Kindly provide the total no. of licenses required for CBS ICCC	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2
1153	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	General	Kindly list the cyber security equipment's along with quantity which needs to be offered as part of the solution.	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2 for the cyber security solution. Bidder may propose additional security measures as part of their solution. Same will be evaluated as part of technical evaluation mentioned in USP (please refer page EQC-11 in part-1).
1154	Part-2		ER-344	Chapter 4 Bill of Quantity (BOQ)	General	As per Table 4-2: Functional requirement of ITMS Command Control Software PAGE NO: ER-130, The GIS functions has been defined. As Per BOQ, the is not line item for number of licenses GIS software. Request to specify the number of licenses required for GIS Desktop and GIS Server softwares.	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1155	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	BOQ o A34 L3 Switch (Copper or/and OFC) o A35/ A68 LEVEL 2 Switch (24 Port) o A36/ A69/ K22 / K40 LEVEL 2 Switch (48 Port) o K21/ K39 L3 Switch (Copper + OFC)	Please share the Technical Specifications for below BOQ category of switches o A34 L3 Switch (Copper or/and OFC) o A35/ A68 LEVEL 2 Switch (24 Port) o A36/ A69/ K22 / K40 LEVEL 2 Switch (48 Port) o K21/ K39 L3 Switch (Copper + OFC)	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1156	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	Request for addition	Minimum specifications of External IR Illuminator is not mentioned in the RFP document however, external IR Illuminator is playing very critical role in the RFP to achieve the desired SLA & accuracy in night scenario. Hence, we request you to kindly incorporate min. specs of External IR illuminator as mentioned below 1. Type: External IR illuminator with high performance LED (42 pcs high brightness IR LED), high efficiency, energy saving and environmental protection. 2. Wavelength: ≥850 nm (Infrared) 3. Illumination Range: minimum 50 mtrs 4. Environment Protection: IP66 or better 5. IR Power: 80 W 6. Adjustable angle to appropriately focus at the number plate. 7. Beam Angle: multiple options- 10 degree (standard), 15, 30, 45 degrees 8. Surge level: Common mode 6KV, Differential mode: 3 KV 9. Certifications: CE, FCC, RoHS, IEC 62471:2006 Test report 10. Protection function: Transient over peak suppression 11. Housing material: Die-casting aluminium alloy 12. User Interface: RS485	RFP condition prevails.
1157	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill of Quantity (BOQ)	BOQ Traffic Lights	As per Indian standards Red Arrow , amber arrow are not used.Only Red ball ,Amber ball with green arrow are used. Introducing new type of traffic lights will result in vehicle user confused & may cause accidents. We request to remove this and follow standard India practices of Red ball,Amber ball & Green arrow	RFP condition prevails.
1158	Part-2	Employer's Requirement	ER-344	Chapter 4 Bill-Bill of Quantity (BOQ)	Bill of Quantity items	GIS place a major part for implementing the ITMS project so SGL will request you to add COTS based GIS and Image Processing components in BOQ. We request to add below mentioned GIS component as: 1. COTS based platform for GIS and Image processing (2 unit)- for data creation, updation, process 2. COTS based GIS Enterprise platform having GIS and Image processing capability (1unit) 3. Development/Customization of GIS based web Application 4. GIS based Integration with other applications 5. Incorporation of GIS layer (administrative Boundary layer, Road network layer, POI data) of scale 1:2500 6.Base map updation at Annual basis 7. AMC/Training	RFP condition prevails.
1159	Part-2	Employer's Requirement	ER-345	1 Supply of Plant/Equipment and Spare parts	Suggest you to change the load balancer quantity to 2 to achieve desired SLA and also avoid single point of failure for the applications	Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability- 99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA . Also The load balancers being front ending the servers will become single point of failure if not in High Availability	RFP condition prevails. Specification mentioned in RFP is minimum. Bidder may propose suitable sizing and solution to meet functional and SLA requirement.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1160	Part-2	Employer's Requirement	ER-345	1 Supply of Plant/Equipment and Spare parts	A37-Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 2 to achieve desired SLA and also avoid single point of failure for the applications	Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA	RFP condition prevails. Specification mentioned in RFP is minimum. Bidder may propose suitable sizing and solution to meet functional and SLA requirement.
1161	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	Minimum specification needs to be incorporated	It is always recommended to specify minimum technical requirement to design the device as per overall architecture of datacenter.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1162	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	A31 Firewall with IPS	There is no IPS related specifications provided in the given firewall specifications. Kindly provide the specifications for the same	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
1163	Part-2		ER-345	1 Supply of Plant/Equipment and Spare parts	page no 349/391 A31 Firewall with IPS	Request to consider dedicated standalone NG IPS solution instead of UTM firewall as FW performance gets degraded and will not inspect from layer2 and works on L3&L4 only. As per industry best practise deploying NGIPS will become as defence in depth layered security strategy from best of breed that offers the breadth of security features with the bump in the wire, high throughput, and low latency. Request to consider attached Annexure sheet for IPS specifications.	Refer to Addendum-1, S.No: 96 dated 08-03-2022.
1164	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	A30-Load Balancer Quantity mentioned as 1	"Suggest you to change the load balancer quantity to 2 to achieve desired SLA and also avoid single point of failure for the applications" For justification Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA . Also The load balancers being front ending the servers will become single point of failure if not in High Availability	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1165	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	A37-Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 1	A37-Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 2 to achieve desired SLA and also avoid single point of failure for the applications Justification:Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1166	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	A37-Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 1	Minimum specification needs to be incorporated Justification: It is always recommended to specify minimum technical requirement to design the device as per overall architecture of datacenter.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1167	Part-2	Employer's Requirement	ER-345	Chapter 4 Bill of Quantity (BOQ)	page no 349/391 A31 Firewall with IPS	Request to consider dedicated standalone NG IPS solution instead of UTM firewall as FW performance gets degraded and will not inspect from layer2 and works on L3 & L4 only.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1168	Part-2	Employer's Requirement	ER-347		General Query, TIDS Controller	Pertaining to the BOQ, we are considering controller as local processing unit at junction level, request you to please confirm	Yes TIDS controller are Local processing unit. Please refer to RFP, TIDS systems are proposed at merging location as defined in section-VII of Part-2.
1169	Part-2	Employer's Requirement	ER-347	Part 2 Employers Requirements Indicative Bill of Material	General Query	Pertaining to the RFP and functional requirement of TIDS, please confirm the numbers of traffic junctions which are " Free flow and Stop-and-Go".	Please refer to RFP, TIDS systems are proposed at merging location as defined in section-VII of Part-2.
1170	Part-2	Employer's Requirement	ER-347	Table 5-1: Hardware Requirement of Camera Type 1 -TIDS Camera	General Query	From TIDS point of view, please clarify on camera resolution and frame rate required to be considered for the complete solution	Refer to Addendum-1, S.No: 85 dated 08-03-2022
1171	Part-2	Employer's Requirement	ER-351	Chapter 4 Bill of Quantity (BOQ)	K.2 Land Line Phone (IP Video Phone)	The Specifications Given in 5.18 are of entry level IP Phones and the RFP BoQ Line-Item K2 Specifies it to IP Video Phone. Please let us know if we need to consider Entry Level IP Phones or Video IP Phones. If we need to consider Video IP Phones, Kindly Provide the detailed specifications	Refer to Addendum-1, S.No: 64 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1172	Part-2	Employer's Requirement	ER-352	1 Supply of Plant/Equipment and Spare parts	Suggest you to change the load balancer quantity to 2 to achieve desired SLA and also avoid single point of failure for the applications	Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA .	RFP condition prevails. Specification mentioned in RFP is minimum. Bidder may propose suitable sizing and solution to meet functional and SLA requirement.
1173	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	Minimum specification needs to be incorporated	It is always recommended to specify minimum technical requirement to design the device as per overall architecture of datacenter.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1174	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	K18 Firewall with IPS		No query provided.
1175	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	K17 -Load Balancer Quantity mentioned as 1	Suggest you to change the load balancer quantity to 2 to achieve desired SLA and also avoid single point of failure for the applications, For justification Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA . Also The load balancers being front ending the servers will become single point of failure if not in High Availability	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1176	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	K23 -Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 1	K23-Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 2 to achieve desired SLA and also avoid single point of failure for the applications Justification: Page 383 Table 5-13: Availability of Command Control Centre 2. Server / Storage / Tape drive/ Router/ Load Balancer, etc. Availability-99.99% 3. Firewall -99.99% It is suggested to consider in High availability (HA) to achieve defined SLA	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1177	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	K23 -Web Application Firewall (WAF) Appliance with DDOS Protection quantity mentioned as 1	Minimum specification needs to be incorporated Justification: It is always recommended to specify minimum technical requirement to design the device as per overall architecture of datacenter.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1178	Part-2	Employer's Requirement	ER-352	Chapter 4 Bill of Quantity (BOQ)	page no 356/391 K18 Firewall with IPS	As per industry best practise deploying NGIPS will become as defence in depth layered security strategy from best of breed that offers the breadth of security features with the bump in the wire, high throughput, and low latency.	Refer to Addendum-1, S.No: 64 dated 08-03-2022
1179	Part-2	Employer's Requirement	ER-356	Chapter 5 Drawings	Refer the drawings provided as separate volume	Can you share those volumes and Drawings	Please refer the drawings provided along with RFP documents
1180	Part-2	Employer's Requirement	ER-357	Section VIII Operation and Maintenance Requirements	The system shall be in operation for <u>24 hours a day and 7 days a week</u> without interruption.	The mentioned clause is very stern. It is 100% of entire contract period. We request authority to amend this clause as, "The system shall be in operation for 24 hours a day and 7 days a week without interruption. <u>However, hardware downtime for 30 minutes to 1 hour weekly is acceptable</u> "	RFP condition prevails. Permissible downtime is already provided.
1181	Part-2	Employer's Requirement	ER-357	Section VIII Operation and Maintenance Requirements		Kindly clarify that manpower during O&M phase can be sub-contracted	Yes. Your understanding is correct.
1182	Part-2	Employer's Requirement	ER-357	Section VIII Operation and Maintenance Requirements	The system shall be in operation for <u>24 hours a day and 7 days a week</u> without interruption.	We request to give atleast 30mins of acceptable hardware downtime per week	RFP condition prevails. Permissible downtime is already provided.
1183	Part-2	Employer's Requirement	ER-36	Employer's Requirement/ ER-36/Table 6-1: Requirement of Contractor's Personnel	Project Director, ATCS Expert, TIMs Expert, CBS Expert	We understand under International category any Indian citizen or person living in India, who is having International working experience can be considered for these all roles. Please confirm if understanding is correct.	Yes. Your understanding is correct.
1184	Part-2	Employer's Requirement	ER-36	Table 6-1: Requirement of Contractor's Personnel	Position: - Project Director International/ Local :- International	We request you to modify as per below Position: - Project Director International/ Local :- International OR Local	Refer to Addendum-1, S.No: 114 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1185	Part-2	Employer's Requirement	ER-36	Table 6-1: Requirement of Contractor's Personnel	Position: - Project Director Experience (International): International Experience as Project Manager in Similar project of at least 5 million USD covering end to end installations; 1 Project	We request you to modify as per below Experience:- International/ Local Experience as Project Director in Similar project of at least 5 million USD OR equivalent covering end to end installations; 1 Project	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1186	Part-2	Employer's Requirement	ER-360	3.1.4 Penalty for delay in Manpower Mobilisation	3.1.4 Penalty for delay in Manpower Mobilisation - Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1,00,000/- (Rupees One Lacs) per day per Key Personnel - In case the delay is more than 3 weeks, the Employer reserves the right to encash the Performance Security towards the aforesaid penalty and may proceed with termination of the project, as the case may be.	The Penalty for the deployment of the proposed resources are too high, request you to please reduce this to INR 5000 Per day per resource. Explanation: The RFP requirement of the personnels to be deployed is very high and stringent including international resources and years of experience asked, meeting such requirement would be difficult for any bidder and moreover as you are aware that any new recruitment will certainly take time. Keeping in view all these challenges request you to kindly reduce the penalty amount.	RFP condition prevails. This applies to O&M phase for section 4 and section 5.
1187	Part-2	Employer's Requirement	ER-360	Part 2, 3.1.4, pg no 360	Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1,00,000/- (Rupees One Lacs) per day per Key Personnel	The required remuneration asked is very high and is not generally asked in similar projects of such high volume where Contractor is investing huge amount of money, hence we kindly request to please remove this clause.	RFP condition prevails.
1188	Part-2	Employer's Requirement	ER-360	3.1.4 Penalty for delay in Manpower Mobilisation	3.1.4 Penalty for delay in Manpower Mobilisation - Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1,00,000/- (Rupees One Lacs) per day per Key Personnel - In case the delay is more than 3 weeks, the Employer reserves the right to encash the Performance Security towards the aforesaid penalty and may proceed with termination of the project, as the case may be.	Please amend as: - Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1000 4,00,000/- (Rupees One Lacs) per week per day per Key Personnel - In case the delay is more than 12 3 weeks, the Employer reserves the right to take necessary actions to encash the Performance Security towards the aforesaid penalty and may proceed with termination of the project, as the case may be.	Refer to Addendum-1, S.No: 21 dated 08-03-2022
1189	Part-2	Employer's Requirement	ER-360	Part 2 Pg 364	3.1.4 Penalty for delay in Manpower Mobilisation - In case the delay is more than 3 weeks, the Employer reserves the right to encash the Performance Security towards the aforesaid penalty and may proceed with termination of the project, as the case may be.	The bidder requests the deletion of the clause.	RFP condition prevails.
1190	Part-2	Employer's Requirement	ER-360	3.1.4 Penalty for delay in Manpower Mobilisation	- Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1,00,000/- (Rupees One Lacs) per day per Key Personnel	The mentioned penalty is very stern. We request authority to amend this clause as, "- Delay in submission of detailed written statements and/or mobilization of aforesaid Key Personnel shall attract penalty @ INR 1,00,000/- (Rupees One Lacs) 10,000/- (Ten Thousand) per day per Key Personnel"	RFP condition prevails.
1191	Part-2	Employer's Requirement	ER-360	3.1.4 Penalty for delay in Manpower Mobilisation	- In case the delay is more than 3 weeks, the Employer reserves the right to encash the Performance Security towards the aforesaid penalty and may proceed with termination of the project, as the case may be.	Contractor will provide Manpower to meet the timeline and deliverables. However, under any condition contractor is unable to provide manpower; said clause is very unfair. Hence, we request authority to delete this clause.	Refer to Addendum-1, S.No: 21 dated 08-03-2022
1192	Part-2	Employer's Requirement	ER-360	3.1.4 Penalty for delay in Manpower Mobilisation	The Manpower proposed shall be dedicated to the project and shall not be proposed for any other project or assigned any other project. <u>The resource cannot be changed for at least two years</u>	Contractor will provide manpower support in line with proposed offerings. However, in unavoidable situation or person reason proposed manpower may leave/retire/self-retirement/resign from said assignment. Hence, we request authority to amend this clause as, "The Manpower proposed shall be dedicated to the project and shall not be proposed for any other project or assigned any other project. The resource cannot be changed for <u>at least two year any change in manpower need to be proposed by contractor in advance with proper justification and equivalent or better replacement.</u> "	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1193	Part-2	Employer's Requirement	ER-362	3.3.3 Power supply and Communication	The fixed charges, installation charges, recurring charges, electricity bill, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period	In none of the similar project executed has the electricity bills charges covered under the scope of Bidder and the same is taken care by the Employer with the view that it a Govt. project. Therefore, request you to please remove the scope of recurring electricity bill payment from the scope of the Contractor	RFP condition prevails.
1194	Part-2	Employer's Requirement	ER-365	ER-365 / 4.2.4 Operation of Incident Management and Traffic Information Dissemination	(3) Other Incident Any other incident as defined by the Employer time to time	Please clarify type of Incident detection to be done on road per camera at least so that server sizing can be generated accordingly.	Please refer to Section-VII of Part-2
1195	Part-2	Employer's Requirement	ER-368	5.3.1 Resolution Time and Penalty	Resolution Time and Penalty	The operational Penalties are slightly on the higher side. Request you to kindly reduce to a rational level for the bidders to optimize their financial risk. Higher Penalties leads to higher project cost. Therefore, request you to kindly reduce it	Refer to Addendum-1, S.No: 22 dated 08-03-2022 This applies to O&M phase for section 4 and section 5.
1196	Part-2	Employer's Requirement	ER-368	5.3.1 Resolution Time and Penalty	The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 25% of the quarterly applicable payment proposed by the Contractor. However, the Employer along with CTP and MTC has an option to consider termination of the contract if the penalty exceeds 20% of the quarterly applicable payment for any two quarter in four consecutive quarters to the Contractor.	The Capping of Penalty at 25% is too high, generally it is kept at 5% for all similar projects. Request you to please reduce this to 5% as with 25% Penalty the operations of the project will take a hit and will in turn impact the project and may make it commercially non viable	Refer to Addendum-1, S.No: 22 dated 08-03-2022 This applies to O&M phase for section 4 and section 5.
1197	Part-2	Employer's Requirement	ER-369	5.3.1 Resolution Time and Penalty	The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 25% of the quarterly applicable payment proposed by the Contractor. However, the Employer along with CTP and MTC has an option to consider termination of the contract if the penalty exceeds 20% of the quarterly applicable payment for any two quarter in four consecutive quarters to the Contractor	Request to modify as follows: The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 10% of the quarterly applicable payment proposed by the Contractor. However, the Employer along with CTP and MTC has an option to consider termination of the contract if the penalty exceeds 20% of the quarterly applicable payment for any three quarter in four consecutive quarters to the Contractor	Refer to Addendum-1, S.No: 22 dated 08-03-2022
1198	Part-2	Employer's Requirement	ER-369	5.3.1 Resolution Time and Penalty	The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 25% of the quarterly applicable payment proposed by the Contractor.	We request you to kindly amend clause as follows: The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 5% 25% of the quarterly applicable payment proposed by the Contractor.	Refer to Addendum-1, S.No: 22 dated 08-03-2022
1199	Part-2	Employer's Requirement	ER-369	5.3.1 Resolution Time and Penalty	The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 25% of the quarterly applicable payment proposed by the Contractor. However, the Employer along with CTP and MTC has an option to consider termination of the contract if the penalty exceeds 20% of the quarterly applicable payment for any two quarter in four consecutive quarters to the Contractor.	The bidder requests the following modifications: The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 5% of the quarterly applicable payment proposed by the Contractor.	Refer to Addendum-1, S.No: 22 dated 08-03-2022
1200	Part-2	Employer's Requirement	ER-369	5.3.1 Resolution Time and Penalty	5.3.1 Resolution Time and Penalty The maximum penalty applicable on quarterly applicable payment for not adhering to the SLA's is capped at 25% of the quarterly applicable payment proposed by the Contractor.	There are many a situations which are out of control for contractor. Multiple stakeholders, service providers & project site being on open public places add to complexity of project services. Considering this we request to limit SLA penalty to maximum at 2% of quarterly applicable payment and maximum capped to 5% of O&M of the complete project.	Refer to Addendum-1, S.No: 22 dated 08-03-2022
1201	Part-2	Employer's Requirement	ER-37	Table 6-1: Requirement of Contractor's Personnel	Position: - Project Manager TIMS Experience (International): International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project	We request you to modify as per below Experience:- International/ Local Experience as Project Director in Similar project of at least 5 million USD OR equivalent covering end to end installations; 1 Project	Refer to Addendum-1, S.No: 114 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1202	Part-2	Employer's Requirement	ER-370	Figure 5-1: Requirement of resolution time	Figure 5-1: Requirement of resolution time Calculation Critical For every Increase of <u>2 hours</u> in time-to-repair per instance, a penalty of <u>INR. 5,000</u> shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every Increase of 2 hours <u>4 hours</u> in time-to-repair per instance, a penalty of <u>INR. 5,000</u> shall be imposed."	RFP condition prevails.
1203	Part-2	Employer's Requirement	ER-370	Figure 5-1: Requirement of resolution time	Figure 5-1: Requirement of resolution time Calculation Major For every Increase of 4 hours in time-to-repair per instance, a penalty of INR. 5,000 shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every Increase of 4 hours <u>6 hours</u> in time-to-repair per instance, a penalty of INR. 5,000 shall be imposed."	RFP condition prevails.
1204	Part-2	Employer's Requirement	ER-370	Figure 5-1: Requirement of resolution time	Figure 5-1: Requirement of resolution time Calculation Minor For every Increase of 8 hours in time-to-repair per instance, a penalty of <u>INR. 50,000</u> shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every Increase of 8 hours in time-to-repair per instance, a penalty of INR. 50,000 <u>INR 5,000</u> shall be imposed."	RFP condition prevails.
1205	Part-2	Employer's Requirement	ER-371	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix #1 Application/Software Minor bug fixes Calculation For every increase of 1 day in time to fix the bug per instance, a penalty of <u>INR. 20,000</u> shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every increase of 1 day in time to fix the bug per instance, a penalty of INR. 20,000 <u>INR 5,000</u> shall be imposed."	RFP condition prevails.
1206	Part-2	Employer's Requirement	ER-371	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix #2 Application/Software Major Software bugs - Previous version restoration Calculation For every increase of 1 day in restoring previous version per instance, a penalty of INR. 50,000 shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every increase of 1 day in restoring previous version per instance, a penalty of INR. 50,000 <u>INR 5,000</u> shall be imposed."	RFP condition prevails.
1207	Part-2	Employer's Requirement	ER-371	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix #2 Application/Software Major Software bugs - Release new version Calculation For every increase of 1 day in version release with bug fix, per instance, a penalty of INR. 50,000 shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every increase of 1 day in version release with bug fix, per instance, a penalty of INR. 50,000 <u>INR 5,000</u> shall be imposed."	RFP condition prevails.
1208	Part-2	Employer's Requirement	ER-371	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix	Table 5-1: Requirement of Repair time for system bugs and Accuracy fix #2 Data Accuracy Fix For every increase of 1 day in time-to-repair per instance, a penalty of INR 5,000 shall be imposed.	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "For every increase of 1 day in time-to-repair per instance, a penalty of INR. 5,000 <u>INR 500</u> shall be imposed."	RFP condition prevails.
1209	Part-2	Employer's Requirement	ER-372	Part 2 Employer's Requirement, 5.3.4 Requirement of Availability of each component, ER-372	"Permissive down time" – It includes the time period required for Scheduled Maintenance, repair works for damages caused by the third parties (e.g. traffic accidents, surge caused by thunder storm, fire, vandalism, etc.), Force Majeure, reasons beyond the control of the Contractor and works as instructed by the Employer	Kindly amend clause as follows: "Permissive down time" – It includes the time period required for Scheduled Maintenance, repair works for damages caused by the third parties (e.g. traffic accidents, surge caused by thunder storm, rains, flood, fire, vandalism, unforeseen changes in network connectivity, theft, etc.), construction of metro rail, flyover construction, Force Majeure, any reasons beyond the control of the Contractor and works as instructed by the Employer. No SLA penalty shall be levied during the permissive downtime.	RFP condition prevails. Current clause already covers for the reasons beyond the control of the Contractor.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1210	Part-2	Employer's Requirement	ER-373	Part 2 Employer's Requirement, Table 5-2: Availability of ATCS, ER-373	1. ATCS Controller Availability: Requirement: 99.5% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device, its associated component in a quarter, penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. ATCS Controller Availability: Requirement: 99.5% 98% Penalty (INR): 5000 2000 Calculation: For every decrease of 0.50% in performance of each device, its associated component in a quarter, penalty of INR. 2000 5000 shall be imposed.	RFP condition prevails.
1211	Part-2	Employer's Requirement	ER-373	Part 2 Employer's Requirement, Table 5-2: Availability of ATCS, ER-373	2. Detector Availability Requirement: 99.0%	Kindly amend clause as: 2. Detector Availability Requirement: 95% 99.0%	RFP condition prevails.
1212	Part-2	Employer's Requirement	ER-373	Part 2 Employer's Requirement, Table 5-2: Availability of ATCS, ER-373	3. Signal aspect Availability Requirement: 99.0%	Kindly amend clause as: 3. Signal aspect Availability Requirement: 98% 99.0%	RFP condition prevails.
1213	Part-2	Employer's Requirement	ER-373	Part 2 Employer's Requirement, Table 5-2: Availability of ATCS, ER-373	4. ATCS Application Availability: Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 4. ATCS Application Availability: Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.
1214	Part-2	Employer's Requirement	ER-373	Table 5-2: Availability of ATCS	ATCS Controller Availability Requirement 99.5%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "ATCS Controller Availability Requirement 99.5% 95.0%"	RFP condition prevails.
1215	Part-2	Employer's Requirement	ER-373	Table 5-2: Availability of ATCS	Detector Availability Requirement 99.0%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "Detector Availability Requirement 99.0% 95.0%"	RFP condition prevails.
1216	Part-2	Employer's Requirement	ER-373	Table 5-2: Availability of ATCS	Signal aspect Availability Requirement 99.0%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "Signal aspect Availability Requirement 99.0% 95.0%"	RFP condition prevails.
1217	Part-2	Employer's Requirement	ER-373	Table 5-2: Availability of ATCS	ATCS Application Availability Requirement 99.5%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "ATCS Application Availability Requirement 99.5% 95.0%"	RFP condition prevails.
1218	Part-2	Employer's Requirement	ER-373	Part 2 Employer's Requirement, 5.3.4 Requirement of Availability of each component, ER-373 to ER-381	Table 5-2: Availability of ATCS Table 5-3: Availability of TIDS Table 5-4: Availability of RLVD Table 5-5: Availability of SLVD Table 5-6: Availability of VMS Table 5-7: Availability of ATCC Table 5-8: Availability of ITMS Platform Table 5-9: Availability of CAD/AVL Table 5-10: Availability of PIS Table 5-11: Availability of DMS Table 5-13: Availability of Command Control Centre	We request you to kindly confirm that: "Any theft/damages by 3rd parties to the hardware in the field locations & command centre shall not be considered in contractor scope and no penalty shall be levied. Also if the contractor is required to supply any materials (over and above the items quoted in price schedule) which are required to bring back the system to perform normally, the same shall be paid at actuals."	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1219	Part-2	Employer's Requirement	ER-374	Part 2 Employer's Requirement, Table 5-3: Availability of TIDS, ER - 374	1. TIDS Availability: Requirement: 99% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty	Kindly amend clause as: 1. TIDS Availability: Requirement: 98% 99% Penalty (INR): 2000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR 2000 shall be imposed.	RFP condition prevails.
1220	Part-2	Employer's Requirement	ER-374	Part 2 Employer's Requirement, Table 5-3: Availability of TIDS, ER - 374	2. TIDS Application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 2. TIDS Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 5000 50,000 shall be imposed.	RFP condition prevails.
1221	Part-2	Employer's Requirement	ER-374	Part 2 Employer's Requirement, Table 5-4: Availability of RLVD, ER - 374	1. RLVD Availability Requirement: 99.0% Penalty (INR): 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 5000 shall be imposed.	Kindly amend clause as: 1. RLVD Availability Requirement: 98% 99.0% Penalty (INR): 2000 5000 Calculation: For every decrease of 0.50% in performance of each device & its associated component in a quarter, a penalty of INR. 2000 5000 shall be imposed.	RFP condition prevails.
1222	Part-2	Employer's Requirement	ER-374	Part 2 Employer's Requirement, Table 5-4: Availability of RLVD, ER - 374	2. RLVD Application Availability Requirement: 99.5% Penalty (INR): 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR. 50,000 shall be imposed.	Kindly amend clause as: 2. RLVD Application Availability Requirement: 98% 99.5% Penalty (INR): 5000 50000 Calculation: For every decrease of 0.50% in performance for a quarter, a penalty of INR.5000 50,000 shall be imposed.	RFP condition prevails.
1223	Part-2	Employer's Requirement	ER-377	Table 5-9: Availability of CAD/AVL	SCU/BOC Availability Requirement 99.0%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "SCU/BOC Availability Requirement 99.0% 95.0%"	RFP condition prevails.
1224	Part-2	Employer's Requirement	ER-377	Table 5-9: Availability of CAD/AVL	CAD/AVL Application Availability Requirement 99.5%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "CAD/AVL Application Availability Requirement 99.5% 95.0%"	RFP condition prevails.
1225	Part-2	Employer's Requirement	ER-378	RFP Part 2, Pg 382, DMS application availability	"DMS Application Availability" is defined as the proper functioning of the DMS application and database as per the functional & technical specifications defined in the bidding documents; this shall also include software license validity of any COTS, Database, Software, Anti-virus etc. which is part of the system.	As per the definition given in the bid statement, this appears clearly that CSCL intends to have a robust, industry proven COTS system for Depot Management System (DMS) modules. Kindly confirm if our understanding is correct.	Industry proven solution which meets MTC requirement.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1226	Part-2	Employer's Requirement	ER-378	RFP Part 2, Pg 382, DMS application availability	"DMS Application Availability" is defined as the proper functioning of the DMS application and database as per the functional & technical specifications defined in the bidding documents; this shall also include software license validity of any COTS, Database, Software, Anti-virus etc. which is part of the system.	<p>we appreciate that CSPL intends to have a COTS system for DMS application and this will be helpful achieving project objectives. Therefore, this is imperative to have product qualification for COTS product. Similar approach have already been adopted by many RFPs to select only proven products.</p> <p>Request to Incorporate the following:</p> <p>The proposed Integrated Product should have been successfully implemented / under implementation / Under O&M (at the time of bidding) for a project that cover the following functionalities (within the pre integrated software) in public bus transport organizations (Government / Private), in line with the Project Requirements .</p> <ul style="list-style-type: none"> • Bus/Route planning and crew scheduling, time tabling • Crew rostering; Dispatch • Integrated with Workshop / Maintenance Management System <p>This will help getting rightly fitted COTS system with scalability to cater any future requirements (min 6000 buses and upto 50 depots), as mentioned in the RFP floated.</p>	RFP condition prevails.
1227	Part-2	Employer's Requirement	ER-378	Table 5-10: Availability of PIS	PIS Availability Requirement 99.0%	<p>The mentioned Requirement is very high and unfair.</p> <p>We request authority to amend this clause as, "PIS Availability Requirement 99.0% 95.0%"</p>	RFP condition prevails.
1228	Part-2	Employer's Requirement	ER-378	Table 5-11: Availability of DMS	DMS Application Availability Requirement 99.5%	<p>The mentioned Requirement is very high and unfair.</p> <p>We request authority to amend this clause as, "DMS Application Availability Requirement 99.5% 95.0%"</p>	RFP condition prevails.
1229	Part-2	Employer's Requirement	ER-378	Table 5-12: Availability of Communications Network	Communication (Wired Connectivity) Availability Requirement 99.5%	<p>The mentioned Requirement is very high and unfair.</p> <p>We request authority to amend this clause as, "Communication (Wired Connectivity) Availability Requirement 99.5% 95.0%"</p>	RFP condition prevails.
1230	Part-2	Employer's Requirement	ER-379	Page 383 New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for Link Load Balancer in HA	<p>Link Load balancer in high availability needs to be added for availability of Two different ISP because single ISP can be single point of failure both at ITMS-CCC and CBS CCC and Defined SLA can not be achieved. Link load balancer will also help to achieve the active-active ISP load balancing and transparent failover.</p>	RFP condition prevails. Specification mentioned in RFP is minimum. Bidder may propose suitable sizing and solution to meet functional and SLA requirement.
1231	Part-2	Employer's Requirement	ER-379	Part2 - Page 383	New Clause	<p>Minimum specification & Quantity in BOQ needs to be incorporated for Link Load Balancer in HA Justification: Link Load balancer in high availability needs to be added for availability of Two different ISP because single ISP can be single point of failure both at ITMS-CCC and CBS CCC and Defined SLA can not be achieved. Link load balancer will also help to achieve the active-active ISP load balancing and transparent failover.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1232	Part-2	Employer's Requirement	ER-379	Part2 - Page 383	New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for SSLi (SSL Interceptor) Justification:Considering 95 % traffic is SSL based and any security device is not effective on encrypted traffic and Security devices do not support hardware based SSL decryption. It is suggested to deploy SSL interceptor to decrypt SSL traffic at perimeter and give to security devices for encryption for achieving deep packet inspection and security protection for SSL traffic.	RFP condition prevails.
1233	Part-2	Employer's Requirement	ER-379	Part2 - Page 383	New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for GSLB in DR for site failover. Justification: Global Server Load Balancer is required to do site-to -site failover form DC to DR.	RFP condition prevails.
1234	Part-2	Employer's Requirement	ER-379	Part2 - Page 383	New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for Network Data leakage prevention (DLP) and Data Classifications Justification: As per MOUD and MeitY guidelines, confidential data in rest and data in transit to be protected and to control the data sharing on internet storage.	RFP condition prevails.
1235	Part-2	Employer's Requirement	ER-379	5.3.4 Requirement of Availability of each component	Communication (Wireless Connectivity-SIM Card) Availability Requirement 99.5%	The mentioned Requirement is very high and unfair. We request authority to amend this clause as, "Communication (Wireless Connectivity-SIM Card) Availability Requirement 99.5% 95.0%"	RFP condition prevails.
1236	Part-2	Employer's Requirement	ER-38	Table 6-1: Requirement of Contractor's Personnel	Position: - Project Manager CBS Experience (International):International Experience as Project Director in Similar project of at least 5 million USD covering end to end installations; 1 Project	We request you to modify as per below Experience:- International/ Local Experience as Project Director in Similar project of at least 5 million USD OR equivalent covering end to end installations; 1 Project	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1237	Part-2	Employer's Requirement	ER-380	Table 5-13: Availability of Command Control Centre	Other application Availability (Web Portal/ Mobile App/ Any other application, <u>Integration services</u> , etc.) Critical 99.50% 0.50%	As Integration service will have third-party dependencies, penalty should not levied on the Integration Service from the contractor. We required authority amend this clause as, "Other application Availability (Web Portal/ Mobile App/ Any other application, Integration services , etc.)"	RFP condition prevails.
1238	Part-2	Employer's Requirement	ER-381	Table 5-14: Performance/Accuracy of ATC	It states that the requirement for ATCS counting accuracy is 92%	Against what baseline will traffic counts be compared for accuracy?	Accuracy will be verified against the count obtained from portable video recording device.
1239	Part-2	Employer's Requirement	ER-39	Table 6-1: Requirement of Contractor's Personnel	Position: - ATCS Expert -International Experience: - International Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project - Experience in Area Traffic Signal Control projects; 3 projects	We request you to modify as per below Experience:- International/ Local Experience in Area Traffic Signal Control of at least 1 million USD OR equivalent covering end to end installations; 1 Project - Experience in Area Traffic Signal Control projects; 3 projects	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1240	Part-2	Employer's Requirement	ER-39	Table 6-1: Requirement of Contractor's Personnel	Position: - ATCS Expert -International International/ Local - International	We request you to modify as per below Experience:- International/ Local: International/ Local	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1241	Part-2	Employer's Requirement	ER-39	Table 6-1: Requirement of Contractor's Personnel	Position: - TIMS Expert - International Experience: - International Experience in Area Traffic Signal Control of at least 1 million USD covering end to end installations; 1 Project - Experience in Area Traffic Signal Control projects; 3 projects	We request you to modify as per below Experience:- 15years- International / Local Experience in TIMS project of at least 1 million USD OR equivalent covering end to end installations; 1 Project- Experience in TIMS projects.; 3 projects.	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1242	Part-2	Employer's Requirement	ER-39	Table 6-1: Requirement of Contractor's Personnel	Position: - TIMS Expert - International International/ Local - International	We request you to modify as per below Experience:- International/ Local: International/ Local	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1243	Part-2	Employer's Requirement	ER-40	Table 6-1: Requirement of Contractor's Personnel	Position: - CBS Expert - International International/ Local - International	We request you to modify as per below Experience:- International/ Local: International/ Local	Refer to Addendum-1, S.No: 114 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1244	Part-2	Employer's Requirement	ER-42	Table 6-1: Requirement of Contractor's Personnel	Urban Planner/ Engineer/ Designer Education: - Graduate in Civil/ Architecture/ Equivalent -Masters in Transportation/or Planning/ Urban design/ Infrastructure or equivalent Experience: -Total Work Experience; 10 years -Experience in Similar Works as Urban Planner/ Designer/ Engineer; 7 years	Kindly amend the clause as below Urban Planner/ Engineer/ Designer Education: - Graduate in Civil/ Architecture/ Equivalent -Masters in Transportation/or Planning/ Urban design/ Infrastructure or equivalent Experience: -Total Work Experience; 10 5 years -Experience in Similar Works as Urban Planner/ Designer/ Engineer; 7 3years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1245	Part-2	Employer's Requirement	ER-42 & ER-88	Part 2: Bidding Documents ER-42, Point No. 11 ER-88, Clause 20 Civil Works	Urban Planner/ Engineer/ Designer Role & Responsibility: Review and prepare the plans and designs for junction improvement' Clause 20 Civil Works	Request you to kindly clarify the scope of works in regards to the Civil Works. Is it limited to the Construction of Foundation, Poles, trench for cabling only or any other additional scope of work is expected. Kindly explain the meaning of Junction Improvement. Is this limited to reinstatement of Junction to the condition prior to Construction work or does it involve consruction of additional structures/Lanes etc.	RFP condition prevails. Please refer page no: ER-194 along with Intersection Improvement scope.
1246	Part-2	Employer's Requirement	ER-44	Table 6-1: Requirement of Contractor's Personnel	Data Analyst Education: - Graduate in Electronics /Computer Science/or equivalent Experience: -Total Work Experience; 7 years -Experience in Similar Works as Data Centre Expert/Data Science, of large-scale distributed and heterogeneous IT systems with 5 years experience ;	Kindly amend the clause as below Data Analyst Education: - Graduate in Electronics /Computer Science/or equivalent Experience: -Total Work Experience; 7 5 years -Experience in Similar Works as Data Centre Expert/Data Science, of large-scale distributed and heterogeneous IT systems with 5 3 years experience ;	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1247	Part-2	Employer's Requirement	ER-44	Table 6-1: Requirement of Contractor's Personnel	Data/Command Centre Expert/System Administrator Education: - Graduate in Electronics /Computer Science/or equivalent Experience: -Total Work Experience; 7 years -Experience in Similar Works as Data Centre Expert/System Administrator; 5 years	Kindly amend the clause as below Data/Command Centre Expert/System Administrator Education: - Graduate in Electronics /Computer Science/or equivalent Experience: -Total Work Experience; 7 5 years -Experience in Similar Works as Data Centre Expert/System Administrator; 5 3 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1248	Part-2	Employer's Requirement	ER-44	Table 6-1: Requirement of Contractor's Personnel	Control room and Data centre (Cloud) management • Asset management of all IT Hardware/device and Non-IT items. • Troubleshooting related to server, data base • Expert in data mining and analysis • Hadoop, or • Oracle Edge Analytics, or • Equivalent Platform • Strong Database skills including Oracle, SQL Server, etc. • Demonstrated skills in real-time analytics, Big Data, Machine Learning for pattern recognition and predictive analysis	If the resource have capability for real time Streaming analytics or Edge Analytics on other OEM platform rather than Oracle; please confirm they should be qualified for the resource CV. Request you to please mention Real time Streaming analytics or Edge Analytics capability rather than specific "Oracle Edge Analytics".	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1249	Part-2	Employer's Requirement	ER-45	Table 6-1: Requirement of Contractor's Personnel	Network Engineer Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 7 years Experience in Similar Works as Network Engineer; 5 years	Kindly amend the clause as below Network Engineer Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 5 7 years Experience in Similar Works as Network Engineer; 3 5 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1250	Part-2	Employer's Requirement	ER-45	Table 6-1: Requirement of Contractor's Personnel	Data Base Administrator Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 7 years -Experience in Similar Works as Data Base Administrator; 5 years	Kindly amend the clause as below Data Base Administrator Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 5 7 years -Experience in Similar Works as Data Base Administrator; 3 5 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1251	Part-2	Employer's Requirement	ER-45	Table 6-1: Requirement of Contractor's Personnel	GIS Expert Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 7 years Experience in Similar Works as GIS Expert; 5 years	Kindly amend the clause as below GIS Expert Education: - Graduate in Electronics /Computer Science/or equivalent engineering Experience: -Total Work Experience; 5 7 years Experience in Similar Works as GIS Expert; 3 5 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1252	Part-2	Employer's Requirement	ER-46	Table 6-1: Requirement of Contractor's Personnel	Electrical Engineer Education: - Graduate in Electrical/or equivalent Experience: --Experience in Similar Works as Electrical Engineer; 5 years - Experience in designing and implementing integrated transportation applications similar to the project requirements. - Experience in relevant projects; 2 projects	Kindly amend clause as below: Electrical Engineer Education: - Graduate in Electrical/or equivalent Experience: --Experience in Similar Works as Electrical Engineer; 3 5 years - Experience in designing and implementing ICT/ integrated transportation applications similar to the project requirements. - Experience in relevant projects; 2 projects	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1253	Part-2	Employer's Requirement	ER-46	Table 6-1: Requirement of Contractor's Personnel	Admin, Human Resource Manager Education: - Graduate in HR/ Equivalent Experience: -Total Work Experience; 7 years Experience in Similar Works as Admin, Human Resource Manager; 5 years	Kindly amend clause as below: Admin, Human Resource Manager Education: - Graduate in HR/ Equivalent Experience: -Total Work Experience; 5 7 years Experience in Similar Works as Admin, Human Resource Manager; 3 5 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1254	Part-2	Employer's Requirement	ER-47	Table 6-1: Requirement of Contractor's Personnel	Communication Expert Education: - -Any graduation / Diploma Experience: --Total Work Experience; 7 years -Experience in Similar Domain; 5 years -Social media material development -Public system, Media, Govt. Agency	Kindly amend clause as below: Communication Expert Education: - -Any graduation / Diploma Experience: --Total Work Experience; 5 7 years -Experience in Similar Domain; 3 5 years -Social media material development -Public system, Media, Govt. Agency	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1255	Part-2	Employer's Requirement	ER-47	Table 6-1: Requirement of Contractor's Personnel	25 ITS Engineer 26 Field Support Engineer 27 Field Support Staff - Technician 28 Call Center Operator -TIMS 29 CBS Operator /Dispatcher -CBS 30 TIMS Operator Education: - -Any graduation / Diploma Experience: --Total Work Experience; 5 years -Experience in Similar Domain; 3 years	Kindly amend the clause as follows: 25 ITS Engineer 26 Field Support Engineer 27 Field Support Staff - Technician 28 Call Center Operator -TIMS 29 CBS Operator /Dispatcher -CBS 30 TIMS Operator Education: - -Any graduation / Diploma Experience: --Total Work Experience; 3 5 years -Experience in Similar Domain; 1 3 years	Refer to Addendum-1, S.No: 114 dated 08-03-2022
1256	Part-2	Employer's Requirement	ER-49	Part 2 Employers Requirements Pg. 53 11 Integration Phase	The Command Control Centre should be integrated with feeds of all tracks/component through Command Control Center deployed under this CITS Project.	Please provide the list of integrations/ solutions to be integrated from the existing ICCC. Kindly provide the existing system technology, platform, version, make & model etc. details to be provided	RFP Condition Prevails: Data level exchange will take place from CITS project to any other project through exchange server in the standard format and Vice-versa after details will be discussed during design stage.
1257	Part-2	Employer's Requirement	ER-50	ER-50 8 Survey/study Phase	The infrastructure of the existing traffic signal may need to be dismantled and replaced with the new systems which are proposed and required under the scope of the project. The infrastructures such as poles, cantilevers, cabling, aspects, etc. should not be reused. The dismantled infrastructure shall be delivered at the Employer's designated location without damage at no extra cost.	Request you to share the detail of existing infrastructure & also the address of Employers designated locations.	Location of Existing infrastructure is as mentioned in Table 3-1 Target Location of ATCS in ER-163. Detailed component shall be surveyed by the bidder after commencement of works.
1258	Part-2	Employer's Requirement	ER-50	Part 2 Employers Requirements Pg. 54 11.1 Integration	Integration activities shall include the telecommunication nodes (i.e., Managed Ethernet Switches) with the existing and/or proposed fibre optic Ethernet telecommunications network, Wireless Network for the design and connectivity of the CITS Project.	Kindly provide the existing telecom nodes (network switch, wireless devices etc.) details like qty, make & model etc. for considering the license for integration	RFP Condition Prevails. Telecommunication nodes means lastmile connectivity from existing ISP service provider.
1259	Part-2	Employer's Requirement	ER-50	Part 2 Employers Requirements Pg. 54 11.1 Integration	All CITS Project equipment shall be managed and operated by the TIMS and CBS Control Centre	We understand that the TIMS CCC is related to traffic and CBS for the Transport and depot management. Hence, kindly confirm only related solutions/ systems will be monitored or controlled by the respective CCC. No cross functional access or viewing licenses to be considered, pls confirm.	RFP condition prevails. The bidder shall consider cross functional access or viewing licenses to be considered.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1260	Part-2	Employer's Requirement	ER-50	Part 2 Employers Requirements Pg.50 8 Survey/study Phase	The infrastructure of the existing traffic signal may need to be dismantled and replaced with the new systems which are proposed and required under the scope of the project. The infrastructures such as poles, cantilevers, cabling, aspects, etc. should not be reused. The dismantled infrastructure shall be delivered at the Employer's designated location without damage at no extra cost.	Kindly provide the location of the warehouses where the dismantled infrastructure to be delivered. This will help us to factor the logistics cost appropriately.	Employer will arrange necessary space to keep dismantled equipment within CMA area.
1261	Part-2	Employer's Requirement	ER-51	Part 2 Employers RequirementsPg. 51 & 52 9.2 System Design Requirement	i) Convergence: The Employer has already initiated many projects which have the state-of-the-art infrastructure at field locations deployed under them. The CITS Project Infrastructure should be made scalable for future convergence needs.	Kindly provide future scalability requirements	Please refer Section-VII of Part-2
1262	Part-2	Employer's Requirement	ER-51	Part 2 Employers RequirementsPg. 51 & 52 9.2 System Design Requirement	d) Availability: Components of the architecture must provide redundancy and ensure that is no single point of failure in the key project components.	We understand that the qty for each components to be considered as per the BOQ. If there is any additional redundancy is required, kindly specify the same in the BOQ.	RFP condition prevails. Bidder may propose additional items in other items section if required in Price schedule.
1263	Part-2		ER-51	9.2 System Design Requirement	Page no 55/391 point f) Security: The architecture must adopt an end-to-end security model that protects data and the infrastructure from malicious attacks, theft, natural disasters, etc. Using Firewalls and Intrusion detection systems such as attacks and theft should be controlled and well supported	In Design section at point Security Architecture refers about IPS solution apart from Firewall, but there is no Technical specification section given for IPS solution. Request to consider attached Annexure sheet for IPS specifications	RFP condition prevails. Specification mentioned in RFP is minimum, bidder may propose better specifications.
1264	Part-2	Employer's Requirement	ER-51	Employer's Requirement/ ER-51/8 Survey/study Phase	j) The Contractor shall directly interact with electricity boards for the provision of mains power supply at all desired locations for field solution. The Employer shall facilitate the same.	We understand that the fees paid towards new connection, HT Panels, Tarnsformers, related power cabling, DG HT panels for all project locations shall be reimbursed as per actual by employer. Please confirm.	Please refer to page no ER-56, clause 14.1 in Part 2 of RFP
1265	Part-2	Employer's Requirement	ER-52	Part 2 Employers Requirements Pg. 52 9.2 System Design Requirement	h) Interoperability: The proposed system should adhere to the interoperable	Kindly clarify this clause.	Please refer to 10.2 and 10.3 in Part-2
1266	Part-2	Employer's Requirement	ER-52	Part 2 Employers Requirements Pg. 52 9.3 Variation of the quantity and location of the project	a) As various projects are under implementation by the Employer and other development agencies, there might arise possible conflict on the location of equipment or the identification of the location due to construction activities, etc. In such a scenario, the alternate location for installation shall be proposed by the Contractor for Employers Approval.	In case the change in location occurs after the completion of the survey, additional cost to be paid by the authority for the resurvey of the new locations on actual. Same will become part of change request, pls confirm.	RFP condition prevails.
1267	Part-2	Employer's Requirement	ER-52	Part2 , Employer Requirements, 9.2 System Design Requirement, ER 52	The Employer may carry out the Security Audit of the entire system post acceptance / operationalization through a Third-Party Auditor (TPA) if required.	Please amend as: The Employer may carry out the Security Audit of the entire system post acceptance / operationalization through a Third-Party Auditor (TPA) if required and the cost for such audit shall be borne by employer.	Selected bidder needs to consider the effort and budget.
1268	Part-2	Employer's Requirement	ER-52	Part2 , Employer Requirements, 9.3 Variation of the quantity and location of the project, ER 52	a) As various projects are under implementation by the Employer and other development agencies, there might arise possible conflict on the location of equipment or the identification of the location due to construction activities, etc. In such a scenario, the alternate location for installation shall be proposed by the Contractor for Employers Approval.	In case of alternate location, that location should be within 100 metres of original identified location. Please confirm as the connectivity charges and other costs will vary with respect to each location.	RFP condition prevails.
1269	Part-2	Employer's Requirement	ER-52	Part2 , Employer Requirements, 9.3 Variation of the quantity and location of the project, ER 52	b) At the time of award of contract, the number of goods, works, or services originally specified in the bidding documents may be increased according to the Contractor's survey and design. It shall be without any change in the unit prices or other terms and conditions of the Contract.	Please confirm that new variation order would be given taking into consideration the same unit price.	Yes. Your understanding is correct.
1270	Part-2	Employer's Requirement	ER-53	Part 2 Pg 57	Any financial penalty imposed on the Employer during the contract period due to license noncompliance shall be borne by Contractor.	The bidder requests the following clarifications: Is there any financial capping on this penalty or the entire burden to be borne by the contractor?	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1271	Part-2	Employer's Requirement	ER-53	RFP Part 2, Pg 57, Development Phase, System Documentation	System Documentation: System Documentation both in hard copy and soft copy to be supplied along with licenses and shall include but not limited to the following. . Functional Requirement Specification (FRS) . High level design of whole system Programmes - Entire source codes as applicable	As per the RFP, We understand that Source code to be submitted for Website and Mobile app only and this is not applicable to Products / COTS system as Product IP rights are owned by the respective OEMs. Kindly Confirm If our understanding is correct.	Since continuous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
1272	Part-2	Employer's Requirement	ER-53	Employer's Requirement/ ER-53/8 Survey/10 Development Phase	Programs: — Entire source codes as applicable	We understand successful bidder shall provide source code, only for the new developments/customizations which will be made for this project. Please confirm, if understanding is correct.	Since continuous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
1273	Part-2	Employer's Requirement	ER-54	Part 2, Employer's Requirement, 12 Pilot Implementation, ER-54	(b) A pilot shall be demonstrated to the Employer and Engineer. If for any reason the pilot is found to be incomplete, these will be communicated to the Contractor in writing on the lapses that need to be made good. A one-time extension will be provided to the Contractor for making good on the lapses pointed out before offering the system to the Employer for review. Failure to successfully demonstrate the Pilot may lead to termination of the contract with no liability to the Employer.	We understand that the pilot implementation is only a demonstration in few traffic junctions. If the outcomes of this implementation does not meet the desired objectives of the entire project, it shall not be taken as a reason for termination of the contract. So we request you to kindly amend the clause as follows: (b) A pilot shall be demonstrated to the Employer and Engineer. If for any reason the pilot is found to be incomplete, these will be communicated to the Contractor in writing on the lapses that need to be made good. A one-time extension will be provided to the Contractor for making good on the lapses pointed out before offering the system to the Employer for review. Failure to successfully demonstrate the Pilot may lead to termination of the contract with no liability to the Employer.	RFP condition prevails.
1274	Part-2	Employer's Requirement	ER-54	Part 2, Employer's Requirement, 12.2 Pilot Testing Report, ER-54	The pilot testing shall be a system acceptance test of the pilot implementation and shall be conducted to confirm whether functionalities of the software and hardware of each subsystem satisfy the Employer's Requirement.	We request you to kindly provide us the following details with respect to Pilot Implementation: 1. Timeline for Supply, Installation & Commissioning 2. Performance parameters of each system 3. Bill of Quantity, etc.	1. Refer to Addendum-1, S.No: 117 dated 08-03-2022. 2. Contractor need to demonstrate device capability on field and during design stage application level capability (parameter) shall be discussed mutually between Employer and Contractor. 3. Please refer to table 12-1 in page ER-54 of Part2
1275	Part-2	Employer's Requirement	ER-54	Part 2, Employer's Requirement, 12 Pilot Implementation, ER-54	Payment for Pilot Implementation	We request you to kindly confirm that the payment for pilot implementation shall be made inline with the schedule of payment specified in Part 3, Section XI. Contract, SCH 2: Schedule of Payment	RFP condition prevails.
1276	Part-2	Employer's Requirement	ER-54	12 Pilot Implementation	12 Pilot Implementation	Kindly provide the timeline for the pilot implementation. Also provide detailed performance parameters and KPI's which will be monitored as miniature model of project can only provide analysis to some extent. Also, suggest the timeline for initiation of Pilot implementation and locations for pilot components considering network and power coverage requirements.	Refer to Addendum-1, S.No: 117 dated 08-03-2022 Contractor need to demonstrate device capability on field and during design stage application level capability (parameter) shall be discussed mutually between Employer and Contractor. The pilot implementation shall be done within first nine month of mobilization.
1277	Part-2	Employer's Requirement	ER-54	Part 2 Employers Requirements Pg.54 12 Pilot Implementation	(a) The Contractor shall conduct Pilot Implementation and testing for meeting the Employer's business requirements for CITS before rolling out the complete system. The pilot will run for four weeks to study any issues arising out of the implementation. The Contractor shall also review the health, usage, and performance of the system till it is stabilized during Pilot Implementation. Based on the Employer's (CTP, MTC, PMU) feedback for incorporating changes as required and appropriate, the Contractor shall train staff involved in the Pilot Implementation.	We understand the locations for the pilot implementations will be provided / finalized jointly between the SI and the authority. Hence, if there is a change required in terms of software customization or change in the camera view etc. will be done by the SI. However, if there is any change in location or re-installation of the infrastructure may lead the SI to incur additional cost. Hence, request to pay the additional charges if any due to change in location/ re-installation on actual. Kindly clarify.	RFP condition prevails. No additional cost will be paid for pilot. Location for installation shall be finalised with the Employer.
1278	Part-2	Employer's Requirement	ER-54	Part2 , Employer Requirements, 12 Pilot Implementation, ER 54	Based on the Employer's (CTP, MTC, PMU) feedback for incorporating changes as required and appropriate, the Contractor shall train staff involved in the Pilot Implementation.	Please confirm: Recommendation shall be within the bounds of the RFP, anything extra will be payable	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1279	Part-2	Employer's Requirement	ER-54	Section 12 - Pilot Implementation, Pg No 58	Pilot Implementation Scope	Will the scope also include setup of Analytics & Visualization Software? If yes, what will be the overall scope of Analytics part	Contractor need to demonstrate device capability on field and during design stage application level capability (parameter) shall be discussed mutually between Employer and Contrator.
1280	Part-2	Employer's Requirement	ER-54	Section 12 - Pilot Implementation, Pg No 58	Pilot Implementation Scope	For Pilot if analytics and BI will be part of scope, then we request you to share inputs on What are the underlying data source system? How data will be transmitted to BI Analytics Platform? How Many Users will be using the BI Analytics Platform? In Pilot How Many Numbers of Reports are expected?	Contractor need to demonstrate device capability on field and during design stage application level capability (parameter) shall be discussed mutually between Employer and Contrator.
1281	Part-2	Employer's Requirement	ER-55	Part2 , Employer Requirements, 13.2 ATCS, ER 55	The infrastructure of existing traffic signal systems including the aspects, controllers etc. will be dismantled. The dismantled infrastructure shall be delivered at the Employer designated location without damage at no extra cost.	Please clarify whether: 1. we can dismantle after installation or before installation? 2. any temporary lights will be provided? 3. any traffic marshals will be provided by the employer ?	1. Implementaion schdule shall be prepared by the bidder after contracting. 2. All necessary cost shall be borne by the bidder. 3. The bidder shall assist the Employer to obtain traffic marshals if necessary.
1282	Part-2	Employer's Requirement	ER-55	Section 13.2 , 13.3 ATCS, CBS		What are the underlying data source system? How data will be transmitted to BI Analytics Platform? How Many Users will be using the BI Analytics Platform? In Pilot How Many Numbers of Reports are expected?	Bidder can provide as per the solution as long as the RFP requirements and design stage requiremens of Client are satisfied.
1283	Part-2	Employer's Requirement	ER-56	Part 2,14.1, pg no 56	The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment under the scope of this Contract shall be in the scope of the Contractor	Kindly reimburse diesel for DG after submission of actual bills.	RFP Condition prevails. The bidder shall be consider in there scope.
1284	Part-2	Employer's Requirement	ER-56	Part 2, Employer's Requirement, ER-56, 14 Work Demarcation between Contractor and Communication/Power Provider	14.1 Procedure The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period i.e. Design phase, procurement, installation, testing, trail-run, commissioning, operations and maintenance period. The Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period.	We request you to kindly amend the clause as suggested below as the Employer being a government agency can directly pay the DISCOM. The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Employer Contractor only for the entire Contract period i.e. Design phase, procurement, installation, testing, trail-run, commissioning, operations and maintenance period. The Contractor Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period and the bidder need not consider charges for the same in their bid price.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1285	Part-2	Employer's Requirement	ER-56	Part 2, Employer's Requirement, ER-56, 14 Work Demarcation between Contractor and Communication/Power Provider	<p>14.1 Procedure</p> <p>The Contractor shall perform all the necessary application procedures to the Power Company required for the power to be supplied to the Traffic Information & Management System Command Control Centre (TIMS-CCC), City Bus System Command Control Centre (CBS-CCC), and the field equipment's. All the expenses charged by the Power Companies shall be borne by the Contractor.</p> <p>The Contractor shall make all necessary arrangements for the electricity needed for the execution of the Works and O&M period for the entire period of the Contract.</p>	<p>We request the employer to take necessary permissions from DISCOM/other agencies for provision of power at various locations of the project however the contractor shall closely co-ordinate with employer for the completion of application procedures. So kindly amend the clause as follows:</p> <p>"The Employer Contractor shall perform all the necessary application procedures to the Power Company required for the power to be supplied to the Traffic Information & Management System Command Control Centre (TIMS-CCC), City Bus System Command Control Centre (CBS-CCC), and the field equipment's in close co-ordination with Contractor. All the expenses charged by the Power Companies shall be borne by the Employer Contractor. The Employer Contractor shall provide make all necessary arrangements for the electricity needed for the execution of the Works and O&M period for the entire period of the Contract. Also if there are any delay due to the permission/approvals from Employer/DISCOM/Other agencies pertaining to the power connection, we request you to kindly confirm that contractor shall not be levied any penalty for such delay and time extension shall be provided accordingly."</p>	RFP condition prevails.
1286	Part-2	Employer's Requirement	ER-56	15 Tests and Inspection	Tests and Inspection	Kindly clarify The cost of Travel and stay and other expenses of the Employers Engineers during inspection shall be borne by the employer or by the contractor	Contractor to borne the all expences.
1287	Part-2	Employer's Requirement	ER-56	Part 2 Er 56, 14.1 Procedure	<p>The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period i.e. Design phase, procurement, installation, testing, trail-run, commissioning, operations and maintenance period. The Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period.</p>	<p>The bidder requests the following modifications: Recurring Charges for Electricity during O&M Period shall be borne by the Employer. The same shall be reimbursed on monthly basis.</p>	RFP condition prevails.
1288	Part-2	Employer's Requirement	ER-56	Employer's Requirement/ ER-56/8 Survey/10 Development Phase	<p>The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period i.e. Design phase, procurement, installation, testing, trail-run, commissioning, operations and maintenance period. The Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period.</p>	<p>The clause is open ended. Please provide the location and details of all the facilities which will b euse dby employer for which successful bidder will be responsible to provide electricity facility.</p> <p>The words "or any other facility" are open ended and needs to be explained during bidding stage or else shall be deleted for better clarity.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1289	Part-2	Employer's Requirement	ER-56	ER-56 14. Work Demarcation between Contractor and Communication/Power Provider	The fixed charges, installation charges, deposits, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TIMS-CCC, CBS-CCC, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period i.e. Design phase, procurement, installation, testing, trial-run, commissioning, operations and maintenance period. The Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period.	We request you to modify clause as per below The Employer shall not be responsible for any provision of power supply during implementation as well as operations and maintenance period, However the recurring charges like electricity bill, DG set fuel etc. will be borne by Employer during Operation and Maintainance period.	RFP condition prevails.
1290	Part-2	Employer's Requirement	ER-57	10 Development Phase	System Documentation both in hard copy and soft copy to be supplied along with licenses and shall include but not limited to the following. Documentation to be maintained, updated and submitted to the Employer regularly: ■ Functional Requirement Specification (FRS) ■ High level design of whole system ■ Low Level design for whole system / Module design level	We are assuming that the High level design (HLD) & Low level design (LLD) in this clause is regarding the Project and not for the software COTS product supplied. Is our assumption correct ?	No, It is applicable for all the products and items mentioned in RFP.
1291	Part-2	Employer's Requirement	ER-57	10 Development Phase	■ Programs: — Entire source codes as applicable	The Proposed CCC Software is a COTS Product, which will be available with complete transparency including manuals & help documents but providing / sharing the source code is not possible. We will share the Product Release Note covering the version details and an End User License Agreement as part of the software license delivery. Kindly confirm.	Since continous improvements are required for Website and Mobile Apps, source code for the same is required to be submitted by the contractor.
1292	Part-2	Employer's Requirement	ER-62	Employer's Requirement/ ER-62/8 Survey/19.2 JICA's Guidance for the Management of Safety	... (https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf)	The files are not available at the given link. Pleas provide the correct link or documents in this regard, if applicable for this project as these guidelines are applicable for Civil works and related projects. Please refer below Screenshot.	Please refer the below link https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf
1293	Part-2	Employer's Requirement	ER-75	Part 2 Pg 79	The inventory of spare parts shall be maintained during the project period . The mandatory spare parts shall be maintained as specified in Chapter 4 Bill of Quantity and will be audited time to time during the project period and any shortfall in this will be subject to penalty as per one hundred twenty percent (120%) of the unit price quoted in the price bid by the bidder during the project period. This inventory of mandatory spare parts shall be handed over to the Employer by the Contractor after performance certificate issued by Engineer.	The bidder requests the following clarifications: Does this mean that the spare parts maintained by the contractor will become the Employer's asset at the end of the contract period? Please confirm.	All the assets delivered to site and accepted by the Employer becomes Employer's asset.
1294	Part-2	Employer's Requirement	ER-79	4.2 Component Systems	ATMS CPS	What is the "CPS", as this is not defined earlier in the document.	Refer to Addendum-1, S.No: 126 dated 08-03-2022
1295	Part-2	Employer's Requirement	ER-79	4.2 Component Systems	All Servers, Storage, Computing, LPU, Networking, Security devices etc. shall be BIS certified.	Request you to change it to "All Servers, Storage, Computing, LPU, Networking, Security devices etc. shall be CE/ FCC certified/ Make in India" For justification: No Security or networking devices apart from power supply and power adapters come under the BIS category, Reference url for BIS listed device categories https://www.bis.gov.in/index.php/product-certification/products-under-compulsory-certification/scheme-ii-registration-scheme/ . Since many import hardware and build software locally which is 70% of the content of any networking or security solution Make in India can be considered instead of BIS.	Refer to Addendum-1, S.No: 84 dated 08-03-2022
1296	Part-2	Employer's Requirement	ER-80	Part 2, Section VII, Chapter 1, 6 Digital transmission system, ER-80	In addition, the CITS Project shall support communication with Internet of Things (IOT) equipment/systems utilizing the associated standard protocols like MQTT	A. Please list Internet of Things (IOT) equipment/systems in scope. B. Please list all protocols in scope that need to be supported for communication with IoT devices.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1297	Part-2	Employer's Requirement	ER-81	10.2 Interoperability of Data	The system should be capable of providing a data lake solution that automatically configures the core services necessary to easily tag, search, share, transform, analyze, and govern specific subsets of data across the employer or with other external users.	Data interoperability with employer and other external agencies with a proper system in place for future expansion.	Yes. Your understanding is correct.
1298	Part-2	Employer's Requirement	ER-81	10.2 Interoperability of Data	Interoperability of Data	The system should be capable of providing a data lake solution that automatically configures the core services necessary to easily tag, search, share, transform, analyze, and govern specific subsets of data across the employer or with other external users.	Query is not clear.
1299	Part-2	Employer's Requirement	ER-82	11.4 Degree of Protection Provided by Enclosures (IP)	11 Environmental Conditions 11.4 Degree of Protection Provided by Enclosures (IP) The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP65 or higher unless otherwise specified.	Traffic Controllers & Local processing unit generate internal heat which if trapped inside will affect working & performance. This needs to be changed to allow Ip55 enclosure which has provision of ventilation for heat dissipation	RFP Condition prevails. However bidder can propose better protection standard to meet the functional requirement.
1300	Part-2	Employer's Requirement	ER-82	11.4 Degree of Protection Provided by Enclosures (IP)	11 Environmental Conditions 11.4 Degree of Protection Provided by Enclosures (IP) The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP65 or higher unless otherwise specified.	Traffic Controllers & Local processing unit generate internal heat which if trapped inside will affect working & performance. This needs to be changed to allow Ip55 enclosure which has provision of ventilation for heat dissipation.	RFP Condition prevails. However bidder shall follow the specific protection as specified for each component. ER-82 specifies the general condition for protection of outdoor equipment.
1301	Part-2	Employer's Requirement	ER-82	Part 2 Employers Requirements Pg. 82, 12 Power Supply	All equipment shall operate with the power supply of 230V plus or minus 10 percent, and 50 hertz plus or minus 3 percent.	The non-IT equipment's like PAC, Comfort AC require 3 phase power supply, hence requesting to amend the clause.	RFP condition prevails. This is applicable to field equipment.
1302	Part-2	Employer's Requirement	ER-82	Part2 , Employer Requirements, 11 Environmental Conditions, ER 82	11.4 Degree of Protection Provided by Enclosures (IP) The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP65 or higher unless otherwise specified.	Please amend as: The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP54 IP65 or higher unless otherwise specified.	RFP Condition prevails. However bidder can propose better protection standard to meet the functional requirement.
1303	Part-2	Employer's Requirement	ER-82	Part2 , Employer Requirements, 13.1 Cabling, ER 82	13.1.1 Type of Cable All underground cable shall be placed inside steel, polyvinyl chloride (PVC) or high-density polyethylene (HDPE) of suitable size and unless otherwise specified no direct burial cable shall be used.	Please leave this requirement to the choice of the bidder.	RFP condition prevails.
1304	Part-2	Employer's Requirement	ER-82	11.4 Degree of Protection Provided by Enclosures (IP)	11 Environmental Conditions 11.4 Degree of Protection Provided by Enclosures (IP) The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP65 or higher unless otherwise specified.	Traffic Controllers & Local processing unit generate internal heat which if trapped inside will affect working & performance. This needs to be changed to allow Ip55 enclosure which has provision of ventilation for heat dissipation.	RFP Condition prevails. However bidder can propose better protection standard to meet the functional requirement.
1305	Part-2	Employer's Requirement	ER-82	11.4 Degree of Protection Provided by Enclosures (IP)	11 Environmental Conditions 11.4 Degree of Protection Provided by Enclosures (IP) The equipment and cabinet to be installed outdoor shall be electrically and mechanically isolated and shall have a degree of protection of IP65 or higher unless otherwise specified.	Traffic Controllers & Local processing unit generate internal heat which if trapped inside will affect working & performance. This needs to be changed to allow Ip55 enclosure which has provision of ventilation for heat dissipation	RFP condition prevails.
1306	Part-2	Employer's Requirement	ER-87	Part2 , Employer Requirements, 16 Cabinet/Junction Box, ER 87	All equipment cabinets for outdoor uses shall be of rainproof and rustproof construction with smooth exterior and adequate protection against moisture condensation and shall be made of high-quality steel or stainless-steel plates of adequate thickness	Please leave this requirement to the choice of the bidder.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1307	Part-2	Employer's Requirement	ER-87	17 Support Structure	The structural steel should be complied with IS 2062. The structure to support the equipment including the message board for VMS, the signal aspect for ATCS and cameras for TIDS, Camera for RLVD and Radar for SLVD, ANPR Cameras etc., shall be sturdy and aesthetically designed and capable of bearing wind loads up to 200 km/h.	Please amend the wind loads upto 50 m/s as specified in other clause of RFP. (i.e) 180 kmph	Refer to Addendum-1, S.No: 125 dated 08-03-2022.
1308	Part-2	Employer's Requirement	ER-93	Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS	General	We understand for the Traffic Information & Management System Command Control Centre 7500sqft of area there is no civil work involved for the same. And the scope off work is limited to interior and indoor work only. Kindly confirm if our understanding is correct .	Please refer to Chapter 1 General Design Requirements in Part-2. DG set installation including civil work is scope of work.
1309	Part-2	Employer's Requirement	ER-93	Part 2 Employers Requirements Pg. 93, Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS	Traffic Information & Management System Command Control Centre (TIMS-CCC) approximate size of 7500 Sq. Ft. will be established in the Chennai Traffic Police building as an operation core to monitor, manage and control traffic and incidents in the Chennai Metropolitan Area.	Kindly clarify whether this is only for the CCC or including on- premises DC	This space is includes Command Control Centre and Data Center
1310	Part-2	Employer's Requirement	ER-93	Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS	Chapter 3-1 Requirements of Command Control Centre for City Bus System & Chapter 2 Requirements of Traffic Information & Management System	We understand that all the subsystems w.r.t. traffic and transport solutions will be integrated with the central Intelligent Traffic Management System. Hence, kindly provide the required number of operator/ client license required at both the CCC locations.	Please refer to Break Down of Price Schedule No. 2 in Part-1 and Chapter 4 Bill of Quantity (BOQ) in Part-2
1311	Part-2	Employer's Requirement	ER-93	Part2 , Employer Requirements, Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS, ER 93	All the supplied equipment shall operate on 230 V, 50 Hz single -phase power supply. Power for all the equipment will be conditioned using on-line UPS with minimum 3 or more hours of back up.	Kindly limit UPS back up for only 1 hour as we don't envisage such a huge requirement for 3 hours back up and only 3 hour backup may increase the cost.	RFP condition prevails.
1312	Part-2	Employer's Requirement	ER-93	Part2 , Employer Requirements, Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS, ER 93	If required, the shifting of the CCC from temporary location to permanent location shall be in the scope of the Contractor. The necessary interiors and arrangement for smooth operations shall be in the scope of the Contractor	1. Please confirm whether Taking over can be issued even if it is in temporary location. 2. Shifting charges shall be paid to contractor at actuals. Please confirm. 3. Also confirm that necessary downtime shall be provided during such shifting and penalty shall not be levied. 4. In case of temporary locaiton, please confirm that interiors for temporary location need not be done.	1. Yes, taking over can be issued. 2. No additional charges will be paid. 3. Alternate option like DR to be proposed. 4. It is in the scope of bidder.
1313	Part-2	Employer's Requirement	ER-96	4 Layout	4 Layout	We request you to kindly provide the detailed drawing layout of the following along with floor plan. Also kindly provide the full address of the locations along with latitude & longitude. 1. TIMS -CCC 2. MTC - CCC	Refer to Addendum-1, S.No: 103 dated 08-03-2022.
1314	Part-2	Employer's Requirement	ER-96	Part 2 Employers Requirements Pg. 96 3 Equipment Location	If there is a delay in construction, any other temporary space shall be arranged by CTP for establishing the CCC temporarily.	Kindly provide the current status of the building along with handover timelines. Considering the complex nature of CCC and DC infra works, we recommend that only permanent implementation to be implemented as temporary CCC implementation and dismantling will result in lots of complexities and will increase the overall project value.	RFP condition prevails. Construction of building is in bidding stage.
1315	Part-2	Employer's Requirement	ER-96	3 Equipment Location	TIMS CCC will be established in the Office of Commissioner of Police. CTP has initiated the process of construction of a new building in the premises of Office of Commissioner of Police - Vepery. One floor will be allotted for CCC	1) Kindly confirm, space allocated for CCC shall have double height ceiling to accomadate 8x6 matrix videowall. 2) Kindly confirm the floor height and its dimensions.	Refer to Addendum-1, S.No: 103 dated 08-03-2022
1316	Part-2	Employer's Requirement	ER-97	Table 4.1 general	Details of TIMS-CCC Information	Please specify the detailed layout of all the rooms and partitions (ex. conference room, visitor room, pantry etc) also please provide the drawings for the same	Refer to Addendum-1, S.No: 103 dated 08-03-2022 Tentative layout provided.
1317	Part-2	Employer's Requirement	ER-97	Chapter 4 Bill of Quantity (BOQ)	TIMS Operation Room	Kindly let us know the number of person sitting in the TIMS operation Room room for seating arrangemnets and also kindly let us know the viewing distance / angle to be maintained from the Video wall	Refer to Addendum-1, S.No: 103 dated 08-03-2022 Tentative layout provided.
1318	Part-2	Employer's Requirement	ER-97	i. TIMS Operation Room	The Video Display Wall envisaged with 48 (70") nos. of cubes placed adjacent to each other and each of the clusters with 8x6 LED Panels/ screens.	Kindly confirm if LED panels can be supplied. As per Figure 2- 1: System Configuration of TIMS Command Control Center drawing mentions "Video Wall (DLP, 70-inch x8x6)".	Please refer to Section-VII of Part-2
1319	Part-2	Employer's Requirement	ER-97	ii. Meeting /Situation Room	This place will be equipped with Led screen, Table Mic, speaker, Projector, IP Phone.	Size of LED Panel in Meeting Room to be specified	It shall be minimum 70" display

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1320	Part-2	Employer's Requirement	ER-97	ER-97,Chapter 2-1 Requirements of Control Centre and Datacenter for TIMS, 4 Layout	It is mandatory for the main bidder that the control room interior solution provider supplies all elements / components like ceiling, flooring, control desks, panelling, partitions & luminaires (to comply with ISO 11064) and completes the installation activities of the same.	Please confirm exact lux level to be maintained.	Please refer to Section-VII of Part-2
1321	Part-2	Employer's Requirement	ER-97	Table 4-1: Details of TIMS-CCC Information	A. Civil Work (False Floor, Ceiling, Ducting, Access Doors, Painting, Partitioning etc.)	Carpet Area in SQ ft. OR Construction area to be required for all required components	Refer to Addendum-1, S.No: 103 dated 08-03-2022
1322	Part-2	Employer's Requirement	ER-98	i. TIMS Operation Room	Technical Support Room: Technical support room shall have a sitting arrangement of various technical staff who shall be responsible for providing technical assistance during operation stage of the project	Kindly let us know the number of person sitting in the Technical Support room for seating arrangements	Refer to Addendum-1, S.No: 103 dated 08-03-2022 Tentative layout provided.
1323	Part-2	Employer's Requirement	ER-99	Part 2, 5 Architectural Requirement	False Ceiling & Metal Panelling ■ Wall Panelling and Ceiling must be seismically tested & certified for Zone 3 (Chennai) Vibrations. Control Room Interiors must be free from health hazardous substances because of interior finishes. ■ Wall Panelling and Ceiling tiles must be Class A fire rated certified for surface burning characteristics and ROHS certified from to ensure restriction of hazardous substance in any of the materials. This is mandatory to ensure that the materials used in the interiors do not provoke fire. ■ It is imperative that the control centres are designed properly in terms of Aesthetics, Ergonomics and Functionality and should be designed as per ISO 11064 norms. Various aspects should be considered while designing to create ideal workplace, considering physiological aspects such as line of sight, field of vision and cognitive factors such as concentration and perceptivity as per ISO 11064.	Please remove the Certificates as these are monopolistic and restrictive in nature.	RFP condition prevails.
1324	Part-2	Employer's Requirement	ER-99	ER-99 - 5	Architectural requirement of Control Centre and Datacentre (This is applicable if On Premise primary DC option chosen by the contractor)	If the Contractor choose Cloud as Primary Data center for TIMS CCC then Architectural requirement of datacenter will not be applicable.	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
1325	Part-2	Employer's Requirement	ER-99	xi. Data Centre	TIA-942: Telecommunications Infrastructure Standard for Data Centres - TIA-942 defines practical methods to ensure electrical continuity throughout the rack materials and proper grounding of racks and rack- mounted equipment. This is the only specification that addresses problems specific to data centre infrastructure.	TIA-942 Tier rating to be mentioned	Bidder to choose the Tier rating which shall meet the functional and SLA requirement.
1326	Part-2	Employer's Requirement	ER-99	Table 5-1: Architectural requirement of Control Centre and Datacentre	Architectural requirement of Control Centre and Datacentre	Architectural requirement of Control Centre and Datacentre (This is applicable if On Premise primary DC option chosen by the contractor)	Successful bidder need to share the architecture with Employer. Engineer and Employer to approve the same before execution.
1327	Part-2		General	Request for Additions	The proposed SDS solution should be a purely software-based solution and should not be dependent on any hardware make and model. TIMS, CBS should be able to run SDS solution on any compatible x86 hardware of choice.	This feature will help to avoid vendor lock-in with specific hardware vendor.	RFP condition prevails
1328	Part-2		General	Request for Additions	The proposed SDS solution should be capable to connect to FC SAN for VM migration and reusing existing Storage natively using FC HBA.	This feature will provide more flexibility to HCI solution in case if same virtualization cluster need to connect with traditional storage.	RFP condition prevails
1329	Part-2				General	We understand there is a requirement of redundancy of network connectivity at the edge switch/field level. Kindly confirm if our understanding is correct for the same.	Yes. Your understanding is correct.
1330	Part-2				General	Please confirm if use of LPU is mandatory or we can perform analytics at the datacenter /central location. Kindly advise and confirm.	RFP condition prevails. LPU is mandatory.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1331	Part-2				General	We understand all field equipment connectivity till data center shall be done over MPLS connectivity. Please confirm if our understanding is correct	Bidder need to assess and consider connectivity to meet functional requirement.
1332	Part-2				General	We understand the base map required for the GIS shall be provided by client. Kindly confirm	The selected bidder shall assess and arrange both required data and GIS Platform.
1333	Part-2				General	We understand there is no requirement of Video Management System in order to view, record and playback and backfill the cameras views of ANPR, RLVD, etc. at the central location. Kindly confirm if our understanding is correct.	The bidder shall propose proper solution which meet the functional requirement.
1334	Part-2				General	We understand any domain , SSL certificates , SMS and email solution along with required gateway and mass messaging system shall be provided by client. Kindly advise if our understanding is correct.	RFP condition prevails.
1335	Part-2			Wi-fi equipment	New Spec to add	802.11ax Certified on dual radio The WIFI standards asked in the rfp are very outdated. Please consider 802.11ax certificate	RFP condition prevails. Specification mentioned in RFP is minimum. Bidder may propose suitable solution to meet functional requirement.
1336	Part-2			Part2-Page 297- 5.12 Load Balancer specification Page 297 New Clause	Should have deployed in any of the PSU/ Govt in India from past 5 years	For such critical networks, it is always suggested to have proven OEM to provide better support and deployment.	Query is not clear.
1337	Part-2			Page 383 New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for SSLi (SSL Interceptor)	Considering 95 % traffic is SSL based and any security device is not effective on encrypted traffic and Security devices do not support hardware based SSL decryption. It is suggested to deploy SSL interceptor to decrypt SSL traffic at perimeter and give to security devices for encryption for achieving deep packet inspection and security protection for SSL traffic.	RFP condition prevails.
1338	Part-2			Page 383 New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for GSLB in DR for site failover.	Global Server Load Balancer is required to do site-to -site failover form DC to DR.	RFP condition prevails.
1339	Part-2			Page 383 New Clause	Minimum specification & Quantity in BOQ needs to be incorporated for Network Data leakage prevention (DLP) and Data Classifications	As per MOUD and MeitY guidelines, confidential data in rest and data in transit to be protected and to control the data sharing on internet storage.	RFP condition prevails.
1340	Part-2			-	General	Kindly provide clarity on size of the control center and Datacentre space/ area available in sq. Ft/sq.	Please refer to Chapter-4 BOQ, Item no: A15 & K12.
1341	Part-2			-	General	Kindly provide clarity on Construction electricity and water scope	Please refer to 4.1 Responsibility of the Contractor in Part-2
1342	Part-2			-	General	Kindly provide clarity on Warehouse scope of project material	Please refer to 4.1 Responsibility of the Contractor in Part-2
1343	Part-2			-	General	Kindly define the list of existing and future application/ system integration and the level of integration etc.	RFP condition prevails. The bidder shall consider cross functional access or viewing licenses to be considered.
1344	Part-2			-	General	Kindly provide the following details. 1. BoQ for cloud requirement. 2. Technical specification for cloud and cyber security requirement	The bidder shall be proposed suitable architecture to fulfill the functional requirement.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1345	Part-2			Part 2 - Employer's Requirement Chapter 2-2 Requirments of Integrated Traffic Management System 4.6 Functional Requirement of Enterprise Management System (EMS) Table 4-7: Functional requirement of Enterprise Management System (EMS) (Pg. No. 150)	Suggestion to add new clause in order to select EMS solution from OEM with experience of deployment in similar projects.	The OEM of the proposed EMS solution should have successfully deployed the solution in atleast 3 ITMS/ACTS projects in India. PO/Signoff copies need to be submitted at the time of bid submission.	Refer to Addendum-1, S.No: 13 dated 08-03-2022.
1346	Part-2			General quiers	Electrical meter required at the Junctions	Kindly provide the total no of Electrical meter required at site.	Bidder need to propose as per accessed location mentioned in RFP.
1347	Part-2			Drawings Vol1 and Vol 2	Drawings Vol1 and Vol 2	As there are large quantity of reference & site drawings , we request to provide Autocad version of drawings so as prospective bidders may review & prepare cost estimate for bid . This will save lot of manhours across industry.	RFP condition prevails. Bidder to conduct their own site suvey of the locations to estimate the quantities. Autocad file will be provided to the selected bidder.
1348	Part-2			Additional	thermoplastic Road markings	It is industry standard that thermoplastic work is measured in square meters area. We request to provide lumpsum square meter area of work for thermplastic road markings .Additionally schedule format for bid (financial BOQ) may be updated with this item So as all bidders may factor same quantity. Payment may be done on actual work done basis.	RFP condition prevails. Bidder to conduct their own site suvey of the locations to estimate the quantities. Tentative Intersection improvement BOQ is mentioned in ER-195 & ER-196. Please refer to "B1" in Break Down of Price Schedule No. 3 of Part-1 for the same.
1349	Part-2			General	Delay Damages / Liquidated Damages	The bidder requests the following clarifications: Will the customer apply Delay Damages as well as penalty for SLA breach / missed timelines? Or these will be separate and only etither of these two shall be applicable for any breach.	RFP condition prevails. Delay damages is applicable for Section 1, 2, & 3. Please refer to PC-4 in part 3. SLA breach is applicable for Section 4 and 5 (O&M phase).
1350	Part-2			General	General	Whether GIS data creation (2D/3D) is in scope? Or do we need to ingest or digitize data from various formats?	There is no requirement for 3D data. However contractor need to consider ingest or digitize data from various formats.
1351	Part-2			General	General	Any existing GIS software like ESRI, ERDAS, etc.,	RFP Codition Prevails,The bidder shall use the standerd and latest available software
1352	Part-2			General	General	Total users of GIS application and concurrent user % or numbers	Please refer to Section-VII of Part-2
1353	Part-2			General	General	Any existing GIS data present. If yes, what is the size and format of the data. We assume that the GIS datasets required for ITMS will be sourced and provided by Client	There is no GIS data present. Bidder need to assess and propose the required data.
1354	Part-2	Employer's Requirement			General Query	As per our understanding expenses towards new load line for control room, HT panels, Tarnsformers and related Cabling shall be taken care by CSCL directly. Pleas econfirm, if understanding is correct.	Contractor to borne the all expences.
1355	Part-2	Employer's Requirement				Kindly confirm the floor load bearing capacity	Bidder to assess and propsoe the same
1356	Part-2	Employer's Requirement				Kindly confirm if any preffered makes list	No. It shall be from reputed OEM.
1357	Part-2	Employer's Requirement		General	All Data center system architecture component specifcatons are very generic with traditional technologies(server,storage,backup and tape library)	Since proposed solution asking for multi cloud environment can we propose latest Hyper converge infrastructure technology which can offer inbuilt provisioning, DC -DR automation, Data Protection and centralized cloud management platform with reduced RTO ,RPO and meeting all functional requirements. Which can enable complete Software Defined Datacenter (SDDC) functionality - provision Compute, Network, Storage and Security solutions	Bidder may assess the requirement and propose the solution which satisfies functional requirement to the satisfaction of the employer.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1358	Part-2			General	All Data center system architecture component specications are very generic with traditional technologies (server,storage,backup and tape library)	Hope the specifications are very minimal, bidder to do sizing as per solution	Yes. Your understanding is correct.
1359	Part-2			General	General	We understand that for CBS Command Control Center no dedicated infra like Racks, Switches, Firewalls, Bandwidth links are asked in RFP, so all the services will be accessed through DC, if DC room down due to any issues CBS Command Control Center can not access any services. Please confirm.	Please read RFP completely. The bidder shall propose proper solution which meet the RTO such as 24 hours and RPO such as 4 hours in ER-107, and operation and maintenance requirement in ER-357.
1360	Part-2			General	General	We understand that for TIMS Command Control Center no dedicated infra like Racks, Switches, Firewalls, Bandwidth links are asked in RFP, so all the services will be accessed through DC, if DC room down due to any issues TIMS Command Control Center can not access any services. Please confirm.	Please read RFP completely. The bidder shall propose proper solution which meet the RTO such as 24 hours and RPO such as 4 hours in ER-107, and operation and maintenance requirement in ER-357.
1361	Part-2			General	General	We understand that no dedicated storage required for flagged video.	Please refer to Section-VII of Part-2
1362	Part-2			General	General	We understand that DC and Cloud based DR will be run in Active-Passive mode.	Yes. Your understanding is correct.
1363	Part-2			General	General	We understand that all bandwidth charges (like internet, MPLS, P2P...etc) will be reimbursed as per actual by CSCL. Please confirm.	Yes. Your understanding is correct.
1364	Part-2			General	UPS for 3-hours backup with Batteries and Outdoor junction Box	For 3 Hours backup UPS battery sizing will be very big in accordance to load calculated, So, Outdoor Junction Box Size will be very Big. Please Clarify.	RFP condition prevails.
1365	Part-2	Employer's Requirement		Load Balancer requirements	Instead of considering physical load balancer? Can the bidder propose Loadbalncer solutions based on software-defined architecture that separates the central control plane from the distributed data plane .		No query provided.
1366	Part-2	Employer's Requirement		Suggested Clause	EMS/NMS OEM must be an industry standard, enterprise-grade solution and shall be in the present in Leaders Quadrant of Forrester / Gartner / IDC report for ITSM for the last two years	Solution having been analysed & recognized by leading analysts ensures that an industry standard solution is being proposed. This is important because as NMS/EMS is the only solution that gives visibility into the project and is responsible for SLA measurements and audits, and therefore all the stakeholders must agree to the reports been generated from NMS/EMS. This warrants an industry-standard solution	RFP condition prevails. Yes, your understanding is correct.
1367	Part-2	Employer's Requirement		Suggested Clause	The proposed solution must be an industry standard solution from an OEM that is ISO 27001, ISO 27034 certified & to ensure proper guidelines on Information Security Processes, this certification needs to be certified from reputed auditor like Schellman/bsi/KPMG/PwC/Ernst & Young. Certification copy for the same to be submitted along with bid Certification copy for the same to be submitted along with bid	This clause protects customer assets from potential cyber breaches & security threats while complying with the Application security standards and to ensure proper guidelines on Information Security Processes, this certification needs to be from an reputed auditor like BSI/Schellman/KPMG/PwC/Ernst & Young..	RFP condition prevails.
1368	Part-2	Employer's Requirement		Suggested Clause	The proposed NMS solution deployment must support latest version of both Windows and Linux Operating Systems with open source database as backend and should be 64-bit application to fully utilize the server resources on which it is installed.	In order to get more convenience on the implementation, so that customer is free to choose the infra. By considering the overall reduction of TCO	Query is not clear.
1369	Part-2	Employer's Requirement		Suggested Clause	The proposed solutions must have been in operations at least 3 or more deployments across Govt / Public Sector, monitoring and managing at least 10,000 network nodes in each of the cases individually	To ensure that the proposed NMS/EMS is proven at the scalability required for the said project and is operational in the Indian Public Sector space and thereby avoid risk of being a test bed for solutions not known to scale up to the requisite levels.	RFP condition prevails.
1370	Part-2	Employer's Requirement		Suggested Clause	The proposed EMS solution should be built on modern container technologies, and have an options to deploy on classic mode (non containerised) as well as containerized (like Docker, Kubernetes) mode. The solution should either support built-in Kubernetes technology or Bring Your Own Kubernetes (BYOK) platform provided by the bidder	This clause helps customer to choose the EMS deployment compatibility considering the TCO & ROI on infrastructure.It provides a universal layer on top of which your container-based apps can run, regardless of the underlying infrastructure Cloud, or your own data centers and it can also Runs on Ubuntu, RHEL, CoreOS, on-premises, on major public clouds, and anywhere else.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1371	Part-2	Employer's Requirement				<p>Measurement may be made by using non-intrusive technology such as Radar integrated camera or individual radar and homologation certificate from Ministry of Traffic or equivalent department from respective country of origin, document authenticated by Indian Embassy (to authenticate that systems are legalized and tested for infractions to avoid legal issues) or Certificate from internationally accredited metrology laboratories (approved for speed calibration) is acceptable</p> <p>We have seen that many suppliers are trying to make solutions using non certified sensors. Which is not good and can be challenged in long run. As per international norms and as per international metrology norms and in all certified international labs only sensors which have proper test reports as per legal metrology can be used. Please add certificate requirement for the sensor from legal metrology norms and minimum references for the sensor also as it will help in future against legal cases which can be effective from retrospective effect. Solution can only be certified when sensor is. please add OIML R 91 requirement for the system and the sensor also</p>	RFP condition prevails.
1372	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should have support for configuring multiple virtual instances on the same hardware appliance	Request the department to consider the mentioned clause as this will help if the applications are deployed in multiple environments such as Production, Non-Production, User Acceptance Testing Environments etc.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1373	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should support dedicated resources for each virtual instance such as throughput, SSL CPS, Memory, CPUs etc with the support of built-in hypervisor on the platform.	Request the department to consider the mentioned clause as this will help for better performance among the different virtual instances to be deployed across multiple environments.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1374	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should support upto 5 number of virtual ADC instances scalable to 10 or higher	Request the department to consider the mentioned clause as this can be used to perform ADC features in different zones. The ADC features today consists of the features like global server load balancing, link load balancing and SSL inspection that can be used in the future with the same hardware.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1375	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should support Virtualization such that individual virtual ADC instance can be rebooted independently without affecting other instance	Request the department to consider the mentioned clause as rebooting a virtual instance in a zone should not effect any other adc virtual instances in other zones.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1376	Part-2	Employer's Requirement		Additional Point - Load Balancer	The hypervisor for hosting virtual ADC instances should be proprietary hypervisor and should not offer any other 3rd party instances on the hypervisor.	Request the department to consider the mentioned clause as the hypervisor should be secure and hosting other 3rd party virtual instances may induce vulnerabilities on the hypervisor that the vendor may not own to.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1377	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should support minimum 18K RSA CPS and 10K ECC CPS.	Request the department to consider the mentioned clause and there are no points in the specification for CPS support.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1378	Part-2	Employer's Requirement		Additional Point - Load Balancer	Should have: TLS1.3, 2048 bits SSL and Elliptical curve Ciphers support from the time of supply. SSL and ECC should run on dedicated hardware chipset and should not be software based.	Request the department to consider the mentioned clause as the SSL protocol should use most secure ciphers suites and support hardware based acceleration.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1379	Part-2	Employer's Requirement		Additional Point - Load Balancer	The solution should support centralized management and deep application analytics. The solution should capture the below in the analytics:- Status of the Applications(Up, Down, Admin-Down,Shutdown, Warning),Top Applications by Throughput (bps),Top Applications by Request (per sec),Application Name,Protocol,Current Throughput (bps),Current Connections (per sec),Source IP,Groups (Up/Total),Real Servers (Up/Total),End-to-End Time,TLS Version,Key Exchange Algorithms,Top Used Ciphers, Rejected SSL Handshakes (%),SSL Connections per Second,URL & Hostname	Request the department to consider the clause as analytics should provide all the attributes and information about the application. This will help the monitoring team to view application response time and server failures.	Refer to Addendum-1, S.No: 97 dated 08-03-2022
1380	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	There are no specification stated for Web Application Firewall in the RFP	Request the department to list all the specification necessary for Web application Firewall.	Refer to Addendum-1, S.No: 100 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1381	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	The proposed solution should have minimum 16 x 1G Copper ports and should have support for atleast 8 x 10G SFP+ ports on the device	Request the department to include the specification for interfaces to be supported in the Web application Firewall	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1382	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	The solution should have 8x 1G copper ports and 4 x 10G SFP+ ports populated from day-1	Request the department to include the specification for interfaces to be supported in the Web application Firewall	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1383	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	The solution should have support for configuring multiple virtual instances on the same hardware appliance	Request the department to consider the mentioned clause as this will help if the applications are deployed in multiple environments such as Production,Non-Production, User Acceptance Testing Environments etc.	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1384	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	The solution should support dedicated resources for each virtual instance such as throughput,SSL CPS, Memory, CPUs etc with the support of built-in hypervisor on the platform.	Request the department to consider the mentioned clause as this will help for better performance among the different virtual instances to be deployed across multiple environments.	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1385	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	The hypervisor for hosting virtual ADC instances should be proprietary hypervisor and should not offer any other 3rd party instances on the hypervisor.	Request the department to consider the mentioned clause as the hypervisor should be secure and hosting other 3rd party virtual instances may induce vulnerabilities on the hypervisor that the vendor may not own to.	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1386	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	WAF should detect Backend Server Failure and route the traffic to available server and should have capability of Load Balancing across the multiple servers	Request the department to consider the mentioned clause as the the solution should be able to perform health check for application server to check their availability	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1387	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	Should be able to uniquely detect and block if required the end user based on internal IP address, Plugins Installed in the browser type etc. instead of going with traditional IP based blocking only	Request the department to include the specification as this feature will help to detect and block malicious traffic from end users	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1388	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	WAF Should support both Negative & Positive Security for zero day protection	Request the department to include the specification as this feature will help to detect and block malicious traffic from end users	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1389	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	Proposed WAF should have feature set to learn the application automatically when ever there is a change in application structure and should create a policy automatically for the newly learned application structure.	Request the department to include the specification since the the solution should have provision to dynamically learn the application traffic behaviour if any changes on the application layer	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1390	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	Proposed WAF should have Feature to self scoring for the threats	Request the department to include the specification as this feature will help to detect and block malicious traffic from end users	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1391	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	WAF should have Predefined Policy and should apply automatically whenever a new application is added to ease management and maintenance. WAF should push real time signature to DDoS without any manual intervention.	Request the department to include the specification as this feature will help to detect and block malicious traffic from end users	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1392	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	To ease out on management and forensic analysis proposed WAF should have GUI feature to filter the events from the logs. WAF and DDoS should be managed by single management console.	Request the department to include the specification since the solution should have detailed logs captured for any security events which are triggered	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1393	Part-2	Employer's Requirement		Additional Point - Web Application Firewall	Should support ICAP integration	Request the department to include the specification since the solution should have capability to integrated with 3rd party security solutions for ex: Anti-Virus for enhancing the security of the application	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1394	Part-2	Employer's Requirement		Additional Point - DDoS	There are no specification stated for DDoS solution in the RFP	Request the department to list all the specification necessary for DDoS solution	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1395	Part-2	Employer's Requirement		Additional Point - DDoS	DDoS solution should be a dedicated hardware appliance and not a licensed feature on Firewall or Load Balancer Appliance or Proxy Based Architecture or a VM based solution installed on a server machine.	Request the department to include the specification as DDoS shouldn't be considered as an integrated component of any other solution as this could have an impact on the performance of the product	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1396	Part-2	Employer's Requirement		Additional Point - DDoS	The proposed solution should have provision for atleast 24 x 1/10G slots on the hardware	Request the department to include the specification for interfaces to be supported in the DDoS solution which will be required incase of scalability to be done in the future	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1397	Part-2	Employer's Requirement		Additional Point - DDoS	The proposed solution should have 8 x 10G SFP+ interfaces populated on the appliance from day-1	Request the department to include the specification for interfaces to be supported in the DDoS solution from day-1	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1398	Part-2	Employer's Requirement		Additional Point - DDoS	System should have inspection throughput of 2Gbps and scalable to 10 Gbps without additional hardware.	Request the department to include the specification for throughput to be supported in the DDoS solution which will be required incase of scalability to be done in the future	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1399	Part-2	Employer's Requirement		Additional Point - DDoS	Should support latency less than 60 microseconds and should be clearly documented in the data sheet	Request the department to include the specification for latency for processing the data traffic	Refer to Addendum-1, S.No: 100 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1400	Part-2	Employer's Requirement		Additional Point - DDoS	System should support In-Line, SPAN Port, Out-of-Path deployment modes from day 1	Request the department to include the specification since the solution should support various deployment modes and should have flexibility for integrating the solution in the network	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1401	Part-2	Employer's Requirement		Additional Point - DDoS	The DDoS detection capability of the solution must not be impacted by asymmetric traffic routing.	Request the department to include the specification since the solution should support various deployment modes and should have flexibility for integrating the solution in the network	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1402	Part-2	Employer's Requirement		Additional Point - DDoS	The system must allow protection parameters to be changed while a protection is running. Such change must not cause traffic interruption	Request the department to include the specification since the DDoS solution should provide flexibility to modify the protection policies when the device is in Active state	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1403	Part-2	Employer's Requirement		Additional Point - DDoS	System should Protect from multiple attack vectors on different layers at the same time with combination of Network, Application, and Server side attacks	Request the department to include the specification since the solution should also have capability to detect and mitigate against the complex attacks targeting various layers in the network	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1404	Part-2	Employer's Requirement		Additional Point - DDoS	Inspection and prevention is to be done in same hardware	Request the department to include the specification since the solution should have capability to detect and mitigate the attacks on the same hardware	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1405	Part-2	Employer's Requirement		Additional Point - DDoS	System should have mitigation mechanism to protect against zero- day DoS and DDoS attacks without manual intervention and should have the provision to configure real time signature within 20 seconds and this should be clearly documented in the datasheet	Request the department to include the specification since the solution should have capability to detect and mitigate Zero day attacks and should have provision to configure real time signatures on the device itself	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1406	Part-2	Employer's Requirement		Additional Point - DDoS	DDoS device should support for Burst Attack Mitigation and signature generation based on behaviour of Attack.	Request the department to include the specification since the solution should have capability to detect and mitigate complex DDoS attacks	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1407	Part-2	Employer's Requirement		Additional Point - DDoS	System should provide zero-day attack protection based on learning baseline / behavioural analysis of normal traffic, zero-day attacks are identified by deviation from normal behaviour.	Request the department to include the specification since the DDoS solution should have capability to detect and mitigate Zero day attacks when targeted towards the network	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1408	Part-2	Employer's Requirement		Additional Point - DDoS	Proposed solution should have centralized management system and helps to manage, monitor, and maintain all DDoS Appliances from a device	Request the department to include the specification for managing the DDoS device and extracting reports from the DDoS solution	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1409	Part-2	Employer's Requirement		Additional Point - DDoS	The system must support the generation of PDF and e-mail reports	Request the department to include the specification since extracting reports is crucial for auditing purpose	Refer to Addendum-1, S.No: 100 dated 08-03-2022
1410	Part-2	Employer's Requirement		Additional Clause / requirement for IT Security	IDAM	Identity management or identity and access management (IDAM), is a framework of policies and technologies to ensure that the right users (in an enterprise) have the appropriate access to technology resources. IDAM systems fall under the overarching umbrellas of IT security and data management. IDAM helps protect against security incidents by allowing administrators to automate numerous user account related tasks. Identity and access management standardizes and even automates critical aspects of managing identities, authentication, and authorization, saving time and money while reducing risk to the business. Draft specs for IDAM are enclosed as Annexure - 3 in subsequent section of this document for your kind consideration.	RFP condition prevails. The bidder may propose suitable solution.
1411	Part-2	Employer's Requirement		Additional Clause / requirement for IT Security	SIEM	IT environments are growing ever more distributed, complex and difficult to manage, making the role of security information and event management (SIEM) technology more important than ever. SIEM solution is important to fulfil key IT security requirements i.e. Compliance; Operations support; Zero-day threat detection and Forensics. Draft specs for SIEM are enclosed as Annexure - 4 in subsequent section of this document for your kind consideration.	RFP condition prevails. The bidder may propose suitable solution.
1412	Part-2	Employer's Requirement		Additional Clause / requirement for IT Security	Application Security and Application data encryption	Application security is important because today's applications are often available over various networks and connected to the cloud, increasing vulnerabilities to security threats and breaches. ... Application security testing can reveal weaknesses at the application level, helping to prevent these attacks. Draft specs for Application Security are enclosed as Annexure - 5 in subsequent section of this document for your kind consideration.	RFP condition prevails. The bidder may propose suitable architecture/solution.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1413	Part-2	Employer's Requirement		Additional Clause / requirement for IT Security	Network Access Control	<p>NAC Network Access Control is essential for ensuring that the users who gain access to networks, data, devices, and software resources are properly authorized to do so</p> <p>It is becoming a growing necessity to possess the tools providing the access control, visibility, and compliance capabilities essential for strengthening network security infrastructure. This is true because organizations are now expected to account for the exponential growth of mobile devices accessing their networks and the security risks they bring.</p> <p>A NAC system is important at it will deny network access to noncompliant devices, give them only restricted access to computing resources, or place them in a quarantined area, thus keeping insecure nodes from infecting the network</p> <p>Draft specs for Network Access Control are enclosed as Annexure - 6 in subsequent section of this document for your kind consideration.</p>	RFP condition prevails. The bidder may propose suitable architecture/solution.
1414	Part-2	Employer's Requirement		Additional Clause / requirement for IT Security	Reliable DNS, DHCP and IP Address Management Services	The solution is based on purpose-built hardware to provide the most robust, scalable, and integrated controls for network services available in the market today. These network services, including DNS, DNSSEC, DHCP, FTP, TFTP, HTTP, HTTPS and NTP, are critical to supporting various network devices leveraging real-time database that is managed centrally using the IP Address Management service.	RFP condition prevails. The bidder may propose suitable architecture/solution.
1415	Part-2			Suggested Clause	EMS/NMS OEM must be an industry standard, enterprise-grade solution and shall be in the present in Leaders Quadrant of Forrester / Gartner / IDC report for ITSM for the last two years	Solution having been analysed & recognized by leading analysts ensures that an industry standard solution is being proposed. This is important because as NMS/EMS is the only solution that gives visibility into the project and is responsible for SLA measurements and audits, and therefore all the stakeholders must agree to the reports been generated from NMS/EMS. This warrants an industry-standard solution	RFP condition prevails.
1416	Part-2			Suggested Clause	The proposed EMS solution should be built on modern container technologies, and have an options to deploy on classic mode (non containerised) as well as containerized (like Docker, Kubernetes) mode. The solution should either support built-in Kubernetes technology or Bring Your Own Kubernetes (BYOK) platform provided by the bidder	This clause helps customer to choose the EMS deployment compatibility considering the TCO & ROI on infrastructure.It provides a universal layer on top of which your container-based apps can run, regardless of the underlying infrastructure Cloud, or your own data centers and it can also Runs on Ubuntu, RHEL, CoreOS, on-premises, on major public clouds, and anywhere else.	RFP condition prevails.
1417	Part-2			General		<p>Please clarify OEM for speed sensor and solution should have some references and experience in india or abroad.</p> <p>We strongly recommend that some basic referemces for speed sensor OEM and solution for RLVD & Speed for similar product is asked for (equivalent to project size) . Else people can go with non proven solution and technology. Therefore, we request you to consider the following :</p> <p>PQ for OEM . Speed detectors : it should have test reports in compliance to International legal metrology standards (OIML R 91) and should have sold atleast 2000 such sensors. Acuracy self decleration with certified firmware should be provided. Speed System : The OEM of the speed enforcment should have proper test reports in compliance to legal metrology standars(OIML R 91,D11) and should have proper certificate for issuing fines . The propsed system should have atleast installtion base of 200 system india.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1418	Part-2			Part 2 – Employer's requirements Clause 4.1 – Fully Adaptive Traffic Control -1 Pg no. ER-171	ATCS shall be able to enable the automatic subarea formulation which is to dynamically connect and separate adjacent adaptive regions(subareas) comparing the real time traffic conditions of each adaptive region to optimize the traffic flow. (for example: if difference of cycle length of each adaptive region(subarea) is less than 20 seconds, the adjacent adaptive regions(subareas) can be connected.)	Please change this requirement from automatic subarea formulation to semi-automatic subarea formulation. Sub area, or region is a collection of junctions in a common area, be this either as part of a closely spaced signalised area of the network or as an arterial route / corridor, where co-ordination between the junctions is advantageous. The formulation of a sub area is typically based on traffic engineering experience, and so a partial automatic subarea formulation is possible, where a common cycle time will be used	RFP condition prevails.
1419	Part-2	Employer's Requirement					No query provided.
1420	Part-2	Employer's Requirement		General		Please confirm whether the data storage components can be hosted on cloud data storage for Big data solution (Data Lake) or whether we have to proposed storage on-premise (Data Lake) solution	Details to be discussed during design stage.
1421	Part-2	Employer's Requirement		General		Please confirm whether the business analytics and data repository solution needs to be hosted on a single DC at Chennai Traffic Information & Management Centre.	It shall be as per bidder's solution which shall comply with RFP requirements.
1422	Part-2	Employer's Requirement		Security	Standard Digital signature on each violation to assure data integrity. Strong encryption on data during local storage and data transfer to back office / Cloud storage.	Request Department to consider strong and robust solution for local storage data transfer along with bring your own key concept to not to depend on vendors. We request and suggest the deaprtment to consider the Network Hardwae Security Modules [HSM] which will secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys (Digital signature Keys and Certificate) The HSM is a high-assurance, tamper-resistant, network-attached appliances. which will provide and ensure the root of trust. Requesting Department to specify the below mentioned standard Key Management Specification to have a robust and secured solution for data protection. Which will ensure data security and comply with Government Regulatory Compliances like GDPR, HIPAA, UIDAI, PCI-DSS-Data Privacy	RFP condition prevails.
1423	Part-2	Employer's Requirement			Additional clause	Top and bottom bracket of signal heads should be made Aluminium for vehicular signal heads and polycarbonate for pedestrian signal heads. (considering the load of the signal head)	Bidder can provide additional functionalities beyond the RFP requirement.
1424	Part-3	Section IX. General Condition (GC)	GC-10	1.2 Interpretation	In these conditions, provisions including the expressions "Cost plus profit" require this profit to be one- twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.	What is this relate to? We request to please clarify.	The clause is self explanatory.
1425	Part-3	Section IX. General Condition (GC)	GC-10	1.5 Priority of Documents	The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:.....	Please note that the muatually agreed terms would be foremost in the order or captured in the Contract Agreement which would finally be signed off by the parties.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1426	Part-3	Section IX. General Condition (GC)	GC-12	1.10 Employer's Use of Contractor's Documents	<p>1.10- Employer's Use of Contractor's Documents</p> <p>As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.</p> <p>The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:</p> <p>(a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works, (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.</p> <p>The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.</p>	<p>Contractor does not provide- non-terminable transferable or right to copy license.</p> <p>"Contractor hereby grants to Employer a non-exclusive, non-sub licensable and perpetual license and right to use the deliverables, formats, material and the documentation solely for Employer's own internal business operations as set forth under the this Agreement. Contractor's software license under this Agreement does not include the right to (a) sell, lease, exchange, mortgage, pledge, license, sub-license, assign or in any other way convey, transfer or alienate COntractor property in favour of any person (either for commercial consideration or not (including by way of transmission) and/or (b) reverse compile or in any other way arrive at or attempt to arrive at the source code of the Contractor property. All the software licenses and warranties pertaining to any software and/or hardware supplied under this Agreement shall be as per Contractor's license terms and conditions and/or End User License Agreement."</p>	RFP condition prevails.
1427	Part-3	Section IX. General Condition (GC)	GC-13	1.14 Joint Several Liability	<p>1.14 Joint Several Liability</p> <p>If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:</p> <p>(a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;</p>		No query provided.
1428	Part-3	Section IX. General Condition (GC)	GC-13	1.12 Confidential Details	<p>1.12- Confidential Details</p>	<p>Propose to <u>add</u> the following:</p> <p>The parties shall keep other party's information confidential. The information which needs to be kept confidential shall be marked as "confidential" by the disclosing party while making disclosure. This confidentiality obligation of either party shall remain for a period of 10 years from expiry of the Agreement.</p>	RFP condition prevails.
1429	Part-3	Section IX. General Condition (GC)	GC-13	1.13 Compliance with Laws	<p>1.13- Compliance with Laws</p> <p>The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:</p> <p>(a).....</p> <p>(b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.</p>	<p>Propose to delete the word "consequences" as it has amibiguity in determining liability and is uncapped for the Contarctors.</p> <p>Contractor would want to restrict the indemnity provisiosns to negligenece and wrongful act done by Contractor as it's a higher degree of remedies under the contract and cannot be extended to all the provisions. Also for Contractor's breach for T&C there are other remedies available under law and contract.</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1430	Part-3	Section IX. General Condition (GC)	GC-13	1.14 Joint Several Liability	1.14- Joint Several Liability	Not acceptable.	RFP condition prevails.
1431	Part-3	Section IX. General Condition (GC)	GC-13	1.14 Joint Several Liability	New clause	<p>In case the bid is submitted as JV/Consortium, we request you to add new clause as suggested here to ensure more competitive proposal from bidder.</p> <p>1.Contract Agreement shall be signed by all the members of JV/Consortium with detailed scope of work & billing schedule. JV/Consortium members are jointly and severally responsible to the Employer for their respective scope of work agreed as per JV/Consortium agreement. However, Lead Member shall have overall responsibility for the successful execution of the project.</p> <p>2.Performance Security shall be submitted by the parties for their respective portion based on agreed scope.</p> <p>3.Each JV/consortium member is independently responsible for executing its part of work through its own resources and bears the risk & penalty for its scope of work.</p> <p>4.JV/Consortium parties shall raise the invoices to Employer for their respective scope of work and the Lead member shall submit an overall claim as a cover note collating both the invoices. Employer shall pay directly to the JV/consortium members (in their respective GST registration).</p> <p>5.Purchaser shall recover TDS from the bill and remit to the PAN account of respective JV/consortium members.</p>	RFP condition prevails.
1432	Part-3	Section IX. General Condition (GC)	GC-13	1.14 Joint Several Liability		We request to kindly clarify whether a consortium can also be considered as bidder instead of joint venture (existing or intended), as informed in the pre-bid meeting	Refer to Addendum-1, S.No: 03 dated 08-03-2022
1433	Part-3	Section IX. General Condition (GC)	GC-19	Part B - Specific Provisions	25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage	Please amend the clause as below: 5% percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage	RFP condition prevails.
1434	Part-3	Section IX. General Condition (GC)	GC-23	4.12 Unforeseeable Physical Conditions	4.12- Unforeseeable Physical Conditions	Requets to please elaborate this clause.	The clause is self explanatory.
1435	Part-3	Section IX. General Condition (GC)	GC-26	4.20 Employer's Equipment and Free-Issue Material	Employers Equipment and Free Issue Material:- Amount due for the use of employers equipement	Clarity required on what all equipments will be provided and what is the approximate cost to be borne by the contractor.	No equipment will be provided by Employer. All required equipment and material for project shall be in Contractor's scope.
1436	Part-3	Section IX. General Condition (GC)	GC-39	7.8 Royalties	Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all royalties, rents and other payments for: (a) natural Materials obtained from outside the Site, and (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.	When required by the employer.How much amount of royalty to be paid? Kindly clarify.	Please refere to clause 4. f). Section-VI General Requirements of RFP Part-2.
1437	Part-3	Section IX. General Condition (GC)	GC-41	8.4 Extension of Time for Completion	8.4-Extension of Time for Completion	In the event of extention of time, the price and delivery schedule would be mutually negotiated and agreed.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1438	Part-3	Section IX. General Condition (GC)	GC-43	8.7 Delay Damages	If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.	Request you to consider the following changes related to the Delay damages clause to reduce liability. If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion] due to the reasons solely attributable to the Contractor, the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.	RFP condition prevails.
1439	Part-3	Section IX. General Condition (GC)	GC-43	8.7 Delay Damages	8.7 Delay Damages If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data. These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.	We are OK for LD/delay damge subject to the foll. conditions "Notwithstanding anything to the contrary, Liquidated damages are levied @ 0.5% per week, subject to a maximum of 5% of the undelivered/unperformed portion of the contract value. Such LD shall constitute Purchaser's sole and exclusive remedy, to be will be levied for delay in supplies, which delays are solely attributable to Contractor.".	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1440	Part-3	Section IX. General Condition (GC)	GC-43 & PC3	8.7 Delay Damages	<p>8.7 Delay Damages</p> <p>If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default.</p> <p>These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate.</p> <p>However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.</p> <p>These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works.</p> <p>These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.</p>	<p>The bidder requests the following modifications:</p> <p>a) Delay damages for the Works - 0.1% of the Accepted Contract Amount for the delayed item or service per 2 weeks of delay.</p> <p>b) Maximum amount of delay damages - 5% of the final Accepted Contract Amount</p> <p>Notwithstanding anything contained in this Agreement of the RFP the maximum aggregate penalty including liquidated damages shall not exceed five percent of the value of the delayed or undelivered services and can be imposed for reasons that are solely applicable to the contractor.</p>	RFP condition prevails.
1441	Part-3	Section IX. General Condition (GC)	GC-55	13.7 Adjustments for Changes in Legislation	The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.	We understand that any statutory variation in taxes, duties, levies, etc. are amended after submission of the bid, the bid price shall be adjusted proportionately in accordance with GCC Clause 13.7 Adjustments for Changes in Legislation. Please confirm whether our understanding is correct.	Yes. Your understanding is correct.
1442	Part-3	Section IX. General Condition (GC)	GC-57	14.2 Advance Payment	The Employer shall make an advance payment, as an interest-free loan for mobilisation and design, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the Contract Data.	Please specify the % or ceiling for Mobilization Advance	Refer clause GC 14.2 in Particular conditions Part-A Contract data of RFP Part-3.
1443	Part-3	Section IX. General Condition (GC)	GC-57	14.2 Advance Payment	(ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Contract Data or in another form approved by the Employer.	Whether a separate Guarantee other than performance Gurantee need to be provided to avail Advance	Yes. Your understanding is correct.
1444	Part-3	Section IX. General Condition (GC)	GC-57	14 Contract Price and Payment	<p>14.1 The Contract Price</p> <p>14.2 Advance Payment</p> <p>14.3 Application for Interim Payment Certificates</p> <p>14.4 Schedule of Payments</p> <p>14.5 Plant and Materials intended for the Works</p> <p>14.6 Issue of Interim Payment Certificates</p> <p>14.7 Payment</p> <p>14.8 Delayed Payment</p>	Request you to kindly clarify in detail the Payment terms and corresponding milestones. It is difficult to interpret paragraphs. A tabular format providing details of payment milestones and the respective deliverables may kindly be provided.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1445	Part-3	Section IX. General Condition (GC)	GC-57	14.2 Advance Payment	The Employer shall make an advance payment, as an interest-free loan for mobilisation and design, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the Contract Data.	Please specify the % or ceiling for Mobilization Advance	Refer clause GC 14.2 in Particular conditions Part-A Contract data of RFP Part-3.
1446	Part-3	Section IX. General Condition (GC)	GC-58	14.2 Advance Payment	(a) deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 per cent (30%) of the Accepted Contract Amount less Provisional Sums;	Whether the Deduction for Advance Payment is made in the payment released by the employer	Yes. Your understanding is correct.
1447	Part-3	Section IX. General Condition (GC)	GC-58	14.3 Application for Interim Payment Certificates	(b) any amounts to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [Advance Payment];	Pls specify Ceiling or % of repayment or Deduction in every bill	Query is not clear.
1448	Part-3	Section IX. General Condition (GC)	GC-59	14.4 Schedule of Payments	the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date.	Whether this schedule may be entertained and payment may be processed based on the same	RFP condition prevails.
1449	Part-3	Section IX. General Condition (GC)	GC-59	14.5 Plant and Materials intended for the Works	(a) (ii) submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence; and either:	This clause may not be quantified and depends on Engineer to accept the same. Pls quantify the same to reduce dependency	RFP condition prevails.
1450	Part-3	Section IX. General Condition (GC)	GC-61	14.6 Issue of Interim Payment Certificates	if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.	Request to delete the clause.	RFP condition prevails.
1451	Part-3	Section IX. General Condition (GC)	GC-61	14.7 Payment	(b) the amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the amount shown on any statement submitted by the Contractor, within 14 days after such statement is submitted, any discrepancy being rectified in the next payment to the Contractor including any amounts due in accordance with a decision by the DB which have been included in the Interim Payment Certificate; and	56 days may be reduced to 42 days for better money flow to the contractor. Since the Job is labour intensive and payment should be made frequently during field rollout. Please consider	RFP condition prevails.
1452	Part-3	Section IX. General Condition (GC)	GC-61	14.6 Issue of Interim Payment Certificates	if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.	Request to delete the clause.	RFP condition prevails.
1453	Part-3	Section IX. General Condition (GC)	GC-62	14.9 Payment of Retention Money	However, if any work remains to be executed under Clause 11 [Defects Liability] or Clause 12 [Tests after Completion], the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed.	Before withholding, intimation may be provided and grace period may be given. Please clarify	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1454	Part-3	Section IX. General Condition (GC)	GC-65	15.2. Termination by employer:	In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately	In view of the said clause, Even the should have sufficient turn around time to take decisions in scenario of termination of the Agreement and for that we need reasonable time to connect with our service providers/vendors, taking care of the equipments/deliverables to be delivered under the transaction and So request you to kindly modify this clause as follow: Termination by employer: In any of these events or circumstances, the Employer may, upon giving 44 30 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.	RFP condition prevails.
1455	Part-3	Section IX. General Condition (GC)	GC-69	17.1 Indemnities	17.1- Indemnities The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of: (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the design, the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, their respective agents, or anyone directly or indirectly employed by any of them".	Contractor will indemnify the Employer alone against all third-party claims, actions, proceedings, demands, costs, expenses, causes of action or suits relating to personal injury, death and loss or damage to property arising out of its sole negligence in the performance of this Agreement. Liability under this "Indemnity" section is subject to the provisions of the "Limitations of Liability" section of the contract.	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1456	Part-3	Section IX. General Condition (GC)	GC-70	17.3 Employer's Risks	<p>17.3- Employer's Risks The risks referred to in Sub-Clause 17.4 [Consequences of Employer's Risks] below, insofar as they directly affect the execution of the Works in the Country, are:</p> <p>(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,</p> <p>(b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,</p> <p>(c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel,</p> <p>(d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity</p> <p>(e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,</p> <p>(f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,</p> <p>(g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, if any, and</p> <p>(h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.</p>	<p>Requets to please elaborate this clause and make sure the interest both Employer as well as Contractor is safeguarded.</p>	<p>The clause is self explanatory.</p>
1457	Part-3	Section IX. General Condition (GC)	GC-72	17.6 Limitation of Liability	<p>Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial PropertyRights].</p> <p>The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.</p> <p>This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.</p>	<p>We request you to kindly modify this clause as follow:</p> <p>Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial PropertyRights].</p> <p>Notwithstanding anything contained under this Contract, the total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall be as per the limit specified in Contract Data.not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.</p> <p>This Sub-Clause shall not limit liability in any case of fraud, deliberate-willful default or reckless-willful misconduct by the defaulting Party.</p>	<p>RFP condition prevails.</p>

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1458	Part-3	Section IX. General Condition (GC)	GC-72	17.6 Limitation of Liability	The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.	<p>We suggest the modification of said clause as to bring out clarity in terms of place and language at the time of Arbitration proceeding.</p> <p>To avoid ambiguity and have better clarity on place and language of Arbitration proceedings. Request you to consider the same:</p> <p>The place of arbitration shall be a New Delhi neutral location determined in accordance with the applicable rules of arbitration; and the arbitration shall be conducted in the English language for communications defined in Sub-Clause 1.4 [Law and Language].</p>	RFP condition prevails.
1459	Part-3	Section IX. General Condition (GC)	GC-72	17.6 Limitation of Liability	<p>17.6 Limitation of Liability</p> <p>Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].</p> <p>The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.</p> <p>This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.</p>	<p>Propose to delete carveouts from both waiver of consequential losses and from the cap on liability cap.</p> <p>Delete: " other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights]"</p> <p>Delete: "other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights],"</p> <p>Delete: "delebrate default"</p>	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1460	Part-3	Section IX. General Condition (GC)	GC-72	17.6 Limitation of Liability	<p>17.6 Limitation of Liability Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights]. The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount. This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.</p>	<p>The bidder requests the following modifications: i) The aggregate liability of bidder (whether in contract, tort, negligence, strict liability in tort, by statute or otherwise) for any claim in any manner related to this Agreement, including the work, deliverables or Services covered by this Agreement, shall be the payment of direct damages only which shall in no event exceed the total amount, paid to bidder by the Purchaser in the preceding twelve months under this Agreement that gives rise to such liability (as of the date the liability arose). ii) In no event shall bidder be liable for any consequential, incidental, indirect, special or punitive damage, loss or expenses (including but not limited to business interruption, lost business, lost profits, or lost savings) nor for any third-party claims (other than those set-forth in Clause (i) above) even if it has been advised of their possible existence.</p>	RFP condition prevails.
1461	Part-3	Section IX. General Condition (GC)	GC-72	17.6 Limitation of Liability	<p>The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free- Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.</p>	<p>we understand that total liability of the contractor / bidder will not exceed more than total contract value under any circumstances. Kindly confirm if our understanding is correct.</p>	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1462	Part-3	Section IX. General Condition (GC)	GC-75	18.3 Insurance against Injury to Persons and Damage to Property	18.3 Insurance against injury to Persons and Damage to Property The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate. This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data, with no limit on the number of occurrences. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply. Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause: (a) shall be effected and maintained by the Contractor as insuring Party, (b) shall be in the joint names of the Parties, (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and (d) may however exclude liability to the extent that it arises from: (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works, (ii) damage which is an unavoidable result of the	Request to modify this clause:" (b) shall be in the joint names of the Parties", as Policy cannot be issued in joint names as per Bidder risk management guideline	RFP condition prevails.
1463	Part-3	Section IX. General Condition (GC)	GC-76	19 Force Majeure	19 Force Majeure	Propose to include the following:-theft, pandemic, vandalsim and any loss or liability caused by a third party (not engaged by the bidder) including a failure of any third party communication system which the bidder is reliant upon, as force Maejure event.	RFP condition prevails.
1464	Part-3	Section IX. General Condition (GC)	GC-77	19 Force Majeure	war, hostilities (whether war be declared or not), invasion, act of foreign enemies,	In view of current situation and to bring out clarity we have captured the events that can be covered under FM event. Request you to consider the same. war, hostilities (whether war be declared or not), invasion, act of foreign enemies, restrictions due to epidemic/pandemic (including but not limited to Covid-19).	RFP condition prevails. Since COVID-19 event or other similar event has no consistent impact on all works (example, civil works vs. technology), time extension will be provided on a case-to-case basis and not as a Force Majeure event. Contractor shall submit request for time extension with proper justification for the specific event in accordance with GC 8.4. Extension of Time for Completion.
1465	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	Terms of Payment: Schedule No. 2: Forty percent (40%) of the total or pro rata CIP/EXW amount upon Incoterm "CIP/Ex-Work", upon receipt at Contractor's warehouses at Project site (destination) within forty-five (45) days after receipt of invoice and documents. Schedule No. 3	Request you to kindly revise the payment terms for schedule 2 & 3 for delviery of goods at the contractor's warehouse to 50% as most of the OEM's/service Providers ask for 100% payment on delivery. Adding 10% more at the time of delivery will add to the cushion of the bidder and will help to manage its cash flow issues.	Refer to Addendum-1, S.No: 134 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1466	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	General	Kindly clarify credit period for payment	Please refer to SCH2 in Part-3
1467	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	Schedule No. 2 Plant and Equipment Supplied from Abroad for Section 1, Section 2 and Section 3: * Ten percent (10%) of the total CIP amount as an advance payment * Forty percent (40%) of the total or pro rata CIP amount upon Incoterm "CIP", upon receipt at Contractor's warehouses at Project site (destination) * Forty percent (40%) of the total or pro rata CIP amount upon achieving the passing of the commissioning tests * Ten percent (10%) of the total or pro rata CIP amount upon issue of the Taking-Over Certificate	We request you to kindly amend the payment terms as suggested below for better cashflow requirements of the bidder. <u>Schedule No. 2 Plant and Equipment Supplied from Abroad for Section 1, Section 2 and Section 3 :</u> * Ten percent (10%) of the total CIP amount as an advance payment * Seventy Forty percent (70% 40%) of the total or pro rata CIP amount upon Incoterm "CIP", upon receipt at Contractor's warehouses at Project site (destination) * Ten Forty percent (10% 40%) of the total or pro rata CIP amount upon achieving the passing of the commissioning tests * Ten percent (10%) of the total or pro rata CIP amount upon issue of the Taking-Over Certificate	Refer to Addendum-1, S.No: 134 dated 08-03-2022
1468	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	Schedule No. 1 Design Services for Section 1, Section 2 and Section 3 Schedule No. 2 Plant and Equipment Supplied from Abroad for Section 1, Section 2 and Section 3 Schedule No. 3 Plant and Equipment Supplied from within the Employer's Country for Section 1, Section 2 and Section3 Schedule No. 4 Installation Services for Section 1, Section 2 and Section 3	We understand that the Payments for schedule 1, 2, 3 & 4 shall be paid on pro-rata basis. Kindly confirm whether our understanding is correct.	Either total or pro rata basis. Please refer SCH2 in Part-3
1469	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	Terms of Payments	We understand that the project comprises both Hardware and Software components. We request you to kindly segregate payment terms for both hardware and software components individually. This will help analysing overall project in a better way financially to ascertain cashflow impact.	RFP condition prevails.
1470	Part-3	Section XI. Contract Form	GF-6	SCH 2: Schedule of Payment	SCH 2: Schedule of Payment TERMS OF PAYMENT Schedule No. 1 Design Services for Section 1, Section 2 and Section 3 Ten percent (10%) of the total design services amount as an advance payment within twenty-one (21) days after receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favour of the Employer.	Please provide the validity details of irrevocable advance payment security submitted against advance payment.	Refer clause GC 14.2 in Particular conditions Part-A Contract data of RFP Part-3
1471	Part-3	Section XI. Contract Form	GF-7	SCH 2: Schedule of Payment	Schedule No. 3 Plant and Equipment Supplied from within the Employer's Country for Section 1, Section 2 and Section3: * Ten percent (10%) of the total EXW amount as an advance payment * Forty percent (40%) of the total or pro rata EXW amount upon Incoterm "Exworks", upon receipt at Contractor's warehouses at Project site (destination) * Forty percent (40%) of the total or pro rata EXW amount upon achieving the passing of the commissioning tests * Ten percent (10%) of the total or pro rata EXW amount upon issue of the Taking-Over Certificate	We request you to kindly amend the payment terms as suggested below for better cashflow requirements of the bidder. <u>Schedule No. 3 Plant and Equipment Supplied from within the Employer's Country for Section 1, Section 2 and Section3 :</u> * Ten percent (10%) of the total EXW amount as an advance payment * Seventy Forty percent (70% 40%) of the total or pro rata EXW amount upon Incoterm "Exworks", upon receipt at Contractor's warehouses at Project site (destination) * Ten Forty percent (10% 40%) of the total or pro rata EXW amount upon achieving the passing of the commissioning tests * Ten percent (10%) of the total or pro rata EXW amount upon issue of the Taking-Over Certificate	Refer to Addendum-1, S.No: 134 dated 08-03-2022

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1472	Part-3	Section XI. Contract Form	GF-7 & GF-9	SCH 2: Schedule of Payment	Schedule No. 1 Design Services for Section 1, Section 2 and Section 3, Schedule No. 2 Plant and Equipment Supplied from Abroad for Section 1, Section 2 and Section 3, Schedule No. 3 Plant and Equipment Supplied from within the Employer's Country for Section 1, Section 2 and Section 3 & Schedule No. 4 Installation Services for Section 1, Section 2 and Section 3: Ten percent (10%) of the total amount as an advance payment within twenty-one (21) days after receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favour of the Employer.	Please clarify on the validity of advance payment security and also confirm that this advance security shall be returned to contractor upon expiry.	Refer clause GC 14.2 in Particular conditions Part-A Contract data of RFP Part-3.
1473	Part-3	Section XI. Contract Form	GF-8	SCH 2: Schedule of Payment	The amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents submitted by the Contractor made in quarterly basis in accordance with GC Sub-Clause 14.3.	Kindly clarify that O&M payments will be equated quarterly instalments of quoted value.	Yes. Your understanding is correct.
1474	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	Performance Security: The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	In view of the recent Notification from the Ministry of Finance, all RFP's issued till 31/12/2021 should only ask for PBG's of 3% instead of 5-10%. Therefore, request you to please relax this requirement in view of the said notification No. F.9/4/2020-PPD	RFP condition prevails.
1475	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	Request you to confirm whether initially we can provide Performance Bank Guarantee for period of 3.5 years along with the letter mentioning that New Performance Bank Guarantee will be issued for future required period before expiring this BG	RFP condition prevails.
1476	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	As per Min. of Finance OM No. F.9/4/2020-PPD dated 12th Nov. 2020, PBG rate is fixed at 3% of total contract value. We hereby request you to allow us to Submit Performance Security @ 3 % of Accepted Contract Amount by issuing corrigendum	RFP condition prevails.
1477	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount	Please amend the clause as below: The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent 3 % (Three) of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount	RFP condition prevails.
1478	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	Percentage of Retention : 10% Limit of Retention Money: 5% of the Accepted Contract Amount	We request you to kindly do not retain any money during interim payments as this will affect the cashflow requirements of the bidder. As we are already submitting a performance security, we request you to kindly not retain any money for retention and please pay the contractor in full on pro-rata basis as specified in SCH 2: Schedule of Payment depending upon the quantum of work completed.	RFP condition prevails.
1479	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	We understand that "Demand Guarantee" is Bank Guarantee only. Please confirm whether our understanding is correct.	Yes. Your understanding is correct.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1480	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	As per recent guidelines from Govt of India, Performace security is 3 % of the total contract value. Hence, we request the authority to reduce PBG of 10% to 3%.	RFP condition prevails.
1481	Part-3	Section X. Particular Condition	PC-2	Part A - Contract Data	Performance Security 'The Performance Security will be in the form of a "demand guarantee" in the amount(s) of ten (10) percent of the Accepted Contract Amount and in the same currency(ies), during the contract period of ninety one (91) months of the Accepted Contract Amount.	The bidder requests the following modifications: The Bidder shall furnish Performance Security to the Authority for an amount of 3% of the Contract Value (as per Circular No. F/9/4/2020-PPD, dtd. 12/11/2020, Ministry of Finance, Government of India) valid up to 30 (thirty) days after the date of completion of contract period.	RFP condition prevails.
1482	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	Delay damages for the Works: 0.1% of the Accepted Contract Amount per day. Refer to Table: Summary of Sections	The Penalty for Delay @0.1% is too big considering the value of the contract. For Illustration: If the contract value is 500 Cr. For any delay even by a week will invite a penalty of 3.5 Cr which is very huge and lead to financial nonviability of the Project for the Bidder. Request you to revise the clause as: " 0.1 0.01% of the value of delayed deliverables the Accepted Contract Amount per day . Refer to Table: Summary of Sections	RFP condition prevails.
1483	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	Percentage of Retention Money:- 10%	Please confirm 10% of what.	10% of the amount derived as per Clause 14.3 (a) & (b) mentioned in RFP Part-3, General Conditions.
1484	Part-3	Section X. Particular Condition	PC-3	Limitation of Liability	10% of the final Accepted Contract Amount	As per the standard practice in big tenders, Request you to consider the following changes suggested. 40-5% of the value of delayed deliverables the Accepted Contract	RFP condition prevails.
1485	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	The product of 1.0 times the Accepted Contract Amount	As per the standard practice in big tenders, Request you to consider the following changes suggested. The product of 1.0 times the Accepted Contract Amount The maximum total liability to the employer shall be limited to the applicable Scope of work/Purchase order/Invoice giving rise to such liability.	RFP condition prevails.
1486	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	GST, Customs Duty or levies for the works of Contract shall be reimbursed as per actual.	Our understanding is that we have to mention basic prices in schedule of prices, and, any taxes /duties would be charged and paid as per prevailing rate at the time of Billing - Request you to confirm whether our understanding is correct	The rates and prices quoted in the bid shall include any duties/taxes/levies applicable/payable by Contractor if any. However GST, Customs Duty or levies for works shall be reimbursed as per actuals. The bid price quoted shall not include GST, Customs duty or levies for work.
1487	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	GST, Customs Duty or levies for the works of Contract shall be reimbursed as per actual.	Request you to confirm whether Chennai smart city Ltd is availing any concession in custom duties for this project (like wise Project import licence under chapter 9801 etc or any other)	No.
1488	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	GST, Customs Duty or levies for the works of Contract shall be reimbursed as per actual.	If the answer to the above query is yes then whether Chennai Smart city Ltd will provide required documentation to us for getting project import licence in our name	Not applicable.
1489	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	8.7 Delay damages for the Works: 0.1% of the Accepted Contract Amount per day Maximum amount of delay damages: 10% of the final Accepted Contract Amount	We request you to kindly amend clause as follows: 8.7 Delay damages for the Works: 0.1% of the undelivered portion of Accepted Contract Amount per week day - This penalty shall be applicable only if the project implementation is not completed within timelines as specified in Summary of Sections in PC-4 Maximum amount of delay damages: 10% of the final Accepted Contract Amount	RFP condition prevails.

Response to Pre-Bid Queries for Procurement of Design, Supply, Installation, Commissioning, Operations and Maintenance of Intelligent Transportation Systems in Chennai Metropolitan Area

Sl. No	RFP Part	Category	Page No	Clause No	Bid Document Statement	Query/Suggestion from Bidder	Remarks/ Clarification by CSCL
1490	Part-3	Section X. Particular Condition	PC-3	Part A - Contract Data	Delay damages for the Works : 0.1% of the Accepted Contract Amount per day. Refer to Table: Summary of Sections	We request the authority to consider Delay damages for an undelivered scope of works.	RFP condition prevails.