KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

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Phone: 04896- 263361 & 263360

F.No. 34/Smart City/2024/195 **Dated: 12.06.2024**

RFP.No. 34/Smart City/2024/195

Bids are invited in response of the Request For Qualification (RFQ) Cum Request For Proposal (RFP) floated by the Kavaratti Smart City Limited (KSCL) for "**Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M)".**

RFP for Selection of Master System (MSI) For Implementation of Integrated Command and Control Centre (ICCC) at Kavaratti and other Islands of Lakshadweep under Kavaratti Smart City Limited (KSCL) (including O&M for 5 years).

Volume 1

Notice Inviting Tender

Letter of Invitation

To

The Kavaratti Smart City Limited has decided to set up "Establishment of Integrated Command and Control Centre (ICCC) at Kavaratti" where the ICCC is a collaborative frame work where information / Data from different sources such as Cameras, VTMIS, Disaster management, Electricity, Water, Transport, District Panchayat, Fire, Police, Metrology, e- Governance, Tourism etc. can be collected and analyze in a single platform for better planning of the city. It also plays the role of decision support system. Surveillance system supplies 24 x 7 scanning and monitoring of human movement, crime incident management, criminal tracking etc**.**

The Kavaratti Smart City Limited has accordingly decided to invite competitive bids for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

It is requested to participate in the Bid stage and submit your Technical and Financial bids along with all the relevant documents in accordance with RFP.

The selection shall be based on Quality cum Cost Selection (QCBS) basis.

KSCL reserves the right to cancel, terminate, change, or modify this procurement process and /or requirements of Bid stated in the RFP, without assigning any reasons and without accepting any liability for the same.

For Kavaratti Smart City Limited

CEO

Seal of Office

Date:

Disclaimer

The information contained in this Request for Proposal document ("RFP") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of Kavaratti Smart City Limited (herein after referred to as “KSCL” or the “Authority”) or any of its employees, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer by the Authority to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their financial offers (Bids) pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority and its employees or advisers to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in the Bidding Documents, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) may be on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

The Authority and its employees/ advisors make no representation or warranty and shall have no liability to any person including any Applicant or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bid Stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or Bids without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

Key Bid Parameters

Bidders are invited to submit their Bids on or before the time, date and at the office for submission as indicated below. The Bids submitted after this time and date or at any other office other than indicated herein below will not be considered under any circumstances; unless notified by the Authority with full information of the altered time, date and the office for submission.

Sl. No.	Event Description	Particulars
1.	Name of Work	Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).
2.	Estimated Cost	Rs. 58.69 Cr
3.	RFP downloadable from website	www.tendersutl.gov.in or www.lakshadweep.gov.in
4.	Online downloading of tender	Date 13 .06.2024 Time:(up to 15:00 hours IST)
5.	Last Date for download of RFP on website	Date and Time 04 .07.2024 at 15:00 Hours
6.	Bid Submission Starting date	Date: 13 .06.2024 Time: (up to 15:00 hours IST)
7.	Mode of Bid Submission	Bids shall be submitted in the e-tender mode through the website https://tendersutl.gov.in Formalities for Registration, submission of bids, etc. are available in this website itself.
8.	Bid Documents	The bid is invited in Two Bid System. Bidder shall submit the Technical Bid and Financial Bid separately in the given format.
9.	Address for communication & submission of Bid	Kavaratti Smart City Limited Second floor, Secretariat Kavaratti- 682555, UT of Lakshadweep. Ph: 04896-263360,263361 Email: smartkavaratti@gmail.com
10.	Contact Details	Shri. ARUN JADHAV, CTO, KSCL +91 9496274995
11.	Last Date for receiving queries for pre-Bid meeting	Pre bid queried shall be shared over email id smartkavaratti@gmail.com before Date: 19 .06.2024; Time (at 15:00 hours IST)

Sl. No.	Event Description	Particulars
		Queries shall be in the form of excel and pdf (signed /stamped)
12.	Date of Pre-Bid Meeting	Date: 19.06.2024; Time (at 17:00 hours IST)
13.	Place of pre-bid meeting	Through Video conference
14.	Date & Time for opening of Technical Bid	04 .07.2024 16:15 hours IST
15.	Presentation by technically qualified bidders	Will be Communicated to Successful Bidders
16.	Date & Time of opening of Financial Bid	Will be Communicated to Successful Bidders
17.	Financial bid	Bidders shall submit financial bid in online format only.
18.	Contract Duration	Go-Live + 60 Months
19.	Earnest Money/Bid security	Form of Bank guarantee

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Acronyms & Abbreviations

#	Acronyms	Description
1.	**AAA**	Authentication, authorization, and accounting
2.	**AI**	Artificial Intelligence
3.	**API**	Application Programming Interface
4.	**AMC**	Annual Maintenance Contract
5.	**ANPR**	Automatic Number Plate Recognition
6.	**BOM**	Bill of Material
7.	**BOQ**	Bill of Quantities
8.	**CAPX**	Capital Expenditure
9.	**CCTNS**	Crime and Criminal Tracking Network and Systems
10.	**CCTV**	Closed Circuit Television
11.	**CMMI**	Capability Maturity Model Integration
12.	**COC**	City Operation Centre
13.	**COP**	Common Operating Platform
14.	**COTS**	Commercial Off-The-Shelf
15.	**CSV**	Comma-Separated Values
16.	**DBA**	Database Administrator
17.	**DC**	Data Center
18.	**DIT**	Directorate of Information Technology
19.	**DNS**	Domain Name Server
20.	**DR**	Disaster Recovery
21.	**DRC**	Disaster Recovery Center
22.	**DPR**	Detailed Project Report
23.	**EMD**	Earnest Money Deposit
24.	**EMS**	Enterprise Management System
25.	**ERSS**	Emergency Response Support System
26.	**ETA**	Estimated Time of Arrival
27.	**ETD**	Estimated Time of Departure
28.	**ETM**	Electronic Ticketing Machine
29.	**FB Camera**	Fixed Boxed Camera
30.	**FPS**	Frames Per Second
31.	**FRS**	Functional Requirement Specifications
32.	**GIS**	Geographical Information System
33.	**GOI**	Government Of India
34.	**GPRS**	General Packet Radio Service

#	Acronyms	Description
35.	**GPS**	Global Positioning System
36.	**GSM**	Global Systems for Mobile Communications
37.	**GUI**	Graphical User Interface
38.	**HA**	High Availability
39.	**HDPE**	High-Density Polyethylene
40.	**HO**	Head Office
41.	**HTTP**	Hypertext Transfer Protocol
42.	**HTTPS**	Hypertext Transfer Protocol Secure
43.	**ICCC**	Integrated Command and Control Center
44.	**ICT**	Information and Communication Technology
45.	**IDS**	Intrusion Detection System
46.	**IP**	Internet Protocol
47.	**IPS**	Intrusion Prevention System
48.	**IT**	Information Technology
49.	**ITIL**	Information Technology Infrastructure Library
50.	**ITMS**	Integrated Traffic Management Systems
51.	**KPI**	Key Performance Indicator
52.	**LAN**	Local Area Network
53.	**LOI/LOA**	Letter of Intent/Letter of Award
54.	**MAN**	Metropolitan Area Network
55.	**MeitY**	Ministry of Electronics and Information Technology
56.	**MoU**	Memorandum of Understanding
57.	**MPLS**	Multi-Protocol Label Switching
58.	**MSV**	Mobile Surveillance Vehicle
59.	**NAS**	Network Attached Storage
60.	**NIC**	National Informatics Centre
61.	**NMS**	Network Management System
62.	**NOC**	Network Operations Center (NOC)
63.	**O&M**	Operations & Maintenance
64.	**OEM**	Original Equipment Manufacturer
65.	**OFC**	Optical Fiber Cable
66.	**ONVIF**	Open Network Video Interface Forum
67.	**OPEX**	Operation Expense
68.	**OS**	Operating Systems
69.	**OSPF**	Open Shortest Path First

#	Acronyms	Description
70.	**OTP**	One Time Password
71.	**PA System**	Public Address System
72.	**PB**	Petabyte
73.	**PDU's**	Power Distribution Units
74.	**PoE**	Power over Ethernet
75.	**PTZ**	Pan Tilt Zoom
76.	**QR Code**	Quick Response Code
77.	**RFP**	Request for Proposal
78.	**RoW**	Right of Way
79.	**RPO**	Recovery Point Objective
80.	**RTO**	Recovery Time Objective
81.	**RTSP**	Real Time Streaming Protocol
82.	**RLVD**	Red Light Violation Detection
83.	**SI**	System Integrator
84.	**SLA**	Service Level Agreement
85.	**SMPS**	Switched Mode Power Supply
86.	**SMS**	Short Message Service
87.	**SNMP**	Simple Network Management Protocol
88.	**SOP**	Standard Operating Procedure
89.	**SVD**	Speed Violation Detection
90.	**TPA**	Third Party Auditor
91.	**TRAI**	Telecom Regulatory Authority of India
92.	**UAT**	User Acceptance Testing
93.	**UPS**	Uninterruptible Power Supply
94.	**URL**	Uniform Resource Locator
95.	**UTM**	Unified Threat Management
96.	**VA**	Video Analytics
97.	**VCA**	Video Content Analytics
98.	**VLAN**	Virtual Local Area Network
99.	**VM**	Virtual Machine
100.	**VMS**	Video Management Software/System
101.	**VMS/VMD**	Variable Message System/ Variable Messaging System
102.	**VPN**	Virtual Private Network
103.	**WAN**	Wide Area Network

1. Introduction

1.1. City Background

The Kavaratti is the capital of the Union Territory Lakshadweep in India. The Island of Kavaratti lies 360Km of the coast of the State of Kerala at 10.57°N 72.64°E. is the closest major city on the Indian mainland at a distance of 404 km (218 mi).. Kavaratti has been selected as one of the hundred Indian cities to be developed as a Smart city under Smart Cities Mission.

he Kavaratti Island is the headquarters of the Union Territory of Lakshadweep. This island is at a distance of 404 km (218 nautical miles) from Kochi and is located between Agatti Island on the west and Androtт Island on the east. It lies between 10° 32′ N and 10° 35′ latitude and 72° 35′ and 72° 40′ E longitude, having an area of 4.22 sq. km. Maximum length of the island is 5.8 km and width is 1.6 km. It has a lagoon having a length of about 6 km and an area of 4.96 sq. km.

The island is 2 to 5 m above the mean sea level on the western side and 2 to 3 m on the eastern side. It is located in the centre of Lakshadweep archipelago. Strangely Kavaratti has a small inland lake at its Northern end. The island itself is stretched over an area of slightly more than 4 Sq. km and has the maximum percentage of non – islanders as residents.

As is the case with other islands of Lakshadweep, Kavaratti has warm sandy beaches where tourists can unwind themselves. Though the beaches are narrow, the lagoons around Kavaratti are fabulous with star fish, anemones, sea cucumbers, countless multi- hued fishes astounding corals. Located to the west of the Island the lagoon is best suited for swimming, kayaking, wind surfing and canoeing. To the South of the Island lies Chicken Neck point which is an absolutely fantastic place for water sports including scuba diving and snorkelling. A glass bottom boat ride offers tourists and opportunity to view the rich marine life and an array of extraordinary corals.

Climate

The climate of Kavaratti is similar to the climatic conditions of Kerala. March to May is the hottest period of the year. The temperature ranges from 25°C to 35°C and humidity ranging from 70 -76 per cent for most of the year. The average rainfall received is 1600 mm a year. Monsoon prevails here from 15th May to 15th September. The monsoon period raises temperature to the mercury level between 27- 30 degrees. During the monsoon time, boats are not allowed outside the lagoon because of the violent sea. The presence of the reef maintains calm at the lagoon.

Island at a glance	
Population (2011)	11221
Density (per Sq.km)	2396.
Access by	Air and Sea from India, South-west coast.
Location	lies between 10o 32′ and 10o 35′ N latitude and 72o 35′ and 72o 40′ E longitude

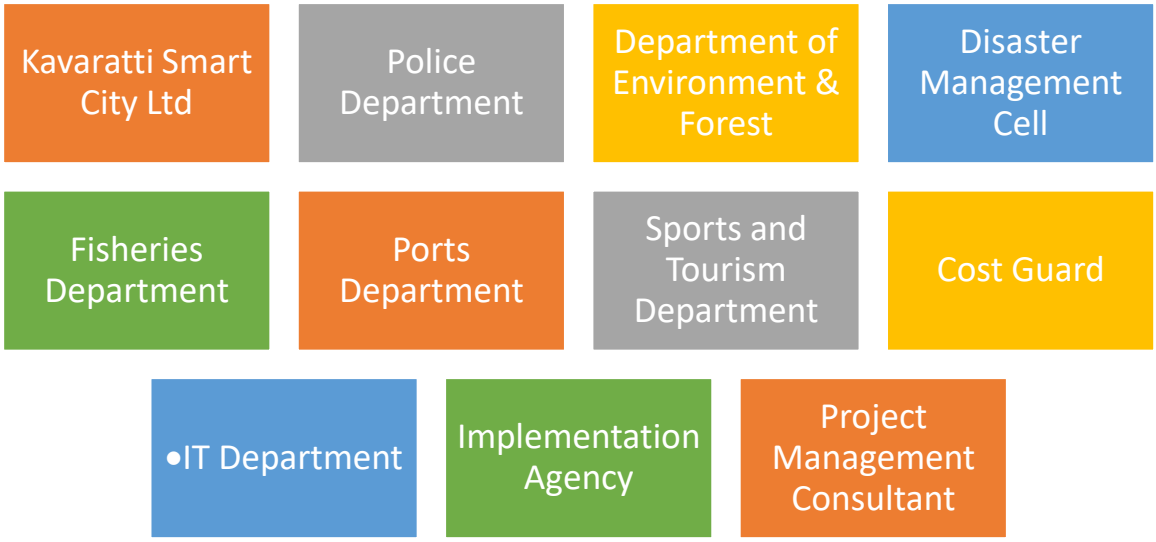
Island at a glance	
Distance to Malabar coast	404 km (218 nautical miles) from Kochi
Total geographical Area	4.22 Sq.km
Maximum Length	5.8 Km
Width	1.6 Km
Temperature	32oC (Max.) to 28oC (Min.)
Humidity	70-75%
Highest Rainfall	241.8 mm. recorded in 24 hours
Literacy Rate	88.29

1.2. Vision

Smart City Mission, launched by Government of India, focuses on development of cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities. Under Smart City Kavaratti, The Lakshadweep Administration has decided to set up "Establishment of Integrated Command and Control Centre (ICCC) and Surveillance System at Kavaratti. where the ICCC is a collaborative framework where information from different functional departments such as Disaster management, Electricity, Water, Transport, District Panchayat, Fire, Police, Metrology, e- Governance, Tourism etc. can be integrated, collected and analyze in a single platform for better planning of the city. It also plays the role of decision support system. Surveillance system supplies 24 x 7 scanning and monitoring of human movement, crime incident management, criminal tracking etc.

The Selected Bidder shall be responsible for Design, Development, Implementation and Maintenance of "Integrated Command and Control Centre (ICCC) along with Surveillance System."

1.3. Identification of all Stakeholders



2. Instructions to the Bidders

2.1. Instructions for Online Bid submission

i. Possession of valid Digital Signature Certificate (DSC) and enrolment/registration of the Bidders on the e-Procurement/e-tender portal are prerequisites for e-tendering.

ii. Bidder should register for the enrolment in the e-Procurement site using the "Online Bidder Enrolment" option available on the home page. Portal enrolment is generally free of charge. During enrolment/registration, the bidders should provide only valid and true information including valid email id. All the correspondence shall be made directly with the Bidders through email id as registered.

iii. Bidder need to login to the site through their user ID/ password chosen during enrolment/registration.

iv. The Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/eMudra or any other Certifying Authority recognized by Controller of Certifying Authorities (CCA) India on eToken/ Smart Card, should be registered.

v. The registered DSC only should be used by the Bidder in the transactions and should ensure safety of the same.

vi. Bidder may go through the tenders published on the site and download the tender documents/schedules for the tenders.

vii. After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise the bid will be rejected.

viii. Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meetings if any. Bidder should take into account the corrigendum if any is published before submitting the bids online.

ix. Bidder may log in to the site through the secured login by the user id/ password chosen during enrolment/registration and then by submitting the password of the e-Token/Smart Card to access DSC.

x. Bidders may select the tender which they are interested in by using the search option and then move it to the 'my tenders' folder.

   a. From my tender folder, the Bidder may select the tender to view all the details uploaded there.

   b. It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.

   c. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document/schedule and ordinarily it shall be in [PDF/xls/rar/jpg/dwf] formats. If there is more than one document, all may be clubbed together and provided

in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded online for the tenders should be less than [2 MB]. If any document is more than [2MB], it can be reduced through zip/rar and the same, if permitted, may be uploaded. The total available size for uploading the documents will be as per the size limited by e-procurement portal.

d. Bidder should submit the Bid Document Fee/ Bid Security/EMD as specified in the tender. The hard copy of the document should be posted/couriered/given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.
e. While submitting the bids online, the Bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.
f. The Bidder has to select the payment option as offline to pay the Bid Document Fee/ Bid Security/EMD as applicable and enter details of the instruments.
g. The details of the DD/any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bids shall not be acceptable or liable for rejection.
h. The Bidder has to digitally sign and upload the required bid documents one by one as indicated. Very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that the Bidder has read, understood and agreed with all clauses of the Bid Document including General conditions of contract without any exception.
i. The Bidder has to upload the relevant files required as indicated in the cover content.
j. The Price-bid/BOQ template is provided in a spreadsheet file (for e.g. BoQ_XXXX.xls), the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Price-bid/BOQ template shall not be modified / replaced by the Bidder; else the bid submitted is liable to be rejected for the tender.
k. The Bidders are advised to submit the bids through an online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the Bidders.
l. After the bid submission, the acknowledgement number indicated by the system should be printed by the Bidder and kept as a record of evidence for online submission of bids for the particular tender.

m. The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e-Tender system. The Bidder should follow such time during bid submission.

n. All the data being entered by the Bidder would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.

o. Any Bid Document that is uploaded on the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded Bid Documents become readable only after the tender opening by authorized bid openers.

p. The confidentiality of the bids is maintained with the use of Secure Socket Layer (SSL) 128-bit encryption technology. Data storage encryption of sensitive fields is done.

q. The Bidder should logout of the tendering system using the normal logout option available at the top right-hand corner and not by selecting the (X) exit option in the browser.

r. For any queries regarding e-Tendering process, the Bidders may contact at address as provided in the Bid Document. For any further queries, the Bidders are advised to send an email tosmartkavaratti@gmail.com

2.2. General

i. While every effort has been made to provide comprehensive and accurate background information, requirements and envisaged solution(s) specifications, Bidders must form their own conclusions about the solution(s) needed to meet the Authority's requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.

ii. All information supplied by Bidders as part of their bids in response to this RFP, may be treated as contractually binding on the Bidders, on successful award of the project by the Authority on the basis of this RFP.

iii. No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of Authority. Any notification of preferred bidder status by Authority shall not give rise to any enforceable rights by the Bidder. Authority may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of Authority.

iv. Bids shall be received by the Authority on the e-Procurement portal www.tendersutl.gov.inbefore the time and date specified in the schedule of the tender notice. In the event of the specified date for the submission of tender being declared a public holiday by the Government of respective state, the offers will be received up to the appointed time on

the next working day. The Authority may, at its discretion, extend this deadline for submission of offers by issuing corrigendum and uploading the same on e-Procurement portal.

v. Telex, cable, or facsimile offers will be rejected.

vi. Bidder shall use the free Map over ICCC Platform. Currently UT doesn't have any GIS Map. But bidder shall be responsible during his entire contract, once KSCL will be having the GIS Map.

vii. There shall be one Command and Control Room at Kavaratti Island and Apart from this there will be a local Viewing Centre at each Island, which shall be having Workstation and LED Screen.

viii. There is ferry service between the Islands. All the necessary approval and permission shall be given by the KSCL. However all the charges wrt to transport shall be borne by Successful Bidder.

ix. TSP will be responsible to provide the required hardware to support their connectivity.

x. Bidder shall supply the 100% complied product. Bids shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP. (No Deviation Certificate). The bids with deviation(s) are liable for rejection.
Bidder shall submit the cross references against each compliance and highlight in datasheet/relevant doc

xi. Bidder shall keep the 3% spares of cameras, field switch, PA System, etc. at each Island.

xii. The rate quoted by contractor shall be inclusive of GST , transportation and installation etc. Nothing extra shall be paid.

xiii. Number of Camera /Smart Poles or any other equipment shown in financial bid are indicative in nature. The number may increase or decrease. The successful bidder shall be paid as per work done and as per quantity shown in BOQ.

2.3. Eligible Bidders

2.3.1. Bidding entity

i. The Bidder for pre-qualification shall be a single entity, coming together to fulfil the deliverables as per the scope of the Bid. However, no Bidder applying individually, as the case may be, can be a member of another Bidder.

ii. A Bidder may be a natural person, private entity, [government-owned entity].

iii. A Bidder shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified.

2.3.2. Consortium of Firms

Consortium is not allowed.

2.4. Proposal Preparation Cost

i. The Bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in

providing any additional information required by Authority, to facilitate the evaluation process, and in negotiating a definitive agreement or all such activities related to the bid process. The Authority will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

ii. This Bid Document does not commit the Authority to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award. All materials submitted by the Bidder shall become the property of Authority and may be returned at its sole discretion.

2.5. Pre-Bid Meeting

i. A prospective Bidder requiring any clarification on the RFP Document may submit his queries, via email mentioned in the RFP.

ii. Authority will host a Pre-Bid Meeting for queries (if any) by the prospective Bidders. The representatives of the Bidders may attend the pre-bid meeting at their own cost. The purpose of the pre-bid meeting is to provide a forum to the Bidders to clarify their doubts / seek clarification or additional information necessary for them to submit their bid.

iii. Pre-Bid conference shall be online.

iv. The queries should necessarily be submitted in the mentioned format in Annexure.

v. Queries submitted post the mentioned deadline or which do not adhere to the above-mentioned format may not be responded to. All the responses to the queries (clarifications / corrigendum) shall be made available on the e-tender portal.

   a. At any time before the deadline for submission of bids, the Authority may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by an addendum/ corrigendum.

   b. The Bidders are advised to visit tender portal on regular basis for checking necessary updates. Authority also reserves the rights to amend the dates mentioned in this RFP for bid process.

   c. In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Authority may, at its discretion, extend the last date for the receipt of Bids.

2.6. Compliant Bids/Completeness of Response

i. Bidders are advised to study all instructions, forms, terms, requirements, and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

ii. Failure to comply with the requirements of this RFP may render the bid non-compliant and the Bid may be rejected. Bidders must:

   a. Include all documentation specified in this RFP, in the bid

b. Follow the format of this RFP while developing the bid and respond to each element in the order as set out in this RFP.
c. Comply with all requirements as set out within this RFP.

2.7. Right to amendment of the project scope

i. Authority retains the right to amend the scope of work or amend the program for service delivery at any time and without assigning any reason. Authority makes no commitments, express or implied, that the full scope of work as described in this RFP will be commissioned.
ii. The bidder's technical and commercial proposals received in this process may result in Authority selecting to engage with the bidders in further discussions, seeking clarifications and negotiations toward execution of an agreement including finalization of the scope elements. The commencement of such negotiations does not, however, signify a commitment by the Authority to execute a contract or to continue negotiations. Authority may terminate negotiations at any time without assigning any reason.

2.8. Authority rights to terminate the selection process

i. Authority may terminate the RFP process at any time and without assigning any reason. Authority makes no commitments, express or implied, that this process will result in a business transaction with anyone.
ii. This RFP does not constitute an offer by Authority.
iii. The bidder's participation in this process may result in Authority selecting the bidder to engage in further discussions and negotiations toward execution of an agreement. The commencement of such negotiations does not, however, signify a commitment by the Authority to execute an agreement or to continue negotiations. Authority may terminate negotiations at any time without assigning any reason.

2.9. Right to Accept/Reject any proposal

i. Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection, or annulment, and without assigning any reasons therefore.
ii. Besides other conditions and terms highlighted in the RFP Document, bids may be rejected under following circumstances:

a. General rejection criteria

i. Conditional Bids;
ii. If the information provided by the Bidder is found to be incorrect / misleading / fraudulent/incomplete at any stage / time during the Tendering Process;
iii. Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions;

iv. Bids received after the prescribed time & date for receipt of bids;
v. Bids without signature of person (s) duly authorized on required pages of the bid;
vi. Bids without power of attorney/ board resolution or its certified true copy;

b. Pre-Qualification rejection criteria

i. Bidders not complying with the Eligibility Criteria given in this RFP;
ii. Revelation of prices in any form or by any reason before opening the Commercial Bid;
iii. Failure to furnish all information required by the RFP Document or submission of a Bid not substantially responsive to the RFP Document in every respect.

c. Technical rejection criteria

i. Technical Bid containing commercial details;
ii. Revelation of Prices in any form or by any reason before opening the Commercial Bid;
iii. Failure to furnish all information required by the RFP Document or submission of a Bid not substantially responsive to the RFP Document in every respect;
iv. Bidders not quoting for the complete scope of work as indicated in the RFP Documents, addendum / corrigendum (if any) and any subsequent information given to the Bidder;
v. Bidders not complying with the Technical and General Terms and conditions as stated in the RFP Documents;
vi. The Bidder not confirming unconditional acceptance of full responsibility of providing services in accordance with the scope of work and Service Level Agreements of this RFP;

d. Commercial Rejection Criteria

i. Incomplete price Bid;
ii. Price Bids that do not conform to the RFP's price bid format;
iii. Total price quoted by the Bidder does not include all statutory taxes and levies applicable;
iv. If there is an arithmetic discrepancy in the commercial Bid calculations the Technical Committee shall rectify the same. If the Bidder does not accept the correction of the errors, its Bid may be rejected.

Misrepresentation/ improper response by the Bidder may lead to the disqualification. If such disqualification / rejection occurs after the Proposals have been opened and the L1 Bidder gets disqualified / rejected, then Authority reserves the right to consider the next best ranked Bidder, or take any other measure as may be deemed fit in the sole discretion of Authority, including annulment of the Selection Process.

2.10. Bidder to Inform

The Bidder shall be deemed to have carefully examined the Terms & Conditions, Scope, Service Levels, Specifications, and Schedules of this RFP. If bidder has any doubts/clarifications as to the meaning of any portion of the Conditions or the specifications, he shall, before the last date and time for Submission of Pre-Bid Queries, and submit them to Authority in writing in order that such doubt may be removed or clarifications are provided.

2.11. Language of the Bid

The bids prepared by the Bidder and all subsequent correspondence and documents relating to the bids exchanged by the Bidder and Authority shall be written in English language. Any printed literature furnished by the Bidder, written in another language, shall be accompanied by an accurate English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

2.12. Hand-written documents, Erasures or Alterations

The offers containing erasures or alterations will not be considered. There should be no hand-written material, corrections, or alterations in the offer. Filling up the information using terms such as "OK", "noted", "as given in brochure/manual" is not acceptable and may lead to the disqualification of the Bid.

A. GENERAL INSTRUCTIONS

2.13. Earnest Money Deposit (EMD)/ Bid Security

i. In terms of this RFP, a Bidder is required to submit EMD of **Rs. 69 Lakh** (Rupees Sixty Nine Lakh Only) in the form of Bank guarantee. Bank guarantee shall be as per the CPWD format.

ii. Scanned copy of EMD should be submitted on e-procurement system (www.tendersutl.gov.in) and original hard copy should be submitted to KSCL office within 15 days from the date of opening of Technical bid. The EMD of unsuccessful bidder will be returned on issue of, Letter of Acceptance (LOA) to the Successful bidder. The Bid Security/ EMD of the successful bidder would be returned upon submission of Performance Bank Guarantee for an amount equal to 3% of Total Contract Value in the format provided in **Annexure 17** of the RFP. Bid security in any other form will not be entertained.

iii. Benefit shall be given to MSEs in line with Public procurement policy for Micro and Small Enterprises (MSEs),2012 as per F.No.9/4/2020-PPD dated 12.11.2020 of Government of India, Ministry of Finance Department of Expenditure, Procurement Policy Division.

iv. No interest will be paid by AUTHORITY on the EMD amount and EMD will be refunded to all Bidders (including the successful bidders) without any accrued interest on it.

v. The Bid submitted without EMD, mentioned above, will be summarily rejected.

The EMD may be forfeited:

a) If a Bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.
b) In case of a successful bidders, if the Bidder fails to sign the contract in accordance with the terms and conditions.
c) If during the bid process, a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
d) If, during the bid process, any information is found false / fraudulent / mala-fide, and then AUTHORITY shall reject the bid and, if necessary, initiate action as per applicable provisions.
e) If the bidder does not agree to correct arithmetic error.

The decision of AUTHORITY regarding forfeiture of the EMD shall be final and binding upon bidders.

2.14. Bid Price

The Bidder shall indicate in the Performa prescribed, the unit rates and total Bid Prices for the product and services, it proposes to provide under this RFP. Prices should be shown separately for each item as detailed in this document.

The Bidder shall prepare the Bid based on details provided in the RFP document. It must be clearly understood that the Scope of Work is intended to give the Bidder an idea about the order and magnitude of the work and is not in any way exhaustive and guaranteed by the Authority. The Bidder shall carry out all the tasks in accordance with the requirement of the RFP document and with due diligence. It shall be the responsibility of the Bidder to fully meet all the requirements and objectives of the RFP. If during the course of execution of the project any minor revisions to the work requirements like technical specifications, equipment sizing, etc. are to be made to meet the goals of the Project; such changes shall be carried out within the proposed price. If any deviation has a major impact on the Project Cost, the Authority shall take appropriate decisions and such decisions would be binding on the Bidder.

2.15. Firm Prices

Prices quoted in the Bid must be firm and shall not be subject to any modifications, on any account whatsoever. The Bid Prices shall be indicated in Indian Rupees (INR) only.

The Price Bid should clearly indicate the price quoted without any ambiguity whatsoever and should include all applicable taxes, duties, fees, levies, and other charges as may be applicable in relation to the activities proposed to be carried out. Should there be a change in applicable taxes, the actual taxes on the date of billing would prevail.

Prices in any form or by any reason before opening the Price Bid should not be revealed, failing which the offer shall be liable for rejection. If price change is inevitable due to any factor external to the Bidders, the Bidders may be given a chance to submit revised Bids in a separate sealed cover. Decisions of the Authority shall be final in this regard.

2.16. Amendment of the RFP Document

At any time prior to the submission of bids, Authority for any reason whatsoever, may modify any element of the RFP Document by issuing an addendum/corrigendum. For the sake of interpretation, the content of any corrigenda issued by the Authority shall be read as a part of the original RFP Document. In each instance where provisions of the Corrigenda contradict or are inconsistent/ inapplicable with the provisions of the RFP, the provisions of the Corrigenda shall prevail and govern, and the contradicted or inconsistent/inapplicable provisions of the RFP shall be deemed amended accordingly.

The Authority may in its sole discretion consider extension of deadlines for submission of the bids, in order to allow prospective bidders reasonable time to take the amendment into account while preparing their bids. All communications with regards to the clarifications / corrigendum shall be uploaded in the E-tender portal.

It shall be the responsibility of the Bidder(s) to check the Authority's website and e-procurement portal from time to time for any amendment in the RFP document.

2.17. Inspection of Site and sufficiency of RFP

Bidder is expected to work out their own rates based on the detailed description of scope of work, the specifications, SLA conditions, etc. and should judiciously arrive at the bidding price. The Bidder shall be deemed to have satisfied itself before Bid submission as to correctness and sufficiency of its bid. The rates quoted by the bidder shall cover all its obligations under the RFP necessary for proper execution of the project including O&M.

If necessary, before submitting its Bid the Bidder should inspect and examine various sites and its surroundings and shall satisfy itself about form and nature of the Sites (including equipment/asset locations), means of access to the Sites, and in general, obtain all necessary information which may influence or affect Project implementation and operationalization. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

2.18. Deviations and Exclusions

Bids shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP. (No Deviation Certificate). The bids with deviation(s) are liable for rejection.

2.19. Total Responsibility

Bidder should issue a statement undertaking total responsibility for the defect free operation of the proposed solution as per the format mentioned in Annexure.

2.20. Key Personnel

Authority has identified certain key positions and minimum qualifications for each of the positions that should be part of the project team of the Bidder (hereby referred to as "key personnel"). Details of these key positions are provided in RFP.

(a) Initial Composition; Full Time Obligation; Continuity of Personnel

Selected Bidder shall ensure that each member of the Key Personnel devotes substantial working time as per the staffing schedule/ manpower plan to perform the services to which that person has been assigned as per the bid.

Selected Bidder shall not make any changes to the composition of the Key Personnel and not require or request any member of the Key Personnel to cease or reduce his or her involvement in the provision of the Services during the defined term of the engagement unless that person resigns, is terminated for cause, is long-term disabled, is on permitted mandatory leave under Applicable Law or retires.

In any such case, the Authority's prior written consent would be mandatory.

(b) Evaluations

Selected Bidder shall carry out an evaluation of the performance of each member of the Key Personnel in connection with the Services at least once in each Contract Year. The Selected Bidder shall provide reasonable written notice to the Authority of the date of each evaluation of each member of the Key Personnel. Authority shall be entitled to provide inputs to the Selected Bidder for each such evaluation. Selected Bidder shall promptly provide the results of each evaluation to the Authority, subject to Applicable Law.

(c) Replacements

In case any proposed resource resigns, then the Selected Bidder has to inform the Authority within one week of such resignation.

The Selected Bidder shall promptly initiate a search for a replacement to ensure that the role of any member of the Key Personnel is not vacant at any point in time during the agreement period, subject to reasonable extensions requested by the Selected Bidder to Authority.

Before assigning any replacement member of the Key Personnel to the provision of the Services, the Selected Bidder shall provide Authority with:

a. A resume, curriculum vitae and any other information about the candidate that is reasonably requested by Authority; and
b. An opportunity to interview the candidate.

The Selected Bidder has to provide replacement resource of equal or better qualification and experience as per the requirements of this RFP

If Authority objects to the appointment, the Selected Bidder shall not assign the individual to that position and shall seek an alternative candidate in accordance with the resource requirements of this RFP.

The Selected Bidder needs to ensure at least 4 weeks of overlap period in such replacements. Authority will not be responsible for any knowledge transition to the replacement resource and any impact/escalation of cost incurred by the Selected Bidder due to resource replacement.

(d) High Attrition

If in the first 6 months period from the Effective Date and in any rolling 12 months period during the Term of agreement, 15 percent or more of the members of the Key Personnel cease or reduce their involvement in the Services for any reason other than with Authority's prior written consent, the Selected Bidder shall:

a. provide Authority with a reasonably detailed explanation as to the reasons for such change, including, where applicable and permitted, notes from any exit interviews conducted by Selected Bidder with any departing member of the Key Personnel; and
b. if such change to Key Personnel has or is likely to have any material adverse impact on the provision of the Services or any substantial part thereof, undertake, at its own costs, such remediation acts as are reasonably necessary in order to improve the retention of the Key Personnel including making reasonable changes to the human resources policies and procedures applicable to the Key Personnel (including those related to compensation, benefits and other conditions so that they are competitive with the market) as may be necessary to ensure that such policies and procedures comply with Good Industry Practice.

2.21. Inclusion of MSMEs and Emphasis on Make in India in Project Delivery

Bidders are encouraged to include Micro, Small and Medium Enterprises (MSMEs) in the delivery of the project. Further to promote Make in India initiative of Government of India, procurement guidelines as per Public Procurement (Preference to Make in India), Order 2017, and its subsequent amendments thereof, of Department for Promotion of Industry and Internal Trade (DPIIT) has to be strictly complied with.

2.22. Right to vary quantity

i. At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased. It shall be without any change in the unit prices or other terms and conditions of the Bid and the bidding documents.
ii. If the Authority does not procure any subject matter of procurement or procures less than the quantity specified in the bidding documents due to change in circumstances limited to variation upto 25%, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding document.
iii. Repeat orders for extra items or additional quantities may be placed limited to variation upto 25%, if it is provided in the bidding document, on the rates and conditions given in the contract if the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionally increased.
iv. During the course of implementation and detailed due diligence, it may be required to vary the quantity and location of the field devices to suit the overall smart city requirements. The Selected Bidder should be required to provision and supply such field devices and the backend

resources at the unit rates quoted in the tender response. Such escalations/additions may go up to 25% of the specified BOQ.

2.23. Withdrawal, Substitution and Modification of Bids

i. Bidder may withdraw its Bid or re-submit its Bid (technical and/ or financial) as per the instructions/ procedure mentioned at e-Procurement website.
ii. Bids withdrawn shall not be opened and processed further.

3. Selection Criteria

3.1. Opening of Bids

The Bids shall be opened by Authority in presence of those Bidders or their representatives who may be present at the time of opening.

The representatives of the Bidders are advised to carry the identity card or a letter of authority from the bidder firms to identify that they are bona fide representatives of the bidder firm, for attending the opening of bid.

There will be three bid-opening events under 2-stage bidding process:

i. Set 1 (RFP Document fee & Bid Security/EMD) and Set 2 (Pre-Qualification bid)
ii. Set 3 (Technical bid)
iii. Set 4 (Price bid)

The venue, date, and time for opening the Pre-qualification bid and technical bid are mentioned in the Fact sheet.

The date and time for opening of the price bid would be communicated to the qualified bidders.

Bids received within the prescribed closing date and time will be opened on the e-procurement platform, on the date, time and at the address mentioned in the RFP Document.

i. Technical bid of only those Bidders shall be opened who meet the Pre-Qualification requirements.
ii. Price Bid of only those Bidders shall be opened who obtain minimum 65 marks in the technical evaluation.

3.2. Preliminary Examination of Bids

Authority shall examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the RFP, shall be rejected by Authority, and shall not be included for further consideration.

Initial Bid scrutiny shall be held and bids will be treated as non-responsive, if bids are:

i. Not submitted in format as specified in the RFP document
ii. Received without the Letter of Authorization (Power of Attorney)
iii. Found with suppression of details
iv. With incomplete information, subjective, conditional offers and partial offers submitted

v. Submitted without the documents requested
vi. Non-compliant to any of the clauses mentioned in the RFP
vii. With lesser validity period
viii. EMD not submitted / lesser EMD validity period
ix. If the Bidder gives wrong information in the Bid.
x. Canvassing in any form in connection with the Bid.
xi. Bids submitted after due date and time.
xii. Bids submitted by Print out/Telex/Telegram/Fax/e-mail.
xiii. Erasure and/or over writing is/are Not permissible
xiv. Bids not signed by authorized signatory

3.3. Clarification on Bids

i. During the bid evaluation, Authority may, at its discretion, ask the Bidder for any clarification(s) of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered, or permitted.
ii. The Authority may waive any minor infirmity, nonconformity or irregularity in a bid that does not constitute a material deviation, and that does not prejudice or affect the relative position of any Bidder, provided it conforms to all the terms, conditions of the bidding documents without any material deviations, objections, conditionality, or reservations. A material deviation, objection, conditionality, or reservation is one (i) that affects in any substantial way the scope, quality, or performance of the Agreement; (ii) that limits in any substantial way, inconsistent with the bidding documents, Authority's rights or the selected Bidder's obligations under the Agreement; or (iii) whose rectification would unfairly affect the competitive position of other Bidders who are presenting responsive bids.

3.4. Evaluation Process

Authority shall constitute a Tender Evaluation Committee to evaluate the responses of the Bidders. The Tender Evaluation Committee shall evaluate the responses to the RFP and all supporting documents/documentary evidence. Inability to submit requisite supporting documents/documentary evidence by Bidders may lead to rejection of their bids.

The decision of the Tender Evaluation Committee in the evaluation of bids shall be final. No correspondence will be entertained outside the process of evaluation with the Committee. The Tender Evaluation Committee may ask for meetings or presentations with the Bidders to seek clarifications or confirmations on their bids.

The Tender Evaluation Committee reserves the right to reject any or all bids. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

The steps for evaluation are as follows:

3.4.1. Stage 1 Pre-Qualification and Technical Evaluation

3.4.1.1. Pre-Qualification

i. Authority shall validate the Set 1 "RFP Document fee & Bid Security/Earnest Money Deposit (EMD)".

ii. If the contents of Set 1 are as per requirements, Authority shall open the Set 2 "Pre-Qualification Bid". Each of the Pre-Qualification conditions mentioned in the document is MANDATORY. In case, the Bidder does not meet any one of the conditions, the Bidder shall be disqualified.

iii. Bidders will be informed of their qualification/disqualification based on the Pre-Qualification criteria through Email and Phone and subsequently, the Bid Security amount shall be returned to the respective disqualified Bidders, after the submission of Performance Bank Guarantee by the successful Bidder. Bids of only those bidders who meets the Pre-Qualification criteria, shall be considered for further evaluation i.e., Stage – 2: Technical Evaluation.

iv. Technical and Price bids for those Bidders who don't pre-qualify will not be opened. Price bids will not be opened for those Bidders, who don't qualify the technical evaluation. Bid Security amount shall be returned for those who don't qualify the financial evaluation stage after Performance Bank Guarantee is submitted by successful Bidder.

3.4.1.2. Technical Evaluation

i. "Technical bid" will be evaluated only for the Bidders who succeed in Stage 1.

ii. Authority will review the technical bids of the short-listed bidders to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.

iii. The bidders' technical solutions proposed in the bid document shall be evaluated as per the requirements specified in the RFP and technical evaluation framework as mentioned in the RFP.

iv. The Bidders shall make a presentation to the Authority/ Committee appointed by the Authority to supplement their bids.

v. The Authority envisages to have proof of concept / technical demonstration to evaluate the technology & system performance for achieving city business outcomes. During the Demonstration/Proof-of-Concept (PoC) at technical evaluation stage, the Evaluation Committee will give special attention to verify the quality, robustness and appropriateness of the proposed solution/ equipment(s). If any brand / products are found unsuitable, Bidder may get disqualified or may be asked to replace the product with better products, meeting the tender requirements, without any change in commercial bid. POC shall be performed as per use cases provided by the Authority in the RFP. Bidder shall be asked to demonstrate such use cases either in local setup at the city level or existing deployments (on the same product and equipment stack as proposed in RFP response) over network/cloud.] at the discretion of the

Authority. PoC should cover end to end data flow from identified domain system to ICCC and alert based SOP implementation.

vi. The Bidder shall be required to exhibit overall solution architecture along with compliance to functional and non-functional requirements of the RFP, through presentation.

vii. The Authority will notify the date and venue for conducting such PoC / technical demonstration to the prospective bidders.

viii. The Bidder shall bear all the costs associated with PoC except for PoC venue, network and internet connectivity which shall be made available by the Authority. The MSI shall share the network and internet connectivity requirements minimum one week in advance prior to the date of PoC to the Authority.

ix. Each Technical Bid will be assigned a technical score out of a maximum of 100 marks. Only those bidders who get a minimum Technical score of 70% will qualify for the commercial evaluation stage and Bidder should get a minimum of 50% of marks in each of the Technical Eligibility Criteria.

3.4.2. Stage 2: Commercial Evaluation

i. All the technically qualified Bidders will be notified to participate in the Commercial Bid opening process.

ii. The Price bids of the technically qualified Bidders shall then be opened on the notified date and time and reviewed to determine whether the Price bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.

iii. Price Bids that are not as per the format provided in the RFP shall be liable for rejection.

iv. The bid price shall include all taxes and levies and shall be in Indian Rupees and mentioned separately.

The Authority or any other government agency shall not have any liability of paying any taxes (including GST)/charges/levies as part of this project. The bidder has to quote their Price duly factoring all these costs over the project duration.

If there is any discrepancy in the Price Bid, it will be dealt as per the following:

i. If, in the price structure quoted for the required Product and Services, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), only the total price/cost as quoted in the table in the Price Bid shall prevail. The unit prices quoted in shall be considered only in case of any deviations/modifications in the scope of the work in due course.

ii. If there is a discrepancy between words and figures, the amount in words shall prevail.

3.4.3. Successful bidder evaluation

The Selection of Successful Bidder shall be through two stage **Least Cost System (LCS)** with the 1st Stage consisting of Prequalification and Technical Criteria evaluation. The minimum qualifying marks for 1st stage would be **70 marks out of 100 marks** as mentioned at Clause 3.6.1. 2nd stage would be

evaluation of Financial Bid and the Bidder with L1 Bid will be selected based on Total Price (Capex Price + Opex Price)

The Bidder with lowest Total Price (Capex Price + Opex Price) will be declared as the winner and will be invited for negotiations for awarding the contract. In case of a tie where two or more bidders have equal Total Price, the Bidder with the higher technical score will be invited first for negotiations for awarding the contract.

This is Least Cost System (LCS),

3.5. Pre-Qualification Criteria

The Bidder must possess the requisite experience, strength, and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view the complexity and volume of the work involved, following criteria are prescribed as the eligibility criteria for the bidder interested in undertaking the project. The bidder must also possess technical know-how and financial ability that would be required to successfully provide System Integration, Operation and Maintenance services sought by the Authority for the entire agreement duration. The bids must be complete in all respects and should cover the entire scope of work as stipulated in the bid document. This invitation to bid is open to all Bidders who qualify the eligibility criteria as given below:.

#	Eligibility Criteria	Supporting documents required
PQ1	**Legal Entity** • Bidder should be a company registered under the provisions of the Indian Companies Act, 1956/2013 or a partnership firm registered under the Indian Partnership Act, 1936 or the Limited Liability Partnerships Act, 2008 • Bidder should be registered with the GST	• Copy of Certificate of Incorporation OR Copy of LLP firm registration certificate, as applicable • Copy of Goods and Services Tax (GST) certificate with GST registration number (GSTIN) • Copy of PAN Card
PQ2	**Board resolution / Power of attorney in favour of authorised signatory** • A board resolution OR power of attorney in the name of the person executing the bid, authorizing the signatory to commit the Bidder.	• Copy of Board resolution OR • Copy of Power of attorney with appropriate supporting documents
PQ3	**Debarment / Blacklisting** Bidder should not be under a declaration of in- eligibility for corrupt, fraudulent or any other unethical business practices and should not bedebarred or blacklisted by any government or semi-government or	Self-certificate letter undertaking to this effect on company's letter head signed by company's authorized signatory.

#	Eligibility Criteria	Supporting documents required
	government autonomous bodies or public sector undertakings or other government organization in India for any reason before the date of submission of bid.	
PQ4	**Financial Turnover** Average annual Gross turnover of last three (3) financial years (FY 2021-2022, FY 2022-2023, FY 2023-2024) should be at least Rs:17.6 Crore.	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover • Chartered Accountant to share Financial Turnover and Net Worth
PQ5	**Net Worth** Bidder should have a positive net worth in each of last three (3) financial (FY 2021-2022, FY 2022-2023, FY 2023-2024)	• Certificate from the CA Auditor clearly stating the net worth • Chartered Accountant to share Financial Turnover and Net Worth
PQ6	**Technical Capability (ICCC).** The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which applications are invited should be either of the following: One project of value more than INR 46.95 Crore OR Two project of value more than INR 35.21 Crore OR Three project of value more than INR 23.48 Crore Note: Similar works means the bidder should complete establishment of at least one Integrated Command Control Centre (ICCC)/ CCTV Command Center in any of smart city/Central Govt/State Govt/PSU. The bidder should attach documentary proof	• The bidder should submit the documental proof of copies of work orders /Agreement/Go-Live. • Certificate may be signed by Chief Technical officer (CTO) / Operation Head ICCC / Chief Executive Officer/Competent Authority

3.6. Technical Bid Evaluation Criteria

The Bidder's technical solution proposed in the Technical Evaluation bid shall be evaluated as per the evaluation criteria in the following table.

Section #	Evaluation Criteria	Points
TQ1	Company profile	30
TQ2	Relevant Experience	30
TQ3	Presentation	20
TQ4	Relevant Manpower Deployment	20
Total		**100**

Authority (or a nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder.

The following sections explain how the Bidders shall be evaluated on each of the evaluation criteria:

3.6.1. Technical Bid Evaluation Criteria

Bidders who meet the pre-qualifications/eligibility requirements as on date of bid submission would be considered as qualified to move to the next stage of Technical and Financial bid evaluation. Technical Evaluation of the bids would be carried out as per the evaluation criteria in the following table.

#	Particulars	Max Marks	Documents Required Supporting
TQ1	**Company profile (30 marks)**		
TQ1.A	**Financial Turnover** Average annual Gross turnover of last three (3) financial years FY 2021-2022, FY 2022-2023, FY 2023-2024 Above Rs: 30 Cr = 15 marks a. Rs 23 Cr to Rs <30 Cr = 10 marks b. Rs 17 Cr to Rs <22 Cr = 7 marks	15	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover • Chartered Accountant to share Financial Turnover and Net Worth
TQ1.B	**Industry Standard Certification** The bidder should be certified	15	Copy of Certificate

#	Particulars	Max Marks	Documents Required Supporting
	• CMMI Level 3 or above • ISO 27001 • ISO 9000/9001 a. All Three certificate= 15 marks b. Any two = 10 marks		
TQ2	**Relevant Experience (30 marks)**		
TQ2.A	Technical Capability (ICCC)/ CCTV Command Center The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which Bids are invited. a. Project experience above Rs: 47 Cr = 15 marks b. Project experience Rs 31 Cr to Rs <47 Cr = 10 marks c. Project experience Rs 24 Cr to Rs <30 Cr = 7 marks	15	• Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects
TQ2.B	Technical Capability (CCTV) The Bidder should have the project experience of supply and implementation of a Single CCTV system Project integrated with ICCC/CCTV Command Center with value of 10 Cr in government or semi- government or government autonomous bodies or public sector undertakings or other government organization in India in the last Seven (7) years.	15	• Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects

#	Particulars	Max Marks	Documents Required Supporting
	Such project should consist of Minimum 500 Cameras a. No of CCTV Camera greater than 1000 Nos = 15 marks b. No of CCTV Camera greater than 750 Nos and less than 1000 Nos = 10 marks c. No of CCTV Camera greater than 500 Nos and less than 750 Nos = 7 marks		
TQ3	Presentation (20 marks)		
TQ3.A	Presentation to be made by bidder a. Overall understanding of project - Scope, objectives, outcome. b. Detailed solution coverage and portal features. c. Quality of proposed resources and deployment plan	20	There shall be a physical/Virtual, presentation/ PoC, bidder has to showcase all the features asked in the RFP.MSI should replace the product with technically evaluated product without any additional cost to KSCL, if the quoted product is unable to showcase the asked features during the PoC/UAT/FAT.
TQ4	Relevant Manpower Deployment (20 marks)		
TQ4.A	**A.** Technical Leader cum Program Manager: 10 Marks a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks b. 7 Years of Minimum Work Experience • Min 7 Years: 2 Marks • 10 Years or more: 4 Marks c. CCNA/ CCNP/ Linux / MCSE/ RHCE / Equivalent Certification : 4 Marks **B.** Technical Leader cum Program	20	a. Candidate CV b. Relevant Valid Certification Copy

#	Particulars	Max Marks	Documents Required Supporting
	Manager: 10 Marks a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks b. 7 Years of Minimum Work Experience • Min 7 Years: 2 Marks • 10 Years or more: 4 Marks • PMP/ Prince 2 / Equivalent Certification : 4 Marks		
Total		**100**	

3.6.2. Technical Demonstration of Proof of Concept (PoC)

Objective of Technical Demonstration/ POC is to evaluate the technology & system performance for getting city outcome.

During the Technical Demonstration/PoC at the technical evaluation stage, the Technical Committee of Authority shall give special attention to verify the quality, robustness and appropriateness of the proposed Solutions/Equipment. If any brand / products are found unsuitable, Bidder may get dis-qualified or may be asked to replace the product with better brands meeting the RFP requirements, without any change in commercial bid.

3.7. Key Personnel Criteria& Deployment

Selected Bidder shall provide an adequate number of personnel, each responsible for a specific role within the project. Selected Bidder shall provide a clear definition of the role and responsibility of each individual personnel.

There shall be a defined hierarchy and reporting structure for various teams that shall be part of the project. A list of proposed Resources for the Project shall be provided to the Authority. Any changes in Resource deployment will have to be approved by the Authority.

Following table indicates the minimum qualification required for Key Positions identified for this project. However, the Bidder shall independently estimate the teams size required to meet the requirements of Service Levels as specified as part of this tender.

MSI shall deploy Manpower during implementation and O&M phases. The deployed resource shall report to Kavaratti and work closely with Program Management Office of the project. Following are the minimum resources required to be deployed to the project, However it is bidders responsibility to deploy the right number of manpower (i.e. Manager, Server and Network Engineer, technician, software person etc) to implement and run the smooth project for 5 years after Go-Live to meet the defined SLAs. MSI shall deploy Manpower 100% operational during implementation.

Indicative Implementation Manpower Plan:

Sr. No.	Role & Responsibilities	UOM	Indicative Qty	Months
1.	Project Manager / Technical Manager	Nos	1	As Per Project Timeline
2.	Solution Architect	Nos	1	As Per Project Timeline
3.	Technical Support Staffed. Network, Server, Application	Nos	2	As Per Project Timeline

Indicative O&M Manpower Plan:

Sr. No.	Role & Responsibilities	UOM	Indicative Qty	Months
1.	Project Manager / Technical Manager	Nos	1	60
2.	Technical Support Staff i.e. Network, Server, Application L2/L3	Nos	2	60
3.	Technical Support Staff i.e. Network, Server, Application L1	Nos	9	60
4.	Technical Support Staff	Nos	2	60

Note:

- All such manpower shall be minimum graduates.
- All such manpower shall be without any criminal background / record.
- Minimum Manpower is mentioned above. However, Bidder may consider the higher manpower as per project requirement.
- Minimum Manpower is mentioned in section "Indicative O&M Manpower Plan", However bidder shall access the project requirement and quote accordingly.

Kavaratti Smart City reserves the right to carry out background check of the personnel proposed on the Project for verification of criminal record, at the beginning of deployment or during deployment.
MSI shall have to replace any person, if not found suitable for the job.
All the manpower shall have to undergo training from MSI for at east 15 working days on the working of project. training should also cover dos & don'ts and will have few sessions from Kavaratti Smart City officers on right approaches for monitoring the feeds & providing feedback to Kavaratti City Administration, Police and other associated government agencies.

Details operational guideline document, standard operating procedure, governance and oversight plan shall be prepared by MSI during implementation which shall specify details responsibilities of these resources and their do's & don'ts.

It is to be noted that this DPR has captured O&M manpower only from the perspective of technology management and associated helpdesk. For functional operational purpose respective department like the Kavaratti Administration, Police etc.

3.8. Conditional bids/Offers by the bidders

The Bidder should abide by all terms and conditions specified in the RFP Document. Conditional bids/offers shall be liable for disqualification.

3.9. Late Tender bids

Any bid received by Authority after the deadline for submission of bid prescribed by the Authority, will be summarily rejected.

3.10. Bid Validity Period

Bids shall be valid for a period of 75 days (Seventy Five days) from the last date of submission of the bids. A Bid valid for a shorter period may be considered as non-responsive. In exceptional circumstances, at its discretion, Authority may solicit the bidder's consent for an extension of the validity period. The request and the responses thereto shall be made in writing or by fax or email.

3.11. Opening of Bids

Bids received within the prescribed closing date and time will be opened on the e-procurement platform, on the date, time and at the address mentioned in the RFP Documents.

i. Technical bid of only those Bidders shall be opened who meet the Pre-Qualification requirements.
ii. Price Bid of only those Bidders shall be opened who obtain minimum 70 marks in the overall technical evaluation as mentioned at Clause 3.6.1.

3.12. Non-Conforming bids

A bid may be construed as a non-conforming bids and ineligible for consideration:

i. If it does not comply with the requirements of this RFP.
ii. If a bid does not follow the format requested in this RFP or does not appear to address the particular requirements of the solution.

3.13. Confidentiality

All the material/information shared with the Bidder during the course of this procurement process as well as the subsequent resulting engagement following this process with the successful Bidder, shall be treated as confidential and should not be disclosed in any manner to any unauthorized person under any circumstances. The manpower resources of the successful Lead member and Consortium members who are proposed to be deployed on the project shall be required to sign a Non-Disclosure Agreement (NDA).

3.14.Eligible Goods and Services, and OEM Criteria

a) For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "services" includes services such as insurance, transportation, supply, installation, integration, testing, commissioning, training, and initial maintenance.

b) The components (including but not limited to Videowall, Network Switches, Firewall & Routers, etc.) should have existing registered service/support centre or established in India within 30 days of award of contract. The Bidder should submit an undertaking from the OEM to that effect. The OEM of active devices to be quoted by the bidder should have local Technical Assistance Centre (TAC) support in India through a toll-free number and should be able to log a call 24x7 via phone, email, or website for technical assistance.

c) For each of the goods/products, bidder shall quote only one specific make and model from only one specific OEM. Providing more than one option shall not be allowed. All goods quoted by the Bidder must be associated with item code and names and with printed literature describing configuration and functionality. Any deviation from the printed specifications should be clearly mentioned in the offer document by the Bidder.

d) The OEM for each product or technology quoted should be in the business of that product or solution or technology for at least 3 (Three) years as on the date of release of the RFP.

e) All the OEMs should have authorized presence (for sale or service) in India directly or through channel partners.

f) The OEM for all active components should give a declaration that products or technology quoted are neither end of- sale nor end-of-life as on the date of installation and commissioning and are not end-of-support till the successful completion of O&M period of the project.

g) The bidder's proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State PSUs as on bid submission date.

h) ICCC OEM Should have at least 5 Work order swrt municipal bodies/smart cities/ Emergency response systems in India along with two PO/Work-order for implementation of a state wide command and control centre project.

i) ICCC platform should be preferably "make in India".

j) All Cameras quoted must be in compliance with Indian standards BIS certifications. The quoted models should have BIS in same brand/OEM name supplying cameras.

k) CCTV OEM should have online-dedicated CCTV support centre available and a fully equipped repair and maintenance office in India.

l) Preference will to be given to MSME/STARTUP registered manufacturers as per Govt. of India policy.

m) Quoted CCTV OEM should be Full/Affiliate member of ONVIF. For verification, details on ONVIF website shall be available. OEM should give the declaration about full membership.

n) The Camera OEM must have their own manufacturing setups and IPR for brand registration, OEM having production and brand via third party factory tie-up or contractual manufacturing will not be considered.OEM should give the undertaking in their letterhead that they have never been reported / rejected by any of the Government security organisation in India.

o) The MAC address of all cameras must be registered in the name of OEM/Brands quoted in the RFP. This can be verified during bid evaluation of the products/Solutions.

p) Adequate supporting documents pertaining to the above points, along with a summary compliance table, should be submitted in the technical proposal by the Bidder.

q) Bidder Shall keep the 3% spares of cameras, field switch, PA System, etc. at each Island.

4. Award of Contract

4.1. Notification of Award

Authority will notify the Successful Bidder via letter / fax /email of its intent of accepting the bid. Within 7 days of receipt of the Letter of Intent (LOI) issued by the Authority, the Successful Bidder shall be required to sign the LOI and return the same to the address specified above as a token of acceptance of the LOI.

5. Performance Bank Guarantee

5.1. Successful bidder shall submit two performance Guarantees ie one towards CAPEX and second towards OPEX.

5.2. Performance Bank Guarantee (PBG) shall be 3% of the contract amount. Bidders shall submit 3% of the CAPEX contract amount towards CAPEX PBG, and 3% of the OPEX contract amount towards OPEX PBG, separately.

5.3. CAPEX PBG shall be valid till Go-Live + 3 Months, and OPEX PBG shall be valid for entire contract duration + three months.

5.4. Performance guarantee in respect of CAPEX shall be released after three months of completion of work (date of completion certificate). OPEX PG will be released after three months of completion of the Operation and Maintenance Period.

6. Signing of agreement

Subsequent to Authority notification to the Successful Bidder by way of an LOI, acceptance of the LOI and submission of the Performance Guarantee, the Successful Bidder shall execute the agreement with the Authority. Failure of the Successful Bidder to furnish the Performance Guarantee or execute the Agreement within the prescribed time shall cause the EMD of the Successful Bidder to be liquidated. In such an event, the Authority shall negotiate with the next eligible bidder. The Successful Bidder will be liable to indemnify the Authority for any additional cost or expense incurred on account of failure of the Successful Bidder to execute the Agreement.

Notwithstanding anything to the contrary mentioned above, the Authority at its sole discretion shall have the right to extend the timelines for execution of Agreement on the request of the Successful Bidder, provided the same is bonafide.

The Draft Agreement between the Authority and the Successful Bidder has been given in Volume III: Master Service Agreement (MSA) of this RFP.

6.1. Concessions permissible under statutes

Bidder, while quoting against this RFP, must take cognizance of all concessions permissible, if any, under the statutes and ensure the same is passed on to the Authority, failing which it will have to bear extra cost. In case Bidder does not avail concessional rates of levies like customs duty, excise duty, sales tax, etc., the authority will not take responsibility towards this. However, the Authority may provide necessary assistance, wherever possible, in this regard.

6.2. Taxes

The Bidders shall fully familiarize themselves about the applicable domestic taxes (such as GST, value added or sales tax, service tax, income taxes, duties, fees, levies etc.) on amounts payable by Authority under the Agreement. All such taxes must be included by Bidders in the Price Bid.

6.3. Audit, Access and Reporting

The following paras details the audit, access and reporting rights and obligations of Authority and/or its nominated agency and the Selected Bidder and its subcontractors, agents, supplier etc. This Schedule is in addition to, and in derogation of, the audit rights and process provided in the RFP.

A. Audit Notice and Timings

a. As soon as reasonably practicable after the Effective Date, the Parties shall use their best endeavours to mutually agree to a timetable for routine audits (Other than those mentioned as part of the mandatory requirements for successful delivery and acceptance of the System) during the Project Implementation Phase and the O&M Phase. Authority shall conduct routine audits in accordance with such agreed timetable and shall not be required to give the Selected Bidder any further notice of carrying out such audits.

b. Authority may conduct unscheduled audits at its own discretion if it reasonably believes that such unscheduled audits are necessary as a result of a misconduct or an act of fraud by the Selected Bidder, a security violation, or breach of confidentiality obligations by the Selected Bidder, provided that the requirement for such an audit is notified in writing to the Selected Bidder within a reasonable period time prior to the audit (taking into account the circumstances giving rise to the reasonable belief) stating the reasons for the requirement.

Except as provided in para (i) & (ii) above, audits shall be conducted with adequate notice of 2 weeks.

B. Access

The Selected Bidder shall provide to Authority and/ or its nominated agency reasonable access to employees, subcontractors, suppliers, agents and third-party facilities as detailed in the RFP, documents, records and systems reasonably required for audit and shall provide all such persons with routine assistance in connection with the audits and inspections. Authority or its nominated agency shall have the right to copy and retain copies of any relevant records. The Selected Bidder shall make every reasonable effort to cooperate with them.

C. Audit Rights

Authority and/or its nominated agency shall have the right to audit and inspect suppliers, agents, subcontractors and third-party facilities (as detailed in the RFP), data center, documents, records, procedures and systems relating to the provision of the services, but only to the extent that they relate to the provision of the services, as shall be reasonably necessary to verify:

a. The security, integrity and availability of all data processed, held, or conveyed by the [Selected Bidder] on behalf of the Authority and documentation related thereto;
b. That the actual level of performance of the services is the same as specified in the SLA;
c. That the Selected Bidder has complied with the relevant technical standards, and has adequate internal controls in place; and
d. The compliance of the Selected Bidder with any other obligation under the Agreement.
e. Unless otherwise provided in the RFP, Security audit and implementation audit of the system shall be done once each year, the cost of which shall be borne by Authority.

For the avoidance of doubt the audit rights under this Schedule shall not include access to (i) the Selected Bidder's profit margins or overheads, (ii) any Confidential Information relating to its employees, or (iii) minutes of its internal Board or Board committee meetings including internal audit, or (iv) such other information of commercial-in-confidence nature which are not relevant to the Services associated with any obligation under the Agreement.

D. Audit rights of Subcontractors, Suppliers and agents

a. The Selected Bidder shall use reasonable endeavours to achieve the same audit and access provisions as defined in this Schedule with subcontractors, suppliers and agents who supply labour, services, equipment, or materials related to performance of obligations by Selected Bidder under the contract. Without prejudice to its other obligations under the contract, the Selected Bidder shall inform Authority and/or its nominated agency prior to concluding supply/ subcontract agreements of any failure to achieve the same rights of audit or access.
b. REPORTING: The Selected Bidder will provide quarterly reports to Authority and/or its nominated agency regarding any specific aspects of the Project and in context of the audit and access information as required by Authority or its nominated agency.

E. Action and review

a. Any change or amendment to the systems and procedures of the Selected Bidder, where applicable arising from the audit report shall be agreed within thirty (30) calendar days from the submission of the said report**.**

b. Any discrepancies identified by any audit pursuant to this Schedule shall be immediately notified to Authority or its nominated agency and the Project Manager of the Selected Bidder who shall determine what action should be taken in respect of such discrepancies in accordance with the terms of the Agreement.

6.4. Records and Information

For the purposes of audit in accordance with this Schedule, the Selected Bidder shall maintain true and accurate records in connection with the provision of the services and shall handover all the relevant records and documents upon the termination or expiry of this Agreement.

6.5. Terms of Payment

i. The request for payment shall be made to the Authority in writing, accompanied by invoices describing, as appropriate, the services performed, and by the required documents submitted pursuant to conditions of the contract and upon fulfilment of all the obligations stipulated in the Contract.

ii. The Authority shall make all efforts to make payments within thirty (30) days of receipt of invoice(s) and all necessary supporting documents.

iii. The currency or currencies in which payments shall be made to the MSI under this Contract shall be Indian Rupees (INR) only.

iv. All remittance charges shall be borne by the MSI.

v. In case of disputed items, the disputed amount shall be withheld and shall be paid only after settlement of the dispute

vi. Any penalties/ liquidated damages, as applicable, for delay and non-performance, as mentioned in this RFP document, shall be deducted from the due payments of the respective milestones.

vii. Taxes, as applicable, shall be deducted / paid, as per the prevalent rules and regulations.

viii. Payments to Selected Bidder, after successful completion of the target milestones (including specified project deliverables), shall be made as mentioned in Volume II of this RFP.

6.6. Right to vary the scope of Work

A. Right to vary the scope of the work at the time of award

The Authority reserves its right to make changes to the scope of the work at the time of execution of the resultant Contract. If any such change causes an increase or decrease in the cost of, or the time required for the Selected Bidders performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Contract shall accordingly be amended. Any claims

by the Selected Bidder for adjustment under this Clause must be asserted within thirty (30) days from the date of the MSI's receipt of the Authority's changed order.

B. Cost Control

a. Bill of Quantities

The Bill of Quantities will contain the requisite items and their estimated quantities for the project work to be done by the Selected Bidder.

b. Changes in the Quantities

i. The Selected Bidder is bound to execute all the supplemental works that are found essential, incidental, and inevitable during execution of project works.

ii. The payment of rates for any supplemental items beyond the quantities estimated in the BoQ will be regulated as under:

- For quantities in excess of the proposed BoQ, the Authority or any authorized official/agency nominated by the Authority shall validate the requirements and necessity of variations in quantity or extra items after due diligence, based on site conditions and work contingencies.
- The recommendations of the Authority or any authorized official/ agency nominated by the Authority will be submitted to the Authority for its consideration and necessary approval.
- For variation in quantities excess or less of the proposed quantity in BoQ, the unit rates quoted by the Selected Bidder in their Price Bid, on mutually agreed terms and conditions shall be applicable.

C. Extra (New) Items

a. Extra items of work shall not vitiate the contract. The reimbursement for extra items shall be validated by the Project Management Office (PMO) and cleared by the Authority. The MSI shall be bound to execute extra items of work as directed by the Authority. The rates for extra items shall be worked out based on the unit rates quoted by the Bidder in Price Bid as per mutually agreed terms and conditions.

b. For new items which are beyond the scope of the BoQ, the Project Management Office (PMO) or any authorized official/ agency shall validate the requirements and necessity of such new/extra items after due diligence, based on site conditions and work contingencies.

c. The Selected Bidder shall submit in writing well in advance at least 14 days before the Authority a statement of extra items if any that they need to initiate during the course of project works.

D. Payment Certificates

a. The Selected Bidder shall submit to the Authority monthly statements of the estimated value of the work completed less the cumulative amount certified previously.

b. The value of work executed shall be determined by the Authority.
c. The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
d. The Authority may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

6.7. Fraud and corrupt practices

Authority requires that Bidder must observe the highest standards of ethics during the entire process of RFP evaluation and during execution of the contract. In pursuance of this policy, Authority defines, for the purpose of this provision, the terms set forth as follows:

i. "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of the Authority in contract executions.
ii. "Fraudulent practice" means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to the Authority, and includes collusive practice among Bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive the Authority of the benefits of free and open competition.
iii. "Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which is given by the Authority in Vol II of the RFP.
iv. "Coercive Practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of a contract.

Authority shall reject the Bid proposal for award of contract, if it determines that the Bidder recommended for award, has been found to have been engaged in corrupt, fraudulent, or unfair trade practices. Once the contract is signed and if it is noticed that the MSI has indulged into the Corrupt / Fraudulent / Unfair / Coercive practices, it will be a sufficient ground for the Authority for termination of the contract and initiate black-listing of the MSI.

6.8. Conflict of Interest

A Bidder shall not have a conflict of interest that may affect the Selection Process or the Solution delivery (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, Authority shall forfeit and appropriate the EMD, if available, as mutually agreed genuine pre-estimated compensation and damages payable to Authority for, inter alia, the time, cost and effort of Authority including consideration of such Bidder's Bid, without prejudice to any other right or remedy that may be available to Authority hereunder or otherwise.

Authority requires that the bidder provides solutions which at all times hold Authority's interest paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The bidder shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of Authority.

A Bidder shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:

i. the Bidder, its Member or Associate (or any constituent thereof) and any other Bidder, its Member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Bidder, its Member or an Associate thereof (or any shareholder thereof having a shareholding of more than 5% (five per cent) of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its Member or Associate is less than 5% (five per cent) of the subscribed and paid up equity share capital thereof;

   For the purpose of this Clause indirect shareholding held through one or more intermediate persons shall be computed as follows: (a) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (b) subject always to sub-clause (a) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (b) if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or

ii. a constituent of such Bidder is also a constituent of another Bidder; or

iii. such Bidder, or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, or any Associate thereof or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, its Member or any Associate thereof; or

iv. such Bidder has the same legal representative for purposes of this RFP as any other Bidder; or,

v. such Bidder, or any Associate thereof has a relationship with another Bidder, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each-others' information about, or to influence the RFP of either or each other; or

vi. such Bidder, or any Associate thereof has participated as a consultant to the Authority in the preparation of any documents, design, or technical specifications of the project.

A Bidder shall be liable for disqualification if any legal, financial, or technical advisor of the Authority in relation to the Bid is engaged by the Bidder, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such advisor was engaged by the Bidder, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this RFP. Nor will this disqualification apply where such advisor is engaged after a period of 3 (three) years from the date of Go-Live of the Project.

6.9. Subcontracting

The Selected Bidder would not be allowed to subcontract work, except for the following:

i. Fiber optic network build, other cabling and fixtures work, and all civil work during implementation
ii. Facility Management Staff at ICCC
iii. Internet Service Provider/Network Service provider

Subcontracting shall be allowed only with prior written approval of Authority. However, even if the work is subcontracted, the sole responsibility of the work shall lie with the lead member. The lead member shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the subcontracting agreements (if any) between both the parties would be required to be submitted to the Authority.

Volume 2

7. Objective & Approach

7.1. Project Idea & Approach

One of the primary objective Kavaratti Smart City Ltd under its smart city mission is to enhance the safety and security for the citizen of Kavaratti Island and other objective caters to bring law enforcement and public awareness among citizen of Lakshadweep on various horizon of Safety concerns which shall promote a better quality of life for residents.

To achieve these objectives, Kavaratti Smart City Ltd desires to foster the development of a robust ICT infrastructure that supports digital applications and ensures seamless steady state operations, emergency response mechanisms and real time surveillance and vital city metrics throughout the city and in government departments.

Kavaratti Smart City Ltd is proposing to set up these priority initiatives identified under the Smart City mission which will include Integrated Command and Control Centre (ICCC), and Smart Elements such as CCTV Surveillance System, Public Address System, Environmental Sensor, Smart Poles etc.

7.2. Project Objectives

The concept is based on a consolidated ICT platform which combines public-safety information of different types and from different sources, obtained through cameras, sensors, and multiagency collaboration.

Smart cities are an essential pillar supporting the development of smart cities throughout the world. They provide the security and safety required to protect citizens from crime and terrorism as well as mitigate, as much as possible, the impact of natural disasters and other threats. A successful smart city solution should support a city's security agencies, fire and rescue departments, public health, and social service departments before, during and after an event and integrate the disparate technologies and government departments responsible for citizen safety.

Prevention: Provide reliable and comprehensive security measures to predict threats and hazardous situations.

City authorities must be able to take measures to prevent threats from occurring in the first place. Simulation and forecasting technology, based on big data mining, can help the relevant authorities to predict public threats and support police and military assets to prevent the event before it begins.

Detection: Aid public-safety organizations in collecting, sharing, and analyzing data more effectively to provide early warnings and raise situational awareness.

Sensor systems in the city will proactively gather information. These sensors may include video surveillance cameras, and weather sensors. The type of sensor used is determined by the scope of the safe city project and how much interoperability is required. Information can be used to provide early detection and alerts when events occur. Increasingly, sensors include "listening" to social media for relevant postings by netizens.

Response: Enable the key organizations in the city to react to security threats in real time.

City authorities must be able to prevent an adverse event from escalating. Smart city projects enable an effective response by using a consolidated ICT platform to provide a common operational picture to all relevant agencies, including law enforcement, public health, fire and rescue services; and to allow the critical communication systems of these agencies to interoperate. This helps to raise the situational awareness for each of the responding agencies, and their command, control, and coordination.

Recovery: provide post-event examination and analysis, identify victims, and provide assistance in rescue actions.

After an event, city authorities must be able to quickly examine and analyze all data received from the relevant sensor systems. This supports the subsequent search for suspects as well as the process of building a case based on incriminating evidence. Information can also be used to facilitate rescue actions, and the identification and assistance processes for both victims and survivors.

7.3. Envisaged Benefits for the city

Smart City project will provide the collaborative monitoring to the administration, thus helping in the analysis of data for quicker decision making. Intelligent operations capability ensures integrated data visualization, real-time collaboration and deep analytics that can help different stakeholders prepare for exigencies, coordinate, and manage response efforts, and enhance the ongoing efficiency of city operations. Cities can rapidly share information across agency lines to accelerate problem response and improve project coordination.

Following are the benefits envisaged from Command-and-Control Room:

- ✓ Enable real time monitoring of the various facets of management of City i.e., Security, Surveillance.
- ✓ Provide capability to respond in a unified manner to situations on ground (both day to day and emergency situations) by creating a common operational picture for the relevant stakeholder.
- ✓ Provide capability to conduct analysis for continuous improvement of city operations.

Following are the intangibles that should be addressed by the proposed interventions:

a) Safety Improvement

ICCC integrates various IT systems with the objective of enhancing efficiency, transparency, safety, security and providing efficient citizen services in the cities. The four main objectives of the project are.

i. To have an integrated single source of information and provide the services to citizens and various stake holders leading in efficient planning of the city,
ii. To receive and collected various information from respective stakeholders, process the information and circulate this information the stakeholders.
iii. To enhance city's disaster management capability and enable it in taking prior and effective measures during any calamity.
iv. One of the major roles it would play is to simulate outcomes which would help authorities to take objective decisions for the citizens.

b) Information

The real time information at the Command-and-Control Centre (CCC) shall enable the operators to take necessary actions based on the type of information. It shall be possible to track a particular event using the cameras installed at the locations.

c) Enable real-time monitoring of various facets of management of Kavaratti Smart City i.e., Security, Traffic, e-governance services, City Utilities and many more**.**

d) Increase Operational Efficiency: City Authorities intend to spend more time on public facing functions. Thus, ICCC solutions should help in reducing repetitive paperwork/records & making the back-office as well as city operations management functions more efficient.

e) Real Time Information & Response: The real-time information at the ICCC shall help in taking necessary actions and execute the required responses such as sending an emergency vehicle to the spot, arranging alternate routes to VIP convoys, diverting the traffic to different routes etc. It shall be possible to track a particular event using the cameras installed at the traffic junction.

f) Creating awareness and educating the public: Through VMD boards, awareness of current situations and information shall be imparted to citizens.

g) Security and public Safety: Live Surveillance through a network of CCTV Cameras shall help to identify, apprehend and prosecute offenders and provide live alerts in case of events and incidents.

h) Effective & Preventive Policing: The technological interventions proposed for CCTV coverage shall enable quick tapping of issues in the form of data and maps such as crime mapping, blind spots identification, hotspots identification, among others. This shall enable the law enforcement to reduce crime, do preventive policing and prevent loss of life and property.

i) Provide capability to respond in a unified manner to situations on ground (both day-to-day and in case of emergencies) by creating a birds-eye-view for the relevant stakeholders within the city.

j) Define and manage the Key Performance Indicators (KPIs) for various systems deployed.

k) Provide capability to conduct analysis for continuous improvement of city operations.

l) Disaster Management and Emergency Response System.

m) Provide and manage system for transit management.

n) Generate Alerts over different modes of communication related to core systems deployed.

7.4. Key Components of ICCC For Kavaratti

The key components of ICCC for Kavaratti is illustrated in the figure given below:

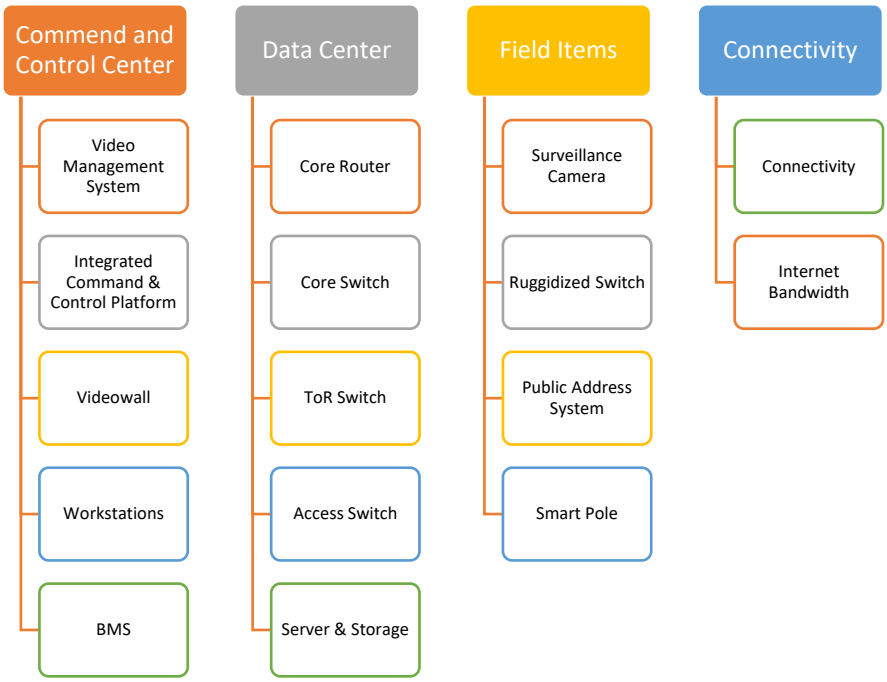


Figure 1 : Key Components of ICCC for Kavaratti

8. Scope of Work

8.1. Overview

The MSI shall deploy the team (based out of Kavaratti} proposed for the project upon signing of agreement and ensure that a Project Inception Report is submitted to Authority within stipulated time mentioned in the RFP after signing of the agreement, covering following aspects:

- Names of the Project Team members, their roles and responsibilities
- Approach and methodology to be adopted to implement the Project (which should be in line with what has been proposed during the bidding stage, but may have value additions/ learning in the interest of the project).
- Responsibility matrix for all stakeholders
- Risks the MSI anticipates and the plans they have towards their mitigation
- Detailed project plan specifying dependencies between various project activities/ sub activities and their timelines.

The MSI shall conduct a comprehensive As-Is study of as existing infrastructure, systems and associated processes in the city in line with project requirement.

Additionally, the MSI should provide detailed TO-BE designs specifying the following, at the minimum:

- High Level Design (for all components installed) for Application architecture, Logical and physical database design, Data dictionary and data definitions, ER diagrams and other data modelling documents and Physical infrastructure design for devices on the field.
- Application component design including component deployment views, control flows, etc.
- Low Level Design (including but not limited to) for all components installed Application flows and logic including pseudo code, GUI design (screen design, navigation, etc.), Data base architecture, including defining data structure, data dictionary as per standards laid-down by Government of India/ Government of (State)
- KPI design for the Video wall to visualize important events on real time basis.

8.1.1. Key activities under the scope of the MSI

- CONOPS design finalization and sign off with Authority
- Project Planning, Procurement, and execution.
- AS-IS and TO-BE Assessment, Survey and Gap analysis for components under the scope.
- Development of use cases and Standard operating procedures (SoPs)
- Site Preparation including required civil work and site clearances.
- Solution design, development, implementation, customization, testing of entire system.
- Deployment of use cases.
- Training- general awareness, Use cases, SoP management, governance, ICCC operation,
- System maintenance.
- Business Process Reengineering and KPIs for the selected applications/ services
- STQC Certification and system audit
- UAT & Go-live
- Capacity Building
- Operation & Maintenance (O&M) for 05 Years from phase-wise Go-live date
- Security audit and compliance

The bidder shall be responsible to carry out detailed survey prior to submission of the bids in order to familiarize with infrastructure requirement, electrical power, network bandwidth requirement, operational & administrative challenges etc.

The bidder shall furnish the survey report (The template to be specified by the Authority) along with their realistic assessment of AS-IS situation and assumptions (if any) for the desired output, as part of their technical bid.

Field equipment installed through this Project would become an important public asset. During the agreement period, the MSI shall be required to repair / replace any equipment if stolen / damaged / faulty.

Hence it is imperative that all infrastructure created under the project shall be leveraged for maximum utilization. Therefore, the bidder is required to ensure that such infrastructure shall allow for accommodation of equipment that is being procured under other city projects (e.g. equipment like junction boxes and poles deployed under the ICCC project at the field locations shall be utilized to accommodate field equipment created under the other projects of Authority. The procedure for utilization of the infrastructure shall be mutually agreed between the Authority and MSI.) The MSI shall note that the activities defined within scope of work mentioned are indicative and may not be exhaustive depending on the respective city specific requirement later provided by them. MSI is expected to perform independent analysis of any additional work that may be required to be carried out to fulfil the requirements as mentioned in the RFP and factor the same in their techno commercial bid response.

8.2. Responsibility Matrix (Indicative)

KAVARATTI SMART CITY LIMITED shall be owner of the project and MSI, who would be responsible for delivering the project on a turnkey basis shall be selected. MSI would be in the form of a consortium of companies that together have the capability and skill to execute and manage the entire project.

MSI shall be responsible for project planning, project implementation and maintaining the project for a given time, as defined by the KAVARATTI SMART CITY LIMITED during the RFP phase. However, the implementation shall be carried out in such a manner that few services shall be up and running in half of duration of mentioned project timeline.

MSI shall be responsible for defining the implementation plan, doing site survey, obtaining necessary permissions, developing system requirements, standard operating procedure etc. However, KAVARATTI SMART CITY LIMITED will help MSI to provide necessary information, facilitate interaction with other departments for getting required information / approval.

8.3. Project Implementation Schedule

a. The milestones and project timelines are given below:

The total payment shall be paid separately for CAPEX and OPEX. For payment release purpose, CAPEX value will not be considered more than 75% of total bid value at any stage, balance will be considered as OPEX. CAPEX payment shall be released based on the mentioned milestone in the below sections. OPEX payment will be released in twenty (20) equal quarterly instalments spread across 5 years Post Go-Live. Other recurring/non-recurring expenses like Electricity/Water connections & consumption bills, fees for PUC/ROW etc. to be paid to Government Departments for Project Execution will be released on actual by Kavaratti Smart City (These expenses need not to be mentioned in Price Bid).

Implementation Schedule" it is clearly mentioned "CAPEX value will not be considered more than 75% of total bid value

T = 14 Days from signing of contract

Sr. No.	Deliverables	Milestone/Deliverables	Timelines (in months)
1.	**Phase 1**		**T + 4 months**
1.1.		Detailed Survey Report including infrastructure assessment, phase wise location distribution, hardware deployment plans etc. Detailed Project Plan including Operations Management, Contract Management, Risk Management, Information Security and Business Continuity Submission of drawings and project plan for review and approval from Kavaratti Smart City and Police Department.	T + 7 Days
1.2.	Requirement Study ✓ CCTV Surveillance ✓ Public Address System ✓ Operation Control Room	Submission of FRS, SRS, HLD, LLD and Application Design Documents for the proposed systems for review and approvals from Kavaratti Smart City and Police Department	T + 30 Days
1.3.	Implementation of Operation Control Room.	Delivery report, inspection reports (component - wise) Site Completion/ readiness Report Software Licenses Acceptance Certificate from Authority / authorized entity (components wise) Site Completion/readiness report Software Licenses. Acceptance Certificate from Kavaratti Smart City and Police Department	T + 6 months
1.4.	Supply, installation, deployment of Applications, training & operationalization of Components ✓ CCTV Surveillance ✓ Public Address System ✓ Operation Control	Delivery Report, UAT (component - wise) Software Licenses, Integration, Training Completion Certificate Acceptance Certificate from Kavaratti Smart City and Police Department	T+ 6 Months

Sr. No.	Deliverables	Milestone/Deliverables	Timelines (in months)
	Room		
1.5.	Go-Live	UAT Acceptance Certificate	T1= T + 7 Month
2.	**Phase 2**		
2.1.	Operation & Maintenance	Weekly & Monthly Reports UAT Acceptance Certificate for the respective integrated solutions	T1 + 60 Months

b. The MSI shall strictly adhere to above-mentioned timelines. However, if the bidder is confident of completing the work before the stipulated period, he shall submit a revised project timelines along with the technical bid.

8.4. Deemed Acceptance

The Authority shall provide acceptance for go-live of each milestone within 60 working days from the date of completion of the UAT for that milestone. The Authority shall provide the following to the MSI:

- Stakeholders/Approvers involved in deliverable, project output
- Deliverable details and its impact/strategic outcome
- Deliverable Timeline calendar with alerts to all Stakeholders/Approver
- Sign off timeline calendar with alerts to all Stakeholders/Approvers

In case the Authority fails to respond and provide feedback on above stated submission, the deliverables shall be DEEMED ACCEPTED.

Post the elapse of the 60 days' approval period, the MSI shall not be asked to rework on the said project outputs/outcomes. However, in case the Authority confirms to the MSI with an alternative date, then that date would hold valid for the deemed acceptance. Such revisions shall be limited to 2 (two).

Any subsequent rework post acceptance/deemed acceptance would form the subject of a formal "Change Control/ Change Request", which has been detailed in Article 55- Change Control Note (CCN) of Volume III.

8.5. Payment Schedule

Sr. No.	Deliverables	Milestone/Deliverables	Payment
1.	Material Delivery	Successful Delivery of Material i.e., Firewall, Switches, s, Video wall, Poles, Applications, Workstations, UPS, Server, Storage, Screen etc.	70% of Capex
2.	Installation, deployment of Applications, training & operationalization of	Successful operationalization of components i.e., Firewall, Switches, Cameras, Video	20% of Capex

Sr. No.	Deliverables	Milestone/Deliverables	Payment
	Components	\ all, Poles, Applications, Workstations, UPS, Server, Storage, Screen etc.	
3.	Go-Live	UAT Acceptance Applications Go-Live Command Center Go-Live	10% of Capex
4.	Operation & Maintenance	Weekly & Monthly Reports UAT Acceptance Certificate for the respective integrated solutions	OPEX will be paid in twenty (20) equal quarterly instalments spread across 5 years Post Go-Live

Note:

1. All payments to the Master System Integrator shall be made upon submission of invoices along with necessary approval certificates from Kavaratti Smart City.
2. The above payments are subject to meeting of SLA's failing which the appropriate deductions as mentioned in this RFP will be applicable.
3. The bill of material proposed by the MSI shall be approved by Authority. The exact quantity and requirement shall be proposed as part of the technical bid by the bidder.
4. The request for payment shall be made to Authority in writing, accompanied by invoices describing the services performed, and by the required documents submitted pursuant to general conditions of the contract and upon fulfilment of all the obligations stipulated in the agreement.
5. Due payments shall be made promptly by Authority generally within sixty (60) days after submission of an invoice for payment by MSI. The Taxes, as applicable, shall be deducted / paid, as per prevalent rules.
6. The currency or currencies in which payments shall be made to the MSI shall be Indian Rupees (INR) only. All remittance charges shall be borne by the MSI.
7. In case of disputed items, the disputed amount shall be withheld and shall be paid only after settlement of the dispute.
8. Any penalties/liquidated damages, as applicable, for delay and non-performance, as mentioned in this RFP document, shall be deducted from the due payments of the respective milestones.
9. Material Shall be delivered at respective Island

8.6. System Architecture for Kavaratti ICCC

It is proposed to integrate all the Smart solutions into the ICCC platform. The proposed high-level architecture of the entire solution is provided in the figure given below: -

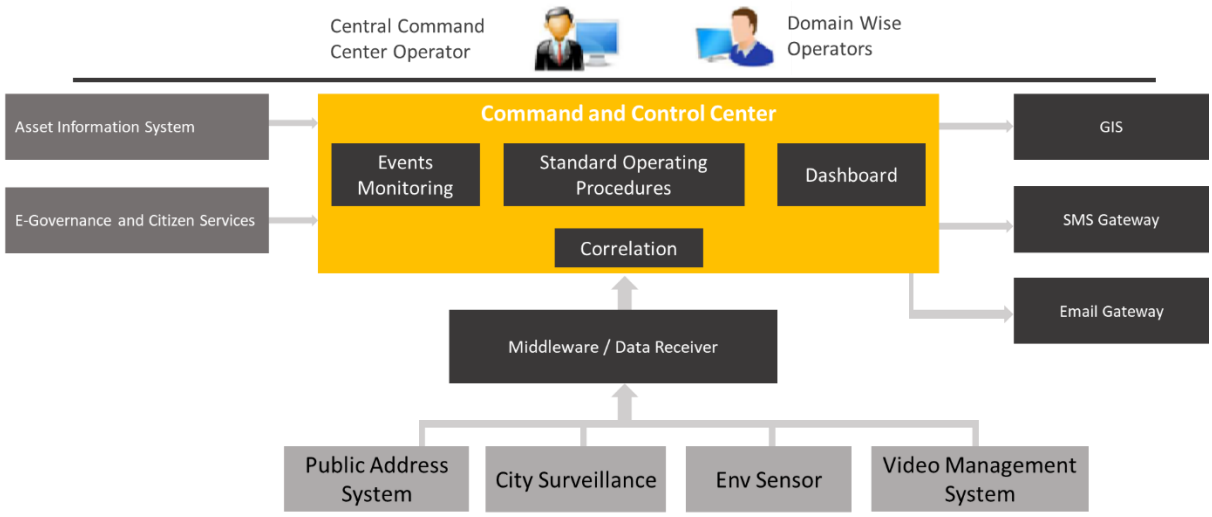


Figure 2 : Schematic view of components of ICCC

8.6.1. Level 1: Integrate and View

Certain components will be Integrated using direst feeds, dashboards and sharing of alerts actionable inputs for integrate and view operations such as:

i. Island Surveillance System
ii. Integrated Command & Control Room Platform
iii. Web and Mobile Application

8.6.2. Level 2: Integrate Command and Control

i. Integration with Existing System and Departments

8.6.3. Level 3: Implement, Command, Control and Fully Operate

i. Integrated Command and Control Centre
ii. CCTV Cameras Installed various other civic purpose as part of Project.

8.7. Integration

The SI will ensure to integrate all application with existing command center.

8.8. AS-IS Assessment

The proposed surveillance system is envisioned for the Kavaratti with following objectives.

1. Providing support to the police department to maintain Law and Order of the Island, by acting as an aid to investigation of various irregular and criminal activities occurring in and around the Island.
2. Deterring, detecting, and thus dealing with criminal activities.
3. Providing evidence for criminal and civil action in the courts
4. Attaining faster turnaround time for crime resolution and proper investigation.
5. Ensure effective security & surveillance of an area under the system which can provide tamper proof record for post event analysis.
6. Continuous monitoring of prominent public places in Kavaratti Island area by keeping an eye on regular activities

7. Addressing the threats from terrorist attacks and helping the department to be prepared in case of any such incident.
8. Support in managing and policing large scale events.
9. Augment rescue operations at the time of any natural disaster.
10. Amalgamation of all existing Surveillance devices belonging to different departments into the planned surveillance system.
11. Department of Environment and Forest also taking huge efforts to control the environmental related encroaching, sea cucumber poaching lagoon monitoring etc. A geo fenced integrated surveillance system shall support department to monitor these activities more effectively.
    - Lagoon Monitoring
    - Monitoring the movements of vessels in lagoon / seaside
    - Monitoring and control the sea cucumber poaching.
    - Environmental related aspects monitoring
12. Ports Department shall make use of integrated surveillance system to monitor their open assets, passenger movements and vessel traffic more effectively with a smart surveillance solution.
    - Port Infrastructure Security
    - Monitoring of Passengers
    - Monitoring of vessel movements through cameras

In addition, the system shall also be integrated with the proposed Integrated Command Control and Communication system and further strengthen safety of the citizens. Proposed video-based surveillance system shall enable the above listed objectives by following:

- Alerting the Police Department about abnormal movements
- Efficient management of security breaches based on alerts received from system.
- Improved turnaround time in responding to any investigation case, faster access to evidence in case of law violation in the prescribed areas.

8.8.1. CCTV Surveillance

Primarily the function of police, these refer to operations to enhance the safety of the public and provide necessary surveillance information to Police for both reactive and predictive policing. CCTV surveillance has been an important component across multiple cities with increasing usage of video analytics to aide police in spotting potential incidents and managing them as they happen.

a. Types of Cameras

Sl No	Type of Camera	Usage
1.	Type 1: Dome Camera	360 degree coverage. Distance up to 6 Mtr . Class room, Laboratory, Class rooms, staff rooms etc..

Sl No	Type of Camera	Usage
2.	Type 2 : Bullet Camera	Distance up to 10 Mtr (Open area). Corridor/ Varandha, Fair shop, Helipad, NIOT, all office buildings etc
3.	Type 3: PTZ Camera	Cover 360 degree including night vision. Distance up to 100 Mtr (Open area). All junctions, Helipad, Sub Jail, Power house, Uninhibited Islands, Play Ground, LPG Godown, Petrol Pump, Jetty area, Treasury etc.
4.	Type 4: Long Range PTZ Camera	Cover 360 degree including night vision for long distance. Distance up to 3 Km (Open Area). Boat Entry points, Jetties, Helipad, and critical locations

b. Location Details for Camera Positioning

Sl.No	Name of Island	Camera Type 1	Camera Type 2	Camera Type 3	Camera Type 4	Total
1	Agatti	106	158	35	3	302
2	Amini	111	179	14	3	307
3	Androth	163	161	21	3	348
4	Bitra	19	35	9	1	64
5	Chetlat	87	173	10	2	272
6	Kadmat	91	165	15	2	273
7	Kalpeni	124	164	28	3	319
8	Kavaratti	209	318	48	4	579
9	Kiltan	78	91	10	2	181
10	Minicoy	134	141	17	4	296
	Total	**1122**	**1585**	**207**	**27**	**2941**

c. Requirement of Smart Poles (Public Address System, LED Panel along with CCTV)

Sl.No	Name of Island	No of Poles
1	Agatti	5
2	Amini	4
3	Androth	4
4	Bitra	2
5	Chetlat	3
6	Kadmat	3

7	Kalpeni	4
8	Kavaratti	5
9	Kiltan	3
10	Minicoy	5
	Total	**38**

8.9. Survey based on data gaps from AS-IS study

The bidder is responsible for undertaking the Survey based on the data gaps identified through "As-Is" as per the objectives of the city. The bidder shall also be responsible for ensuring appropriate geo referencing & geo tagging of all the Smart City Components/Assets on the map including Wi-Fi locations, Cameras, Poles, PA & VMD systems etc.

8.10. IoT and ICCC Integration

- Geo tagging of IoT Assets: Mapping of all the IoT assets over GIS platform's base map using Geo tagged location of the sensors and devices – Environment sensors, PTZ cameras, Public Announcement Systems (PAS), junction boxes, Emergency systems etc.
- Using buffer tools to mark the area of coverage, for devices like PTZ Camera, ANPR camera, it shall analyze the total coverage of the devices for optimum locations.

8.11. Implementation Services- on premised model

The MSI shall be responsible for implementing and integrating the IT solutions to enable the city stakeholders achieve their objectives. The IT infrastructure must be made ready before city specific applications can be implemented.

Following are the implementation services to be provided by the MSI:

#	Parameter	Functional Requirement	Deliverables
1.	Environmental planning	MSI shall optimally size all environmental requirements, as applicable: • Racks and rack space • Power requirements • Cooling requirements • Passive cabling requirements • Wi-Fi access points in operational area • Operational space requirements	1. Rack schematics 2. Power schematics 3. Passive cabling 4. drawings 5. DC floor plan 6. Staff seating plan
2.	IT infrastructure sizing for both DC and DR	MSI shall optimally size all IT infrastructure requirements, including, but not limited to:	1. Sizing calculations and justifications 2. There is no DR at

#	Parameter	Functional Requirement	Deliverables
		• Compute & Storage • Data Storage • Network ports (core and access) • No. of security zones • No. of VLANs in each zone	this moment.
3.	Project Planning	MSI shall be responsible for overall project planning, resourcing and scheduling to meet the implementation timelines proposed by Authority. As part of planning, MSI shall provide: • Project plan • Staffing plan • Project Organizational structure • Detailed activity list for each subproject • Project risks and mitigation plan • Internal and external dependencies • Communication plan • Stakeholder communication • Documentation plan • Roles and Responsibilities matrix • Escalation matrix • User Acceptance Testing plan • Success criteria and Sign-off • Operations and Management plan	1. Detailed Project Plan document 2. Organizational structure and resource details 3. RACI matrix 4. Testing strategy document 5. Templates for various documents 6. Operational Plan
4.	Planning and Design – IT Infrastructure solutions	MSI shall plan and design the DC Architecture as per the SLA requirements of Authority: • IT infrastructure architecture • IP address and network planning and design • DNS planning and design • Enterprise Directory design • Infrastructure security planning and	1. High level design 2. DC Low level design

#	Parameter	Functional Requirement	Deliverables
		design • Identity and Single Sign On (SSO) design • Application Integration solution planning and design • End user (all stakeholders) accessibility design	
5.	DC Implementation services	MSI shall install and configure the IT infrastructure and the proposed solutions in compliance with the availability requirements of Authority with No Single Point of Failure (NSPoF)	Installation Reports
6.	Solution Implementation Services	MSI shall install and configure all IT solutions that have been proposed as below, but not limited to: • ICCC Platform • Video Management System • Public Address System • Video Messaging Display • Enterprise Management System • Others	For each solution: 1. Installation reports 2. Solution Architecture documents 3. Solution Operations documents 4. Integration guides 5. User guides

#	Parameter	Functional Requirement	Deliverables
7.	Integration services	MSI shall integrate with the following solutions if they already exist with Authority or as common services for the city: • Payment gateway • SMS gateway • Email gateway If Authority or the city does not have an SMS gateway, MSI shall propose and procure SMS gateway services. Bidder shall consider 1 Lac SMS per annum as part of solution for entire project period.	
8.	Bandwidth	MSI shall be responsible for sizing the user load per application being deployed, field devices being deployed and assess the network bandwidth required for: Authority shall be responsible to provide the connectivity scope as defined in the section "Connectivity"	Bandwidth sizing calculations and justifications

Operations and Management

Operations and management require a robust framework to ensure that ICT systems perform at the required level. The MSI shall take up Operations and Management post UAT and acceptance by Authority.

#	Parameter	Functional Requirement	Deliverables
1.	Operations and	MSI shall design appropriate	1. Process

#	Parameter	Functional Requirement	Deliverables
	Management processes design	operational processes for Authority as below, but not limited to: • Resources on-boarding • Helpdesk services • Service catalogue • User Management • Change Requests • Service Requests • Incident Reporting and tracking • Security Emergency • Patch Management • SLA monitoring and reporting • Application on-boarding	documentation for each of the listed topics 2. Checklists as applicable (e.g., Application go-live checklist)
2.	Operations and Management services	MSI shall provide the following 24 x 7 x 365 Operational and Management services and resources for: • Helpdesk services • Physical infrastructure management and monitoring • IT infrastructure administration and monitoring • Network administration and monitoring • Security management and monitoring • Application and compute & storage performance monitoring	1. Periodic Availability (uptime, downtime) reports 2. Periodic resource utilization reports 3. SLA reports 4. Application performance reports 5. Security incident reports 6. Network bandwidth utilization reports 7. Service ticket reports
3.	Security Vulnerability and Penetration	MSI shall carry out periodic (min. 1 per year or as prescribed by Authority) Security vulnerability and	Audit Reports

#	Parameter	Functional Requirement	Deliverables
	testing	Penetration testing of the IT infrastructure, by CERT-IN empaneled Information Security auditors	

The MSI shall put an effective monitoring and management system be put in place with following minimum considerations:

#	Parameter	Requirement
1.	Functionalities	The proposed solution shall include the following functionalities, but not limited to: • Helpdesk services • IT Asset and configuration Management • Network Monitoring and Management • Server Monitoring and Management • Application Monitoring and Management • End user response time monitoring and management • Incident Reporting and tracking • SLA monitoring and reporting
2.	Auto discovery capability	Proposed solution shall have capability to automatically discover manageable elements connected to the infrastructure and map the connectivity between them. It should include, but not limited to: • Servers • Storage • Network switches • Routers • Cameras • Any IP device
3.	Thresholds and alerts	Proposed solution shall have capabilities to set various performance thresholds on devices and generate alerts in real-time, when those thresholds are breached Solution shall have capabilities to send the generated alarms in real-time over (not exhaustive): • Mobile SMS • Email • On screen

#	Parameter	Requirement
4.	Performance Management	Capable of monitoring and reporting minimum, maximum, current values of all parameters as below, but not limited to: • CPU • Memory • Storage I/O • Storage capacity • Network I/O • Network utilization • Processes • Users

8.12. City Communication Network

8.12.1. MPLS / P2P Connectivity

It is deemed that the bandwidth required for the project implementation will be provided by the UT directly from BSNL or KSCL may request IT department (UT) to provision some spare core for this project from its 48 Core fibre laid around the Kavaratti Island. The location of BSNL provided / UT owned fiber will not be more than 100 meter at each location. However, MSI shall be responsible for any last mine connectivity to be extend for any field location or Control Room. It may be required for upgrading the Junction infrastructure, this bandwidth will be required for the last mile connectivity and ICCC, to meet the requirements of the Surveillance. There may be few locations where connectivity can't not be provisioned and over those locations MSI shall provision NVR as mentioned in the BoQ to keep recording at locally over the location. The network & bandwidth should meet following requirements:

- Authority may order an increase/ decrease/ termination/ withdrawal in bandwidth, which shall be considered.
- The network should be capable of providing Bandwidth on Demand for planned as well as for unplanned activities.
- It will be the responsibility of the MSI to consider all the hardware to terminate the bandwidth to the respective location.
- MSI shall also be responsible for provision of Civil infrastructure.
- All costs to connect the links to last mile node of as to be borne by SI. Kavaratti Smart City will not pay or reimburse any last mile of extra work cost.

8.12.2. Internet bandwidth at DC

As provisioned by the KSCL.

9. Domain Use Cases

9.1. Indicative /Partial List of Use cases

ICCC are intended to be the brain and nervous system of the city for monitoring & managing various key functions. ICCC in Kavaratti shall be driven by following use cases to deliver specific outcomes for various departments and stakeholders of the city.

Following indicative use cases shall be enabled by the ICCC:

#	Domain	Use Case	Description
1.	Safety and Security	Crisis Management	Point of Interest, Tweets, Traffic, ECB Data, Dial 100 API
		Crowd Management	Point of Interest, Tweets, Video Feed, Traffic, ECB Data, Dial 100 API
2.	Sensor Data	Identifying malfunctioning sensors and data noise removal	
		Forecasting model for noise, temperature, AQI, ambient light based on time series model	time stamp, lat-long, observed value; weekdays; holidays; hour of the day
3.	Social (Text Analytics)	Twitter Sentiment Analysis	Tweets
		Crisis Management	POI, Tweets, Traffic
4.	Video Analytics	Object Identification and its application on Bin pickup monitoring, thief monitoring	Live Camera Feed
		Prevent crowd gathering beyond permitted threshold	Live Camera Feed
		Trash or road not clean	Live Camera Feed

10. Functional and Technical Specifications

These Monitoring shall be happening through CCTV Cameras. Vessel Management system is out of scope

10.1. Video Management System

VMS Shall have the management of ANPR camera and it can be used after procuring the ANPR licenses in future though ANPR functionality is out of scope of the RFP

VMS shall have mentioned Capabilities for future requirement. Procurement of any Video analytics licenses are out of scope of this RFP

VMS shall have these capabilities asked in the RFP for future requirement, though NVR integration is out of scope of the RFP

There shall be virtual environment and bidder shall maintain the HA in cluster. Secondly, Bidder can deploy the solution in N+1 failover. However its bidders responsibility to maintain the SLA and bidder shall deploy the solution accordingly.

Sl. No.	Minimum Specifications	Compliance (Yes / No)
General Requirement		
1.	The VMS shall support client applications including System client, Web client, Video wall management client and mobile client	
2.	The VMS shall support login by username and password. It shall also manage all user information, permissions, license, operation information and system information.	
3.	The VMS shall support unified time synchronization among all devices in the system and daily user and maintenance information management.	
4.	The video recording management shall support several types of storage device such as DAS, NAS, IPSAN, direct storage etc. It shall enable centrally management of NVR, storage devices offering video searching, playback, managing and downloading	
5.	Shall have Network management server which regularly acquires the status of video devices such as NVR, Network camera, storage boxes and running status of servers of system.	
6.	Shall have an Alarm management server which provides alarm events and maintains the logs of alarm management. It shall also receive I/O alarms triggered by alarm host such as recorder, camera and so on. IT shall also be responsible to trigger linked actions like push alarm notification to clients, sending e mail, calling presents in PTZ, video wall linkages etc.	
The VMS shall support 3 types of authentication method viz.		
7.	Username and password: User name (login name) must be exclusive and cannot be modified once set. After login, all the operations shall be monitored and saved into the system record (log) for internal review.	
8.	Binding IP Address Authentication In order to prevent the operator from logging in illegally, the IP address of the computer is bound. The operator can only log in from the designated computer; or else he or she may not be able to enter the system normally.	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
9.	Access Permission Precise permission settings shall be supported. Any user or any video resources shall be set precisely. For example, each user can be assigned the permissions including real-time monitoring, playback, PTZ control and so on to each camera.	
Video Surveillance Management shall support following functions:		
Live view		
10.	The real-time live view shall be displayed in 1/4/6/9/13/16 windows through the C/S or B/S clients. C/S = Client / Server B/S = Browser / Server	
11.	The user is able to set the video to show in original size or extent to the whole screen.	
12.	The system is able to remotely control the PTZ functions, including rotation, auto scan, zoom in, zoom out, preset settings, patrol settings, and so on. Set the speed dome's preset, and then the speed dome will automatically go to the preset to perform monitoring.	
13.	Auto-switch shall allow displaying the videos according to the rules set by the user, which can be set as auto-switch in one group, auto-switch among groups, or combined auto-switch or scheduled auto switch.	
14.	The system shall be able to receive real-time sound through the two-way audio function	
15.	Instant Play back the recorded video files of a specific camera in the live view mode.	
Playback		
16.	The recorded video file by file type, date, and camera, with many additional functions, including playback in 1/4 window divisions, fast forward (×1, ×2, ×4, ×8), clipping, image capture, multi-camera simultaneous playback, etc	
17.	The system shall be able to play back the video in different time segments.	
18.	Supports multiple playback types: scheduled recordings, motion recordings, manual recordings, and alarm	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	recordings	
19.	Picture Playback - Shall Support searching vehicle pictures by multiple types, such as normal, illegal and armed, shall support Supports auto play and auto play delay duration	
Comprehensive search		
20.	Picture search of passing vehicles - Search by license plate no.	
21.	Export - Shall support export searched result in customized way i.e., Picture or data or picture and data	
E-Map		
22.	E-Map shall be of 2 types - is developed based on the third party map engine that already exists to realize GIS map function or When users need to manage the resource in E-map without original data and the third party map engine, the E-map server can load JPEG E-map	
23.	Shall allow to visually display the spatial position of video resources. All camera points, checkpoints, and E-police actual positions shall be displayed in E-map. Users can search the camera points, checkpoints, and E-police actual positions and quickly locate to the positions to check the surrounding geographic information	
24.	Shall supports searching by License plates number and time period, and displaying history playback of vehicles	
25.	Shall support displaying information and pictures of passing vehicles	
Alarm Management		
26.	Shall support editing alarm schedule templates, customizing alarm time, alarm level- Low, medium, high, multiple alarm linkage viz., client linkage, recording linkage, message linkage etc.	
27.	Shall support camera alarms, device alarms, IO alarms, server alarms,	
28.	Shall allow to generate the alarm report	
Recording management		
29.	Shall support setting recording, shall have different type of templates viz all-day template, work day template, weekend	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	template, customized template	
30.	Shall allow to select the storage types whether device storage, storage server	
31.	Shall support pre and post recording time	
Task scheduler		
32.	Shall support to generate task of server time synchronization, device time synchronization, data and record backups, device reboots, device status inspection etc.	
Maintenance management		
33.	Shall allow checking the server information and status of the server including type of server, total no. of server, normal server, exceptional server, offline server etc.	
34.	Checking status and information of devices working under certain organization unit including type of device, total no. of device, normal device, exceptional device, offline device etc.	
35.	Checking the status of users including user name, organization name, login time, login type, online time, IP address, total online users etc.	

10.2. Command & Control Centre Platform

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
1.	General requirements	The Command & Control solution should be implemented and Compliance to the industry open standards based Commercial-of-the-shelf (COTS) products.	
2.		ICCC should support Role based access of application modules.	
3.		System must provide a comprehensive API (Application Program Interface) or SDK (Software Development's Kit) to allow interfacing and integration with existing systems and future	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		application and sensors which shall be deployed on the field.	
4.		The platform should be able to normalize the data coming from different devices of same type and provide secure access to that data using data API(s) to application developers.	
5.	Command & Control	The solution must use the latest application architecture models for better interoperability and performance.	
6.		Proposed ICCC Application and Field User Mobile Application shall have Web Security Audit certificate from a Cert-In authorized Security Auditor as on date of publishing of the bid.	
7.		The platform must be able to normalize the data from various data sources such as IOT (Internet of things), IT (Informational Technology).	
8.		ICCC Platform shall be developed utilising the latest Microsoft .NET architecture and the back bone of the systems database will be a Microsoft SQL server.	
9.		The proposed ICCC platform should be deployable both on-prem and on cloud i.e., hybrid deployable.	
10.		The proposed ICCC platform must be published on at least one of the leading global CSP marketplace i.e., AWS/Azure/GCP.	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
11.		The platform must be able to integrate data from different sub-systems and provide a unified view of the sub-system data over visualization dashboards.	
12.		The platform must have the capability to perform collection of data from the devices or sensors through the APIs provided by the sub-systems.	
13.		The platform must be compatible to work on web browsers.	
14.		ICCC and Video Management System should not be from the same Original Equipment Manufacturer (OEM) to avoid vendor lock-in and ensure interoperability and compatibility among different systems and devices.	
15.		Must have capabilities to achieve load balancing and high availability using load balancer & must be self-certified by the OEM.	
16.		Platform System shall have capabilities	
17.	Integrations	The ICCC shall integrate with the following Systems/ Platforms through SDKs and APIs shared by their provider: • Video Management System (CCTV Surveillance System) • Video Analytics • Facial Recognition System (FRS)	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		• Intelligent Traffic Management System (ITMS) • Automated Number Plate Recognition (ANPR) System • Public Address System (PAS) • Emergency Call Box (ECB) • Solid Waste Management (SWM) • Water SCADA • Incident Management System • Environmental Sensors • Water Monitoring Sensors • GIS platform • GPS • Email Gateway • SMS Gateway	
18.	Video Management System (CCTV Surveillance System) Integration	ICCC Platform Solution should have the capability to be integrated with Video Management System (VMS) through SDKs and APIs shared by their provider and shall have the following functionalities:	
19.		View live video of Camera nearest to the Alert location in ICCC Application.	
20.		User can take snapshot and allocated with alert created which can be utilized for future reference.	
21.		All Cameras should be be mapped on GIS platform (if integrated) with different information regarding their status, Location address.	
22.		The camera visual should be directly accessed through the icon on the map.	
23.		There should be a snapshot	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		functionality, when the operator access a live video camera.	
24.		Zoom in/out camera functionality should be provided.	
25.		Ability to perform below mentioned video controls (if applicable) from ICCC systems by Operator:	
26.		Play, slide-forward, slide-backward, pause, and specify time to play recorded video.	
27.		Take a video still image (snapshot) from live or recorded video.	
28.		Move PTZ camera by clicking on camera controls to the chosen location.	
29.		Provide screen control in video pane to control pan, tilt and zoom PTZ camera.	
30.		Display in 2x2 and 3x3 window formats.	
31.	Video Analytics Integration	The ICCC solution should have the capability to be integrated with Video Analytics Platform through SDKs and APIs shared by their provider and shall have the following functionalities:	
32.		Alerts will be generated in ICCC Platform in case of any information received from the Video Analytics platform.	
33.		Geo-spatial locations of all the incidents will be plotted on GIS Map.	
34.		All the information received from	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		integrated Video Analytics Platform will be visible on ICCC Platform.	
35.	Vehile Tracking System Integration	The ICCC solution shall have the following functionality with respect to Vehicle Tracking Integration:	
36.		Track latitude and longitude or geospatial location of resources (ex. People/ vehicles.) if associated with location-based device.	
37.		Enable multiple resources to be simultaneously tracked.	
38.		Enable resource locations to be displayed on the map in ICCC Application.	
39.		Enable display of recent movements of tracked object on a map.	
40.		Enable display of any vehicle/resource on a map with GPS coordinates.	
41.		Enable search and find tracked objects by name.	
42.		Operator should be able to get Vehicle's attributes by clicking on the icon of vehicle on GIS map.	
43.	GIS Map Integration	ICCC application should be integrated with GIS map.	
44.		All alerts should be mapped in GIS map	
45.		Integration application should support for receiving different types of alerts.	
46.		GIS map should have all basic features of creating any point of	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		interest point or affected area.	
47.		GIS map should have plotted all Cameras/Sensors deployed across the city.	
48.		GIS map should enable search on Map for any alert by type or subtype.	
49.		Distance measuring tool should be part of GIS panel.	
50.		On receiving alerts GIS map should zoom on alert location.	
51.		Clicking on any alerts in GIS map should allow to acknowledge or close the alert. Same should be possible from alert panel.	
52.		Alert Panel and GIS panel should be in sync and support multi-screen.	
53.		Clicking on any Alert should show nearest Cameras, from where live viewing of Camera should support.	
54.		Operator should be able to take Snapshot of Live streaming and save image.	
55.		Operator should have capability to Create alerts when viewing something on Camera and attaching the snapshot taken.	
56.		All alerts should be mapped to various SOP, where authorities should be informed through SMS or Email.	
57.		Operator should be able to draw a free hand shape on GIS map and should be able to perform following functionalities:	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		• Alert list should be populated in a window which are generated in area within the drawn shape on GIS Map. • Operator Should be able to perform certain action on listed Alerts like close the alert, assign nearest responder and execute SOP. • Responder list should be populated in a window which are available in area within the drawn shape on GIS Map. • Operator should be able to Send the Message to selected Responders. • Operator should able to see health status of all sensors which are available in area within the drawn shape on GIS Map.	
58.		Operator can assign to nearest field responder from drag and drop option from GIS Map as well as assigned from Alert panel.	
59.		Platform shall have Map view widgets with support of different base maps and additional map layers imposed on the base map.	
60.		Platform shall support open-source base map as well as should be able to support major map providers such as HERE, Tom-tom, Google Maps, ESRI etc.	
61.		Platform shall be able to integrate and visualize map layers provided by Client for different layers such	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		as administrative boundaries, Road Networks, Hospital/Fire Stations, Landmarks etc. These layers can be contextually enabled or disabled by the operator for situational awareness.	
62.		Platform shall support the Map functionalities such as zoom-in, zoom-out, re-centre, search, filter, area selection, zoom to marker level, multi-select, selection of a specific element to see more details of the same, change of the base map, selection/deselection of layer maps for visualization.	
63.		Platform shall visualize on the map different vehicles, IoT Devices & Sensors, CCTV Cameras and other IoT Elements. These layers shall show contextual information on the icons when mouse-over and also have different colour of icons for easy representation of the state of the IoT elements. A summary panel shall show the legends and the corresponding counts.	
64.		Platform shall have capability to show heatmap as additional map layer on top of pre-selected map layers.	
65.	Public Address System Integration	ICCC will be required to integrate with Public Address System using Open API standards.	
66.		ICCC should be able to map Public Address System locations	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		over the GIS layer.	
67.		The operator at ICCC should be able to click on the GIS map to view the details of particular Public Address System status.	
68.		ICCC should also be able to trigger the commands (if required) to the respective PA system.	
69.		All the information received from Public Address System will get into Analytics layer of ICCC and provide useful insights and KPI's over dashboard.	
70.	Alert Management	The Platform shall support the following Alert Management functionality:	
71.		Operator can access complete information related with Alert.	
72.		Operator should be able to assigned nearest responder to an alert from the alert Panel its self	
73.		Should support Geospatial rendering of Alert information. Platform must have the ability to show the alerts over the map view so that there is a sense of awareness amongst the platform users where the alert has occurred.	
74.		Should provide facility to capture critical information such as location, name, status, time of the event and be modifiable in real time by multiple authors. Events should be captured in standard formats to facilitate event	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		correlation and reporting.	
75.		Operator should be able to print audit log of an alert from the alert panel which should contained all the activities performs against the alert.	
76.		Application should provide visual indication for the severity of alert , like if severity of alert is high it should show upward-arrow , if low then downward-arrow should be visible against each alert in alert panel.	
77.		Platform must have differentiated color cues for multiple criticalities of the alert that are sourced from the sub-systems or generated in the platform.	
78.		Application should provide visual indication in alert panel if alert crossed escalation time.	
79.		Operators shall be able to perform the following actions: • Change the Alert state. • Edit the Alert. • Change the description • Change the priority level • Attach additional entities to the Alert. • Link related Alert. • Attach a document as a URL link to the Alert. It shall be possible to query the Alert history filtering by: • Alert type	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		• Alert state • Location • Priority • Trigger time range • Alert owner	
80.		Operator should be able to change the severity of an alert from the alert panel itself after analyzing the alert.	
81.		Platform must have the ability to change the severity of an alert and the ability to capture the comments when change in critically is performed by platform users.	
82.		Platform users must have the capability to create manual events from the alert Management module by providing appropriate domain, alert type, description, location details and image/video for proof of alert.	
83.		Operator should have clear visual indication that alert have an attachment or not.	
84.		Platform users must have the ability to comment and collaborate on any event that is visible and provide more evidence, if necessary, in the form of image or video.	
85.		Alert attachments should be accessible from the alert panel and user should not be required to open the complete alert to view the alert attachments.	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
86.		Operator should be able to short the alert based on severity, status, created time, assigned responder, alert type, alert sub type and source of alerts.	
87.		Alert comments must also receive the image and video evidences submitted by the field responder, if field responder assigned for the alert.	
88.		Operator should be able to clear an alert from the alert panel with mandatory remarks.	
89.		Operator should be able to define up to ten escalation levels associated with the Type and Jurisdiction of an alert.	
90.		Operator should be able to escalate the alert from alert panel and application should find appropriate escalation level automatically and a SMS and Email should be dispatched to qualified escalation level.	
91.		Create and modify user-defined alert types. An unrestricted number of user-defined alert types shall be supported.	
92.		Operator should be able to schedule the creation of alert.	
93.		User should be able Set the priority level of an alert.	
94.		User should able to view the history / activity perform against the Alert.	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
95.		Provide the ability to group alerts by source and by type.	
96.		The platform should generate Notification/ Alert messages as per the incidence / events that are received, that should be visible within the Dashboard and the Field Responder Mobile App or web portal if required.	
97.		All system messages (notifications, alerts and alarms) should always be available from the Notifications View.	
98.		ICCC platform should support to deliver message. The Notification service should support min two types of notification methods:	
99.		1. Email notification	
100.		2. Short Messaging Service (SMS) notification	
101.	Vehicle Tracking and Geo fencing	ICCC Solution should have capabilities to track vehicle from any agency through Pull or push mechanism.	
102.		Solution should have capabilities to pull the data from APIs and track the vehicle.	
103.		Solution should have capabilities to listen with predefined GPS packet format so that GPS device provider can push the data to system.	
104.		Solution should have capability to visualize agency wise vehicle tracking.	
105.		Solution should have capabilities to	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		display the summary of all tracking vehicle for example total vehicle tracked, currently how many vehicles are sending the location data.	
106.		Solution should have capability to display the vehicle details like registration number, driver name, speed, direction etc.	
107.		Solution should have facility to set the speed limit for vehicle. In case any vehicle violates the speed limit ,alert notification should generate in command centre.	
108.		User should able to create the geofence over the GIS map.	
109.		User should be able to create and save the geofence like circle, polygon, rectangle and free hand drown shapes and save for further use.	
110.		User should be able to edit the created geofence in case it is required and save the updated geofence.	
111.		User should be able to map created geofence to a single vehicle or multiple vehicles.	
112.		User should get alerts in case any vehicle violates the associated geofence.	
113.		In case any vehicle in not in associated geofence, user should be identifying the vehicle on GIS map by its Icon.	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
114.		Icon of all the vehicles should be color coded like vehicle within the geofence in green color, outside the geofence in red and no geofence associated in blue color.	
115.		User should be able to fetch the geofence violation report of vehicle between selected duration.	
116.	Architecture and Data Connectors	Platform must have the ability to connect to different source systems using varied connection protocols and consume the data that can be either used for ingestion into the platform database or be directly pushed for the visualization layer to be consumed by visualization layer or be exposed as an API to be consumed by 3rd party.	
117.		Platform shall be an IP enabled solution. All communication between the servers and other clients shall be based on standard TCP/IP protocol.	
118.		ICCC API/SDK should be available for third party system to use.	
119.		Platform must be able to consume the data from REST API.	
120.	Standard Operating Procedures (SOPs)	Platform must provide the ability to assign SOP to an alert type.	
121.		Platform must provide the ability to approve or reject an SOP from getting executed for a created alert.	
122.		Platform must provide an ability to trigger multiple tasks at the same time.	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
123.		Platform must provide an ability to trigger tasks to Field Responder mobile application through SOP.	
124.	Escalation Rules	Platform must provide the Escalation capability if the SOP is not completed within the pre-defined duration. Duration can be set by an operator and can be updated if required.	
125.		Platform must provide the capability to create Escalation levels so that escalation hierarchy can be established when the SOPs are not executed within the pre-defined duration.	
126.		Escalation rules must be region-based and can be assigned to an SOP if escalation is required.	
127.		Escalation rules must trigger both notification and email to the users for which the escalation level is assigned so that appropriate action can be taken by the user on the alert instance that is escalated.	
128.	Visualization	Platform must have capability to create grid-based widget system to create different visualization elements and compose it over dashboards.	
129.		Platform must be capable of providing different widgets like charts, data grids, KPI, map, timeline.	
130.		Platform user must be able to change the theme that are allocated	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		by the admin user for the tenant.	
131.		Platform visualization must be intuitive that the two or more widgets should be able to communicate with each other wherein the change in one or more widgets should affect the other widgets in the dashboard.	
132.		Platform should allow widget to drilldown from one level to next level and also allow other related widgets data to be automatically updated based on the selected drilldown level.	
133.		Platform must be able to embed other websites/portals/standalone pages into the dashboard using iframes.	
134.	Notifications	Platform must be able to source the events from the sub-systems and be able to show in the form of notification so that the platform user can take necessary action on the alerts.	
135.		Platform must be able to show the escalation on an SOP Instance to an escalated user in the notification section.	
136.		Platform users must be able to navigate from the notification section to the alert management section by perform click action on the notification.	
137.		Platform must have an ability to unmute or mute notification sound	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		for the alerts.	
138.		Notification section must have the ability to represent graphically from which domain/sub-system the event is received.	
139.		Platform users must receive the notification based on the Data Access Control restriction that is set for the domain for the derived roles.	
140.	Reports	Platform must have an ability to schedule reports from the report section.	
141.		Platform must have the ability to fetch reports based of selected parameters and can download it in Excel or PDF format.	
142.		Platform must be able to preview the report before scheduling the report.	
143.		Platform must be able to generate the report Daily, Weekly and Monthly.	
144.		Platform must have the ability to pause the report schedule and resume it when required.	
145.		Platform must have the necessary audit trail if the schedule got executed or failed, with appropriate transaction ids to trace in case of failures.	
146.	Role based Access Control (RBAC)	In-built default Roles should be available in the Platform.	
147.		Admin must have the ability to derive new roles from the default	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		roles.	
148.		Default roles must have the default features access capabilities predefined and can't be changed at any time.	
149.		Platform must have the ability to assign appropriate features access levels to the roles.	
150.		Platform must have the ability to assign appropriate domains access to the roles.	
151.		Platform must have the ability to assign appropriate region access to the roles.	
152.		Platform must have the ability to assign appropriate roles to the Users, and the users created would be able to see the data and access the features basis the role that has been assigned.	
153.	Dashboards	Integration platform should have KPI dashboard along with various analytics for end user.	
154.		GIS Analysis: Platform should be equipped with heat map analysis along with clustering of alerts to indicate the area affected.	
155.		Comparative Analysis: User should have option to compare two-time intervals along with alert type and subtype to measure the effectiveness of applying some policy.	
156.		Trend Analysis: User should have visibility of all trends in system i.e.,	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		month wise, day wise, alert wise, season wise, time interval based.	
157.		Solution shall be enabled with word cloud and operator can easily identify maximum used key words.	
158.		User should allow to extract event based on custom draw shape from GIS map irrespective of any boundaries limitations.	
159.	Intelligent Dispatch Centre	Identify & dispatch mobile resources available nearby the Alert location.	
160.	Intelligent Operator Console	Provide configurable intelligent operator console based on the jurisdiction, critical area or sensors to monitor as per situation demands for focused surveillance.	
161.	Remote User Module	Supervisors remotely can access the system and monitor the alerts received, action taken status, response etc.	
162.	Mass Notification System	Provide a single web-based dashboard to send notifications to target audiences using multiple communication methods including SMS, E-mail.	
163.	Workflow Engine	User should be able to create the dynamic workflows with Drag and Drop ease.	
164.		Workflow can be created base on action / status change of an Alert.	
165.		User should be able to attach multiple activities with single workflow with Drag and Drop.	
166.		All the activities should execute in	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		sequential order as they are created / attached with the work flow.	
167.		User should be able to attach single workflow with the Alert generated from different sub systems.	
168.		User should be able to de-attach the workflow from Alert Type.	
169.		User should be able to create multiple work flow without restricting a user.	
170.		User Should be able to detached the Workflow from Alert Type in case it is not required.	
171.	Scheduler	User Should be able to schedule an Alerts/Event for a period at specific time.	
172.		User should be able to schedule to broadcast a message to individual or group users of ICCC application.	
173.		User should able to schedule to play a file on public address system for certain period with an option to send it to individual or group of PA System (if applicable).	
174.		User should able to remove any scheduled event.	
175.		All scheduled event should be mapped to Calendar view in form of day, week or month.	
176.	Custom Query Builder	ICCC Platform should provide user to search the system data based on the query designed by operator dynamically.	
177.		User should be able to design the	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		dynamic query using boolen operator like AND & OR.	
178.		User should be able to design dynamic query using conditional operator like IN, Greater Then, Less Then, Equal To, between and not between etc.	
179.		User should able to save these query templates for future use.	
180.		Search data can be taken as Print report in form of Excel/CSV or PDF.	
181.	Alert Search	Operator should be able to search alerts created based on some predefined parameters. Like From and To Date, Alert type, Alert area, alert sub type and status of alerts.	
182.		Operator should be able to do analysis on searched data.	
183.		Pre - defined charts should be generated automatically based on search data in 2 x 2 blocks.	
184.		Operator should be able to change the type of chart in any of the panel out of four.	
185.		Operator should be able to Map any chart type to any panel in 2 x 2 blocks.	
186.		Operator should be able to enable or disable the level and legends of any chart panel.	
187.		Operator should be able to change the X - Axis data of any chart from the search results.	
188.	Correlated Alerts	Application should allow an admin operator to set the correlation	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		parameters like correlation distance, Time etc.	
189.		Application should provide correlation notification in case any newly generated alert qualifies the defined correlation criteria.	
190.		Operator should be able to tag two correlated alerts manually after modifying the correlation criteria for a login session.	
191.		After tagging two alerts child alert should close automatically to avoided the repetitive work for operator.	
192.		Application should provide the count of alerts generated from same source in alert panel.	
193.		Operator should be able to view summary of alerts generated from same source and analyzed the similarity by clicking on counts of similar alerts.	
194.		Operator should be able to close all similar alerts with single close action to avoid the repetitive work.	
195.	Post Alert Analysis	Solution should be displaying all Alert related details by just entering the alert ID.	
196.		Post Alert analysis should have complete information of Similar Alert generated within predefined time.	
197.		Administrator should have the ability to change the predefined time period for displaying the	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		similar alert.	
198.		Complete history of alert action should be visible under post alert analysis.	
199.		System should rate the alert execution based on certain parameter such as, closing time, priority, Action perform etc.	
200.		Supervisors remotely can access the system and monitor the alerts received, action taken status, response etc.	
201.		Supervisor should be able to add remarks against alerts.	
202.		Supervisor should be able to give star ratings to an alert after analysing the complete details on single page.	
203.	Command Line Action	Application should support following command line functionality : • Enable the console to be launched through a pre-defined button. • Enable a video window in the console to be displayed through a command line. • Launch an alarm window and alarm details in the console to be displayed through a command line. • View the All Commands Defined for operator action. • Programmatic command to acknowledge the particular alert. • Operator should be able to close	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		an alert. • Escalate an alert through a command line. • Assign nearest field resource to alert through a command line. • locate the alert on map using command line. • Operator should be able to Enable and Disable the escalation for particular alert. • Open sensor window for deployed sensors across the jurisdiction. • Operator should be able to mark any sensor operational or non-operational using command line. • Send message to logged in application user using command line. • Broadcast the message to all logged in application user.	
204.	Field Responder Mobile App General Requirements:	The ICCC shall support mobile apps for various off-the-shelf smart phones and tablets. The mobile apps shall communicate with the Mobile Server of ICCC over any WIFI or mobile network connection.	
205.		Integration platform should have Work force mobile app.	
206.		Mobile app should receive alerts from integration platform.	
207.		Mobile app should be used for GPS tracking of Resources.	
208.		Mobile app should have the feature	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		to update its status by acknowledge, enroute and arrive on the assigned alert.	
209.		Mobile app user should submit the action taken report in form of text and should be able to attach audio, video files or images with the alert.	
210.		Action taken report should be visible at integration platform.	
211.		Mobile application should have the facility to create POIs on the map to update the new locations to keep the map updated.	
212.		All the communication between the mobile apps and ICCC platform will be on HTTP and also on HTTPS by adding TLS encryption (if required).	
213.	SOS Mobile App General Requirements:	The application should provide functionalities enforcing User safety.	
214.		User should be able to register themselves using SOS application with minimal information like Name, Phone number, gender, age and address.	
215.		User should be able to create SOS alert in integrated command-and-control centre application.	
216.		Application should capture two pictures from front mobile camera and two from back camera automatically and attached with Created SOS alert.	
217.		Number of images can be	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		configured in application without coding efforts involved.	
218.		Application should capture 10 second video from mobile camera and attached with SOS alert created.	
219.		User should be able to attached Image, additional textual information as remarks in case SOS alert is active and not closed.	
220.		User real time location should be tracked from command-and-control center during active SOS alert.	
221.		User should view all the alerts generated by him at least for a month time span.	
222.		User should save up to five contacts number with in the application. In case SOS button pressed by citizen one predefined SMS should be delivered to saved Contacts.	
223.		User should be able to view neared Police Station from the current location in case he/she within the city jurisdiction.	
224.		User should be able to get route from current location to the selected Police station.	
225.		User should be able to view neared Hospital from the current location in case he/she within the city jurisdiction.	
226.		User should be able to get route	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		from current location to the selected Hospital.	
227.		SOS Mobile App should be the integral part of ICCC Application and should not be a Third-party Application.	
228.		User Application should be available for Both Android and IOS mobile users.	
229.	Social Media Analysis	Social Media Analysis should be integral part of ICCC platform.	
230.		No separate license should be required for this.	
231.		It should integrate with open source APIs to monitor insights of the social media platform.	
232.		Its should integrate with Facebook, Twitter, Instagram and multiple RSS feeds.	
233.		Tool should provide insights of these platform like Total Followers New Followers New Accounts You Follow Male % Female % Primary Age Group Primary Location # of Positive Sentiments # of Negative Sentiments # of Neutral Sentiments, Total Engagements # of Individual Engagements by Type (retweets, likes, comments, link clicks, shares, etc.)	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		Engagement Rate % Increase/Decrease Mentions Received, Total Page Views, Influencer analysis, Keyword search, most trending topics, latest trends	
234.		Bidder shall factor these charges.	
235.	WhatsApp Chat bot	Chatbot should be part of ICCC application and provide a platform to citizens to get the static as well as dynamic information about the facilities and scheme.	
236.		It should not use any third party API or SDK except WhatsApp.	
237.		User can register a complaint from Chatbot into ICCC application.	
238.		User can view the status of registered complaint.	
239.		ICCC can broadcast to all chatbot users relevant information as and when needed.	
240.		SI Shall consider all the charges	
241.	Application Server Performance	Operator should be able to monitor following parameter of ICCC application servers on real time bases with in the ICCC application without using any external Tools. • CPU performance counter of Application server deployed • RAM Performance counter of Application server deployed • /Sec disk transfer and free and used space of drive • Lan Adaptor uses configured in Server	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		• System performance counter like running process , file write operations / sec, file control operations / sec etc. • IIS performance counters like Request /sec, Request Wait Time ,Request Failed , Success Request etc. Above parameters can be customizes as per the requirement	
242.	Database Performance	Operator should be able to monitor following parameter of ICCC database server on real time bases with in the ICCC application without using any external Tools. • Total Active requests on database. • Lock Request / sec. • Transactions / sec on database. • Database file size . • Processor Queue length. • User Connections. • Static Performance counters.	
243.	Document Management	Document management should be integral part of the ICCC platform	
244.		User should be able to create dynamic file system / Folders of users' choice.	
245.		User should be able to upload PDF, Word, Excel, CSV, JPEG, GIF etc. file into application to manage	
246.		Uploaded files should be accessible based on user rights	
247.		User should make secure the file by encrypting and should not be	

S. No.	Parameter	Minimum Requirement	Compliance (Yes / No)
		modify without decrypting the same.	
248.		User Should be able to lock the file, so it cannot be download or access to delete from the file system	
249.		Application should be able to maintain all the action perform on a file which include view, downloads, Encrypted, decrypted renaming etc.	
250.		All the Logs should be accessible for further analytics.	
251.		Version of uploaded files should be maintained in application itself.	
252.		User should be able to rename the uploaded file.	
253.		User should be able to see the dashboard and over view of complete the action performed by a user.	
254.	ICCC OEM Criteria	• ICCC Platform OEM should have ISO 9000/ISO 9001; ISO 20000/ISO27001.	
255.		• ICCC Platform OEM should have office and development center in India for last 5 years.	
256.		• OEM Should have at least 5 Work order swrt municipal bodies/smart cities/ Emergency response systems in India.	
257.		• The ICCC OEM should have PO/ Work-order for implementation of two state wide command and control centre project.	
258.		• ICCC platform should preferably be “make in India”	

10.3. Video wall

Sl. No.	Parameters	Specification Descriptions	Compliance(Yes/No)
1.	Overview Display	The displays shall utilize direct LED lit LCD panel technology with 100, 000 Hours Lifetime of LED, with a matrix of 2(C) and 2(R)	
2.		All panels shall of 55” diagonal sizewith Screen gap <0.88mm	
3.	Native Resolution per Panel	In order to achieve acceptable image quality for both video and graphics, and to avoid pixel loss, the LCD panel must be of native resolution of 1920 x 1080.	
4.	Aspect Ratio	16:9,	
5.	Backlight	Direct LED with 500 Nits of brightness and 100, 000 Hours lifetime of LED minimum	
6.	Brightness	The “Typical” Luminance specification must be 500 Cd/m2 (nits) or higher with a “Typical” Static Contrast Ratio of 1500:1 or greater in normal operation.	
7.	Viewing angle	Each display shall utilize a high contrast screen (anti glare) with sizes of 55” diagonal. The screen shall have a H 178°/V 178° viewing angle or greater.	
8.	Connectivity	DP, HDMI, USB,LAN (Redundant Port would be preferred)	
9.	HDCP	Yes	
10.	Ethernet ports	2	
11.	Redundant Power supply (Optional)	Inbuilt Dual Redundant Power supply for Fail safe Operations.	
12.	Redundant wall (Optional)	Complete wall should be redundant and no downtime to be there in case of power supply failure	
13.	Power control	1 AC power ON/OFF switch	
14.	Power consumption	Less than 250 watt in Full Brightness Mode	

Sl. No.	Parameters	Specification Descriptions	Compliance(Yes/No)
	(Max)		
15.	Operating Temperature	system shall be operate properly under 0ºC to 40ºC Temperature	
16.	Storage Temperature	0°C to +60°C	
17.	Heat Dissipation (Max)	Less than 650 BTU/Hr. in Full Brightness Mode	
18.	Humidity	upto 80% (non-condensing)	
19.	Size (L x H x D)	Actual with reference to the diagonal	
20.	Supplier/OEM	Health monitoring of video wall can also be possible on Cloud for pro-active diagnosis and maintenance	
21.	Modules	The Display Modules, Display Mount, Display Controller & Software should be from a single OEM	
Video Wall Controller			
22.	CPU	Intel® Xeon® Octa core 2.1 GHz Processor	
23.	Memory	min. 32 GB RAM and expandable upto 64 GB DDR4 or higher	
24.	Hard Disk	R.A.I.D 1/5/10 or better	
25.	Cooling	Should be equipped with dual FAN for cooling	
26.	Network	2x 1Gb/s LAN	
27.	Outputs	As Per solution Requirement	
28.	Graphics Card	4ch Graphic card	
29.		Max resolution:	
30.		3840x2160@60Hz	
31.	Operating System	Windows 10 64-bit IoT Enterprise or higher, Professional grade windows-10 Professional	
32.	Tampering Alarm	Controller cover opening alarm	
33.	Output	DP/DVI/HDMI	
34.	Input	H.264, MPEG2/4, MxPEG, MJPEG, H.263 Along with Required Hard wired Inputs	
35.	Dimensions	19” Rack mount	
36.	Operating Conditions	As Per OEM Design	

Sl. No.	Parameters	Specification Descriptions	Compliance(Yes/No)
37.	Operating Temperature	0° to 40°C | 32° to 104°F	
38.	Humidity	Max. 80% Rh (noncondensing) @ 40°C	
39.	Regulation Compliance	BIS (Supporting documents to be enclosed along with bid)	
40.	Wireless	The operator should be also possible to show Laptop Or Android/iOS phone over the video wall without disturbing the existing network over wireless	
41.	Software	The software should be able to preconfigure various display layouts and access them at any time with a simple mouse click or schedule/timer based.	
42.	Software	The software should be able display multiple sources anywhere on video wall in any size. Key features of Video Wall management Software •Central configuration database •Browser based user interface •Auto-detection of network sources •Online configuration of sources, displays and system variables	
43.	Software	Video Wall Control Software shall allow commands on wall level or cube level or a selection of cubes: •Switching the entire display wall on or off.	
44.	Software	Should support Multiple clients / Consoles to control the Wall layouts	
45.	Software	The Software should be able to share layouts b/w available different videowalls on same network as well as preview of sources on the workstation	
46.	Software	Software should enable the user to display multiple sources (both local & remote) up to any size and anywhere on the display walls (both local & remote).	

Sl. No.	Parameters	Specification Descriptions	Compliance(Yes/No)
47.	Software	The software should be able to create layouts and launch them as and when desired	
48.	Software	The Display Wall and sources (both local & remote) should be controlled from Remote PC through LAN without the use of KVM Hardware.	
49.	Software	Software should support display of Alarms	
50.	Software	The software should provide at least 2 layers of authentication	
51.	Software	Software should able to Save and Load desktop layouts from Local or remote machines	
52.	Software	All the Layouts can be scheduled as per user convince. Software should support auto launch of Layouts according to specified time event by user	
53.	Software	It should be possible to create layouts comprising of screen scrapped content of Workstations, DVI inputs, Web sources, URLs configured as sources. Layouts can be pre-configured or changed in real time Can be pre-configured or changed in real time	
54.	Software	It should be possible to schedule specific Layout based on time range It should be possible to share the layouts over LAN/WAN Network with Display in meeting room/ NOC Roomor on Remote Workstations connected on LAN/WAN Network	
55.	Software	The system shall include complete Bi-directional Soft KVM to permit operators to take mouse & keyboard control of Displays, Screen Scrapped applications and DVI source	
56.	Software	It should be possible to create two separate Tickers which run concurrently. These can be positioned at top or bottom and can run	

Sl. No.	Parameters	Specification Descriptions	Compliance(Yes/No)
		independently. The Ticker can be picked from data source through screen scrapping or through typing specific incidence, manually	
57.	Software	The system should have the capabilities of interacting (Monitoring & Control) with various applications on different network through the single Operator Workstation. It shall be possible to launch layouts, change layouts in real time using Tablet	

10.4. UPS for ICCC

Sl. No.	Minimum Specifications	Compliance (Yes / No)
1.	UPS should be of 2x40 kVA in Redundancy, Rack/Floor mountable with pf up to 0.9 and efficiency up to 94.9%. Other features of UPS system are as follows: • True On-line UPS with Widest input range (320V-476V) • Double conversion and IGBT technology: Full IGBT Rectifier /Battery Charger and IGBT based Inverter • Facility for remote monitoring • N+N redundancy should be provided.	
General Description:		
2.	Supply, install, test and commissioning of true online, double conversion, high efficiency, and high-power factor Uninterruptible Power Systems (UPS) rated at 2 x 40 KVA with battery backup support for combined 30 minutes on full load (15 min battery backup per UPS) . UPS shall be of maximum 4U size, rack mountable & The backup batteries should be supplied with the necessary arrangements to mount outside the cabinet.	
3.	Configuration: 2 x 40kVA (N+N Redundancy)	
4.	Bidder need to make provision for UPS at least 1KVA with 60 Minutes back up along with each junction box.	
Scope		
5.	The scope shall include design, supply, installation, testing and	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	commissioning of the complete UPS system and related accessories including: • All Server racks will get power feed from two independent 40 KVA UPS systems to ensure redundancy. • All systems should be tested in factory as per the manufactures recommended procedure for all operating parameters and the test results should be provided during the installation. • Delivery at site, unloading, handling, installation of complete system including interconnection from the UPS system to batteries and to input / output panels switches. All interconnections shall be done using multi-strand Flexible Copper conductor cables of appropriate sizes. • Scope includes battery bank connections and providing safety barriers for all bus bars and cable connection leads on battery racks. • Energizing of UPS and Battery bank commissioning. • UPS control parameters setting and complete testing of system on load. • Service backup by engineer till system is fully operational and subsequently training is to be provided to the concerned persons. • Any upgrade of the system hardware and associated other software during the warranty period should be supplied at free of charge. • Acceptance tests will be carried out after installation and the systems will be taken over only after successful completion of the acceptance tests. • Operation and service manuals of the systems containing technical / Electronic drawings / circuit diagrams complete in all respects should be supplied.	
6.	**Specification / features of the UPS system is as follows:** • Widest input range. • Double conversion and IGBT technology. • Full IGBT Rectifier / Battery charger • IGBT based Inverter	

Sl. No.	Minimum Specifications		Compliance (Yes / No)
	• Batteries to support combined 30minutes full load backup. • Power distribution panels • Facility for remote viewing • Easy to expand in a cost-effective way		
UPS other technical specification			
7.	UPS type	ON-LINE	
8.	Model Name	Bidder to Specify	
9.	Rating (VA/W)	Unity	
10.	Make	Bidder to specify	
11.	Technology	IGBT with PWM Switching	
12.	Crest Factor	3:1	
13.	Double Conversion efficiency	94.9%	
14.	Eco mode efficiency	98.5 %	
Input			
15.	Nominal Input Voltage	415V AC (3-Phase)	
16.	Permissible input voltage variation at full load	320 V – 476 VAC	
17.	Nominal input frequency	50 Hz	
18.	Permissible input frequencies variation	40 Hz to 70 Hz	
19.	Input power factor at full load	> 0.99 at full load	
Output			
20.	Nominal output voltage	Settable 380-400-415	
21.	Output Voltage regulation	< +/- 1%	
22.	Output voltage distortion	2% total harmonic distortion (THD) for 100% linear loads 5% THD for 100% nonlinear loads.	
23.	Nominal output frequency	50 Hz	
24.	Waveform	Pure Sine wave	
25.	Power factor	0.9 lagging	
26.	Overload capability	125% for 5 minutes, 150% of full load for 1 minute,	

Sl. No.	Minimum Specifications		Compliance (Yes / No)
		with automatic transfer to bypass	
27.	Transient recovery time	Within 20 milliseconds to +/- 1%	
Bypass			
28.	Voltage Range	+15% -20%	
29.	Frequency	50/ 60Hz	
30.	Frequency Range	+/-10%	
Battery Parameters			
31.	Type	SMF	
32.	No. of battery blocks	32-40	
33.	Battery nominal voltage	12V	
34.	Battery Voltage	384-480Vdc	
Environmental Parameters			
35.	Operating temperature	0 to 40 deg. Centigrade	
36.	Storage temperature	-15 to 45 deg. Centigrade	
37.	Relative Humidity	95% RH non condensing	
38.	Altitude	1000 meters	
39.	Altitude-rating	derate power by 1% per 100m when above 1000m	
40.	Noise level	58db	
Mechanical Parameters			
41.	Height X width X Depth (MM)	Bidder to specify	
42.	Weight	Bidder to specify	
43.	Ventilation	Forced - Aircooled	
44.	Cable Entry	terminal block	
45.	Protection	IP20	
46.	Monitoring	SNMP, Dry contact card, site monitoring / shutdown for multiple servers	
Standards			
47.	Safety	IEC/EN62040-1-1	
48.	Electromagnetic Compatibility	IEC/EN62040-1-2, IEC/EN61000-3-11, IEC/EN61000-3-12,	

Sl. No.	Minimum Specifications		Compliance (Yes / No)
		YD/T1095-2008	
49.	Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5	

10.5. Workstation

Sl. No.	Parameters	Minimum Specification	Compliance (Yes / No)
1.	Processor	Latest generation64bit x 86 Xeon Processer with latest chipset	
2.	Motherboard	OEM Motherboard	
3.	RAM	Minimum 16GB DDR3RAM expandable to 32 GB	
4.	Graphics card	Minimum Graphics card with 2 GB video memory (non-shared)	
5.	Monitor	Two Monitors of 24" TFT LED monitor, with Minimum 1920 x1080 resolution, Minimum input of 1xDP /1x HDMI/ 1xDVI, Energy star 5.0/BEE star certified	
6.	HDD	Min. 1 TB Hard Drive@7200rpm	
7.	Other Accessories	Line/Mic IN, Line- out/Spr Out (3.5 mm), Minimum 2 USB ports, 104 mechanical keys keyboard, USB Optical OEM mouse	
8.	Operating System	64-bit pre-loaded OS	
9.	Antivirus feature	Advanced Antivirus	

10.6. PTZ Joystick

Sl. No.	Minimum Specifications	Compliance (Yes / No)
1.	USB Interface: USB 2.0, DirectX	
2.	Serial Interface: Joystick (3-axis control, rotating zoom)	
3.	Power Supply: 5V DC via USB / Power Adapter	
4.	Humidity: 10%~90% (non-condensing)	
5.	Supported OS Windows 7/8/10/11 with plug n play	

10.7. Control Centre Furniture and Interior

- MSI need to leverage the space provide by KSCL. One Hall will be provided to the MSI for Operation Control Room. However, MSI shall design the layout and take the authority approval before implementing the project. It is MSI responsibility to do provision AC, Access Control, network, and Power cabling work inside the control room.
- Interior furnishing (civil work) of Hall identified for establishment of ICCC at Kavaratti is not in the scope of bidder. However bidder shall carry out electrical and network cabling, power supply, Access control including DC required in the hall.
- Size of hall identified for establishment of ICCC at Kavaratti is 17.10 x 7.4 Mtr.

Sr. No.	Specification	Compliance (Yes / No)
1.	The purpose of this document is to define the specifications of control room interior and control desk.	
1.1.	**Scope of Work:** The scope of the project includes designing; engineering, supply & installation of 24X7 mission critical control centre interiors. Being a project of national repute this state-of-the-art facility & all its components like ceiling, flooring, panelling, glass partitions, control desks, ceiling light & luminaire's electrical etc. must look integrated and therefore it shall be treated as a part of one single solution i.e., Control room interior solution.	
1.2.	It is mandatory for the main bidder that the control room interior solution provider supplies all elements & executes all the activities at site like ceiling, flooring, control desks, panelling, partitions & illumination to avoid interface & quality related issues.	
1.3.	The control desk solution shall conform to high standard of engineering as mentioned in the document; meeting the specified codes, standards and designs. It shall be capable of performing 24X7 operations under the specified environmental condition.	

10.8. Rack

Sl. No.	Minimum Specifications	Compliance Yes/No

Sl. No.	Minimum Specifications	Compliance Yes/No
1.	42 U Rack Height 800 mm Width And 1000mm Depth Networking Rack Confirms To DIN 41494 Standards With Fully Adjustable 19 Inches Equipment Mounting Angels. Ventilated Bottom And Top Covers With Cable Entry Position. Load Bearing Capacity Of 500kgs. With IP Rating - 20. ISO Certified Having Manufacturing Experience For More Than Ten Years.	
2.	Front Door Would Be Supplied with Transparent Toughened Glass And Rear Door Would Be SPCC Quality Cold Rolled Steel Metal With 1mm Thickness With Locking Provision In Front And Rear. And With Easy Removable Side Panels With Slam Latches	
3.	4nos Of Fan 230V And 90 CFM To Be Placed On Top	
4.	AC Main Channel Vertical And 10x 5Amps and 2x15amps Sockets	
5.	Equipment Tray Of 700Depth For Mounting the Equipment	
6.	Two Horizontal Cable Manager	
7.	Hardware Fasteners Packet Of 20nos	
8.	Copper Based Earthing Strip	
9.	Cable Entry Provision at Top and Bottom.	
10.	Powder Coating 60-100 Microns. Colour Light Grey RAL 7035	

10.9. PAC

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Capacity	As Per DC Requirement	
2.	Type	Precision	
3.	Energy Saving	Yes	
4.	Temperature Control	Yes	
5.	Cooling Capacity	As per Requirement	
6.	Compressor Type	Rotary/ Scroll	
7.	Air Circulation CFM H/M/L)	above 500/450/300	
8.	Moisture Removal L/Hr	above 1.8	
9.	IDU Noise Level(DBA)	<=55/50/45	
10.	Control	Microprocessor controlled	
11.	Power Source (V/Hz/ Φ)	230/50/1 OR 415V / 50Hz / 3	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
12.	Display	LED/LCD	
13.	Input Voltage	130-300 V OR 380V - 420V AC	
14.	Efficiency	>95 percentage	
15.	Frequency	50 Hz	
16.	Equipment Shall Be Supplied With	Required copper piping with superlon insulation for suction line and copper piping with superlon insulation for discharge line and PVC piping for drain and Indoor- outdoor unit connecting power cable and required cable from power socket to stabiliser and from stabiliser to AC Unit and base plate for hanging unit	

10.10. Router

- Router must function as MPLS CPE

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	Architecture:	
1.	The Router should be based on real time, secure, embedded operating system.	
2.	Capability to detect hardware failure during power up and before going online	
3.	Should provide Stateful failover.	
4.	HA configuration that uses dedicated HA-control interfaces apart from the mentioned traffic interfaces	
5.	Should provide active/active and active/standby failover	
	Sessions	
6.	Should support up to 2Million Concurrent sessions and at least 50,000 sessions per second	
	System Throughput	
7.	Should provide 9 Gbps Throughput	
8.	Should have 4 Gbps IPsec throughput	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
9.	Memory - at least 16GB or higher and 100GB storage	
10.	Support: - IKEv1 and v2, IPsec VPN standards, 56-bit DES, 168-bit 3DES, OSPF routing, x.509, Up to 256-bit AES data encryption	
11.	Authentication, Authorization and Accounting (AAA) support: RADIUS, TACACS or TACACS+	
12.	Support for: Network and application level attacks ranging from malformed packet attacks to DoS attacks, Support RSA and Diffie- Hellman, MD-5, SHA-1, SHA-128, SHA-256	
13.	DHCP relay	
14.	Forwards DHCP requests from internal devices to an administrator specified DHCP server, enabling centralized distribution, tracking, and maintenance of IP addresses.	
	Provides:	
15.	Rich dynamic NAT and PAT services	
16.	Bidirectional NAT and Transparency	
17.	Static NAT and PAT services	
18.	Stateful and stateless and Zone-based firewall	
19.	Denial of service (DDoS) protection	
20.	Traffic anomaly protection	
21.	MPLS (RSVP, LDP), MPLS VPN	
22.	Virtual private LAN service (VPLS)	
	Management	
23.	Web based management to support for remote monitoring	
24.	Accessible through variety of methods including: Telnet, Console Port, SSH	
25.	Dedicated Out-of-Management interface	
26.	Support SNMPv1, v2, v3 & Support for syslog	
27.	Should have the ability to create customizable administrative roles/profiles (monitoring only, read-only access to configuration).	
	Software features	
28.	support for IPv4, RIPv2, OSPF, BGP, VLAN, DHCP. Support for IPv6 RIPng, OSPFv3.	
29.	Power Supply	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
30.	Internal Redundant Power supply	
	Minimum Interfaces Required	
31.	4 No's 10Gig ports	
32.	8 No's of 1Gig Ports	
33.	Certification: Router should be EAL3/NDPP/NDcPP or better	

10.11. Firewall

Sl. No.	Minimum Specifications	Compliance (Yes / No)
1.	The Firewall should be Hardware based, Reliable, purpose-built security appliance with hardened operating system that eliminates the security risks associated with general-purpose operating systems	
	Firewall appliance should have at least 16 x 1GE RJ45 interface and 4 x 10G SFP+ SR interfaces scalable to additional 4 x 1G interfaces in future in same appliance.	
2.	Firewall Throughput should be 70 Gbps	
3.	Firewall should support minimum 40 Gbps of VPN throughput	
4.	Firewall should support 1000 site-to-site & client to site VPN Tunnels.	
5.	Firewall should support minimum 1,000 concurrent SSL VPN users and should be scalable in future	
6.	Firewall should support 500,000 new sessions per second	
7.	Firewall should support 7 million concurrent sessions	
8.	The Firewall should be supplied with hot swappable redundant power supply.	
9.	The solution should support minimum 10 Gbps of NGFW (FW + IPS + AVC) throughput for Mix / production traffic	
10.	The solution should support minimum 9 Gbps of Threat Prevention (FW + IPS + AVC + AV/Malware) throughput for Mix / production traffic	
11.	The Firewall solution should support NAT46, NAT64, DNS64 & DHCPv6	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
12.	The proposed system shall be able to operate on either Transparent (bridge) mode to minimize interruption to existing network infrastructure or NAT/Route mode. Both modes can also be available concurrently using Virtual Contexts.	
13.	The proposed system should have integrated Traffic Shaping functionality.	
14.	The Firewall module shall belong to product family which minimally attain Internet Computer Security Association (ICSA) Certification.	
15.	The device shall utilize inbuilt hardware VPN acceleration:	
a.	IPSEC (DES, 3DES, AES) encryption/decryption	
b.	SSL encryption/decryption	
	Virtualization	
16.	The proposed solution should support Virtualization (Virtual Firewall, Security zones and VLAN). Minimum 5 Virtual Firewall license should be provided from day 1	
	Intrusion Prevention System	
17.	The IPS capability shall minimally attain NSS Certification	
18.	IPS throughput should be minimum 12 Gbps for Mix / Production traffic	
19.	The IPS detection methodologies shall consist of:	
a.	Signature based detection using real time updated database	
b.	Anomaly based detection that is based on thresholds	
20.	The IPS system shall have at least 10,000 signatures	
21.	IPS Signatures can be updated in three different ways: manually, via pull technology or push technology. Administrator can schedule to check for new updates or if the device has a public IP address, updates can be pushed to the device each time an update is available	
22.	In event if IPS should cease to function, it will fail open by default and is configurable. This means that crucial network traffic will not be blocked and the Firewall will continue to operate while the problem is resolved	
23.	IPS solution should have capability to protect against Denial of Service (DOS) and DDOS attacks. Should have flexibility to	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	configure threshold values for each of the Anomaly. DOS and DDOS protection should be applied and attacks stopped before firewall policy look-ups.	
24.	IPS signatures should have a configurable actions like terminate a TCP session by issuing TCP Reset packets to each end of the connection, or silently drop traffic in addition to sending a alert and logging the incident	
25.	Signatures should a severity level defined to it so that it helps the administrator to understand and decide which signatures to enable for what traffic (e.g. for severity level:high medium low)	
	Antivirus / Antimalware	
26.	Firewall should have integrated Aintivirus solution	
27.	The proposed system should be able to block, allow or monitor only using AV signatures and file blocking based on per firewall policy based or based on firewall authenticated user groups with configurable selection of the following services:	
a.	HTTP, HTTPS	
b.	SMTP, SMTPS	
c.	POP3, POP3S	
d.	IMAP, IMAPS	
e.	FTP, FTPS	
28.	The proposed system should be able to block or allow oversize file based on configurable thresholds for each protocol types and per firewall policy.	
29.	The Firewall solution should have provision to be integrated with on-premise Sandbox in future from same OEM.	
	Web Content Filtering	
30.	The proposed system should have integrated Web Content Filtering solution without external solution, devices or hardware modules.	
31.	The proposed solution should be able to enable or disable Web Filtering per firewall policy or based on firewall authenticated user groups for both HTTP and HTTPS traffic.	
32.	The proposed system shall provide web content filtering	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	features:	
a.	which blocks web plug-ins such as ActiveX, Java Applet, and Cookies.	
b.	Shall include Web URL block	
c.	Shall include score based web keyword block	
d.	Shall include Web Exempt List	
33.	The proposed system shall be able to queries a real time database of over 100 million + rated websites categorized into 70+ unique content categories.	
	Server Load Balancing Requirements	
34.	The administrator shall be able to define the type of supported communication protocol used by the virtual server for load balancing:	
a.	HTTP, HTTPS	
b.	SSL	
c.	TCP, UDP & IP	
35.	The proposed system should be capable of creating server load balancing settings with configurable health probes using	
a.	HTTP port, URLs & Matched Content	
b.	Customized TCP port	
c.	ping probes	
36.	The proposed system shall be able to use the following load balance algorithm:	
37.	Static: The traffic load is spread evenly across all servers, no additional server is required.	
38.	Round Robin: Directs requests to the next server, and treats all servers as equals regardless of response time or number of connections. Dead servers or non responsive servers are avoided. A separate server is required.	
39.	Weighted: Servers with a higher weight value will receive a larger percentage of connections. Set the server weight when adding a server.	
40.	First Alive: Always directs requests to the first alive real server.	
41.	Least RTT: Directs requests to the server with the least	

Sl. No.	Minimum Specifications	Compliance (Yes / No)
	round trip time. The round trip time is determined by a Ping monitor and is defaulted to 0 if no Ping monitors are defined.	
42.	Least Session: Directs requests to the server that has the least number of current connections. This method works best in environments where the servers or other equipment you are load balancing have similar capabilities.	
	Web Application Firewall Requirements	
43.	Web Application Firewall must be able to create with Signature and Constraints, with the options to support "Allow", "Monitor" or "Block", and the Severity can be set to High, Medium or Low.	
a.	Cross Site Scripting	
b.	Cross Site Scripting Extended	
c.	SQL Injection	
d.	Trojans	
e.	Information Disclosure	
f.	Known Exploits	
	SD-WAN Capabilities	
44.	The Proposed system shall support SD-WAN.	
45.	The Proposed system shall support SD-WAN Policies based on:	
a.	Firewall Addresses	
b.	Internet Service Database	
c.	Application awareness	
d.	Preferred Interface	
	High Availability	
46.	The proposed system shall have built-in high availability (HA) features without extra cost/license or hardware component	
47.	The device shall support stateful session maintenance in the event of a fail-over to a standby unit.	
48.	High Availability Configurations should support Active/Active or Active/ Passive	

10.12. CoreSwitch

S. No	Minimum Requirement	Compliance (Yes /No)
1.	The Switch will consist of 48x10G SFP/SFP+ Ports and 6x 40 GE QSFP+ ports or 4x100G QSFP28 ports. The chassis will have a nominal operating temperature range of 0 to +40 Degree C and 1 U. It should support 10/100/1000management port.	
2.	Power Supply: Proposed switch should have an Dual hot swappable power supply.	
3.	Switching Capacity: 1TB or more	
4.	FP: 700 MPPS or better	
5.	Management: Proposed switch should have a RJ-45 Serial console port and Dedicated Management 10/100/1000 Service Ports	
6.	**Layer2 Switching**: - Spanning Tree Protocols to prevent loops, Link aggregation to allow for increased interconnect bandwidth, and VLAN support allows for virtualization of networks. Multicast snooping and forwarding are supported for efficient Video.	
7.	**Layer3 Switching:** -Plan to support Routing protocols like BGP, RIP and OSPF in addition to static routing. For Multicast the switch supports PIM. Switches Should be IPv6 Ready and support IPv4 and IPv6 traffic.	
8.	Quality of Service in converged networks multiple applications can be given their own priorities and bandwidth. Customer traffic can be limited and uplink traffic shaped as required.	
9.	**Certificates**: - EMC, RoHS	
10.	**Compatibility:** - All the switches and accessories from the same OEM.	

10.13. ToR Switch

S. No	Minimum Requirement	Compliance (Yes /No)
1.	Switch shall have min. 24 Nos. of 10 Gigabit SFP+ ports & the ports should be fully populated with required optics.	
2.	Switch should have min. 2x 40 GE QSFP+ ports or 1x100G (QSFP28) ports.	

S. No	Minimum Requirement	Compliance (Yes /No)
3.	Switch shall have minimum 600 Gbps Full Duplex Switching Capacity	
4.	Switch shall have minimum 800 MPPS Forwarding Rate	
5.	Switch shall have a minimum of 32K MAC address space.	
6.	Switch should support minimum 4K VLANs.	
7.	Proposed switch should have an Dual hot swappable power supply	
8.	Should support jumbo frame.	
9.	Should support following security features viz.:	
a.	Web Management (HTTPS)/SSH,	
b.	Broadcast/Multicast/ Unicast Storm Control,	
c.	AAA support – Accounting, Authorization and Authentication of users and commands. Support of local authentication and Radius.	
d.	Authentication of routing protocol updates: OSPF, BGP.	
e.	SSH support.	
f.	Support Access Control List to filter traffic based on Source & Destination IP Subnet, Source & Destination Port, Protocol Type (IP, UDP, TCP, ICMP etc) and Port Range etc. Should Support SNMPv1/v2/V3.	
10.	Should support protocols like MSTP, STP, RSTP, VLAN-tagging, LACP, NTP/SNTP	
11.	Should have features like port-security, auto-negotiate, MAC filtering	
12.	The device should support the aggregation of the interfaces to form one single logical interface for data transfer.	
13.	Switch should support SNMP traps and Syslog.	
14.	Switch should comply to following Temperature performance parameters:	
a.	Operating Temperature - min 0 to 40°C	
15.	EMC, RoHS	

10.14. PoE Access Switch

Sl. No.	Minimum Specifications	Compliances Yes/No

Sl. No.	Minimum Specifications	Compliances Yes/No
1.	Minimum 24 ports of 10/100/1000 base-T PoE ports. 2 X 1/10 Ports	
2.	Rack mountable and should provide stacking / or similar technology to connect minimum 2 switches of dedicated bandwidth	
3.	Minimum 50 Gbps Backplane capacity.	
4.	Should support non-blocking hardware architecture	
5.	All interfaces should provide wire speed forwarding for both Fiber and copper modules.	
6.	Support for at least 1000 VLANs & minimum 16k MAC address	
7.	It should support IGMP snooping v1,v2 & v3	
8.	It should have advanced static IP routing, RIP, OSPF, OSPFv3,BGP PIM from day 1	
9.	Switch should support 8 hardware queues per port.	
10.	Dynamic Host Configuration Protocol (DHCP) snooping	
11.	Switch should support LLDP.	
12.	Should support IP source guard & DAI **or similar**	
13.	Should support Secure Management Protocol Shell (SSH) Protocol and Simple Network Management Protocol.	
14.	Switch needs to have console port for administration &management	
15.	Management using CLI, GUI using Web interface should be supported	
16.	FTP/TFTP for upgrading the operating System	
17.	IEEE 802.1x support	
18.	IEEE 802.1D Spanning-Tree Protocol	
19.	IEEE 802.1p class-of-service (CoS) prioritization	
20.	IEEE 802.1Q VLAN	
21.	IEEE 802.3u 100BASE-TX specification	
22.	Switch should have internal power supply.	
23.	Switch should able to support management via CLI, Web interface	
24.	SNMP v1, v2,v3	
25.	Switch should be manageable through both IPv4 & IPv6.	
26.	EMC, RoHS	

10.15. Server Security – HIPS

Bidder shall comply to this clause if supplied hardware/software/ platform require for same.

Sl. No.	Minimum Specification	Compliance (Yes / No)
1.	Solution should have Firewall, Anti-Malware, Vulnerability protection, Exploit prevention, and Integrity Monitoring in single module or a in single agent.	
2.	Solution should be suitable for a wide range of server roles and usage patterns, including protection for file servers, network storages and key elements of the corporate infrastructure, ensuring their smooth and secure functioning.	
3.	Solution should have support for shared folder and storage protection against crypto-malware.	
4.	Solution should have a powerful Exploit Prevention mechanism that will protect process memory from exploits. It should watch over protected processes and prevent attempts to exploit unpatched or even zero-day vulnerabilities in system components and applications.	
5.	Virtual Patching / Exploit Prevention / Machine Learning Technologies should be achieved by using a high-performance ATP engine to intelligently examine the content of network traffic entering and leaving hosts.	
6.	HIPS should have signatures for known & unknown vulnerabilities and exploits. It should also allow for creation of custom signatures to secure home grown legacy applications. Detailed events data to provide valuable information, including the source of the attack, the time, and what the potential intruder was attempting to exploit, should be logged.	
7.	Solution should have minimal impact on server performance and provide different optimization capabilities depending on server role (for example, by configuring application priority or excluding business-critical trusted processes from scanning).	
8.	Solution should have the capability to provided Agent less Antimalware protection to save the resource of VMware virtual environment.	
9.	Solution should have Application Launch Control component for prohibiting the use of any application other than trusted system components and specified programs or services (most malware types will be automatically blocked from starting)	

Sl. No.	Minimum Specification	Compliance (Yes / No)
10.	Solution should have Device Control running with Default Deny mode ruling out the use of any unsolicited storage (these will considerably reduce the attack surface and boost the security of the server)	
11.	The solution should convert events in application logs into formats supported by the syslog server so that those events can be recognized and imported into a SIEM.	
12.	Solution should have the option to provide light agent-based protection for other virtulized platform Hyper-V, Citrix, KVM.	
13.	Ability to execute an automatic deployment based on the request of the dedicated protection system for virtual infrastructures based on VMware ESXi, Microsoft Hyper-V, Citrix XenServer virtualization platform or hypervisor.	
14.	Ensuring continuity of file protection during short-term unavailability of the protection machine by logging all file operations on the protected virtual machine during the period of unavailability, and automatic scanning of all changes after access is restored	
15.	Solution should have cloud-assisted server protection to deliver faster-than-ever response to new threats, improving the performance of protection components and minimizing the risk of false positives.	
16.	Protection against hacker attacks by using a firewall with an intrusion detection and intrusion prevention system (IDS/IPS) and network activity rules for the most popular applications when working on any type of computer networks, including wireless networks.	
17.	Component enabling the creation of special rules to block the installation and/or running of a program. The component should be able to control the application via program path, metadata, MD5 checksum, and predefined categories of applications provided by the vendor. It should also allow exceptions to the rules for specific AD users.	
18.	Monitoring user activity with external I/O devices by the type of device and/or the bus used including the ability to create a	

Sl. No.	Minimum Specification	Compliance (Yes / No)
	list of trusted devices by their ID and the ability to grant privileges to use external devices to specific AD users.	
19.	Solution should support Installation of anti-malware software from a single distribution.	
20.	Automatic distribution of computer accounts by management groups in the event of new computers appearing on the network. Ability to set the transfer rules according to IP address, the type of the operating system, the location in OUAD.	
21.	Centralized installation, update and removal of anti-malware software; configuration, administration, viewing of reports and statistical information about its operation.	
22.	Centralized removal (manual and automatic) of incompatible applications from the administration center.	
23.	Different methods of anti-malware agent installation: RPC, GPO, administration agent for remote installation; the option to create a standalone installation package for local installation.	
24.	Solution should adapted for protection of physical as well as virtualized servers, allowing to run server workloads securely in any part of hybrid infrastructure: on premises, in a datacenter or in a public cloud.	
25.	Solution should have the inbuilt option to take RDP access of the client servers in case of any issue.	
26.	The proposed solution should support endpoint isolation from network and bring back the endpoint after remediation.	
27.	Solution should have option to generate the IOC from detected incident and should have the option to assign the task automatically.	
28.	Solution should have the option to scan the infra using external (third party) IOC.	
29.	Solution should have the option to export the generated IOC.	
30.	The solution must have the capability to check / run a scan a cross all host for any File name, File extension, File MD5/SHA1 or provided IOCs etc..	

Sl. No.	Minimum Specification	Compliance (Yes / No)
31.	Solution should have option to take multiple actions based on detection like:	
	1)putting objects in prevention mode	
	2)Perform hots isolation from network	
	3) Adding file to white list / send the object for further analysis	
	4)Critical Area scans	
	5)Quarantine/recovery of object	
	6) File deletion	
	7) Terminate Processes	
	8)Running commands on the endpoints	
32.	**Support Platform**	
33.	**Microsoft Windows**	
34.	**Agentless Anti malware should support below (If VM ware environment)**	
35.	Windows 7 SP1 & above (32- or 64-bit).	
	Windows 8 (32- or 64-bit).	
	Windows 8.1 (32 / 64-bit) – when used with VMware vSphere 5.5 Update 2 or later	
	Windows 10	
	Windows Server 2019	
	Windows Server 2016	
	Windows Server 2008 R2 (64-bit).	
	Windows Server 2012	
	Windows Server 2012 without ReFS (Resilient File System) support (64-bit).	
	Windows Server 2012 R2 (64-bit) (when used with VMware vSphere 5.5 Update 2 or later)	
	Windows Server 2008 (32- or 64-bit)	
36.	**Agent Based Anti-malware should support below (All environment)**	
37.	Microsoft Windows 7 Enterprise SP1 32-bit/64-bit;	
	Microsoft Windows 7 Professional SP1 32-bit/64-bit;	
	Microsoft Windows 8.1 Pro / Enterprise 32-bit/64-bit.	

Sl. No.	Minimum Specification	Compliance (Yes / No)
	Windows 10 Pro / Enterprise (32-bit / 64-bit)	
	Windows Server 2019	
	Windows Server 2016	
	Windows Server 2012 R2 (64 bit)	
	Windows Server 2012 (64-bit)	
	Windows Server 2008 R2 Standard SP1 (64-bit)	
38.	**Virtual platform**	
39.	**Agentless Anti malware should support below**	
	VMware ESXi 6.0 Hypervisor & higher	
	VMware ESXi 5.5 Hypervisor Update 2	
	VMware ESXi 5.1 Hypervisor Update 3	
	VMware vCenter 6.0.0a Server	
	VMware vCenter Server 5.5 Update 2e	
	VMware vCenter Server 5.1 Update 3a	
	VMware vShield Endpoint from the VMware vCloud™ Networking and Security 5.5.4.1 suite	
	VMware vShield Manager from the VMware vCloud Networking and Security 5.5.4.1 suite	
	VMware NSX 6.x & higher	
40.	**Agent based antimalware should support below-**	
41.	VMware ESXi 5.5 with the latest updates;	
	VMware ESXi 6.0 with the latest updates.;	
	Microsoft Windows Server 2012 R2 Hyper-V (in full installation mode or in Server Core mode) with all available updates.	
	Citrix XenServer 6.5 SP1	
	Citrix XenServer 6.2 SP1;	
	KVM (Kernel-based Virtual Machine) running the Ubuntu Server 14.04 LTS or CentOS 7 operating system	
	Citrix Provisioning Services 7.1;	
	Citrix XenDesktop 7.5.	
	VMware Horizon View 7	
42.	**Agent-based anti-malware software should provide protection to KVM (Kernel-based Virtual Machine)**	

Sl. No.	Minimum Specification	Compliance (Yes / No)
	hypervisor virtual machines running under the following operating systems:	
	Ubuntu Server 14.04 LTS	
	CentOS 7	
	RHEL Server 7u1	
43.	**Agent-based anti-malware software should provide protection to KVM (Kernel-based Virtual Machine) hypervisor virtual machines running under the following server operating systems**	
	Windows Server 2012 R2 (64 bit)	
	Windows Server 2012 (64-bit)	
	Windows Server 2008 R2 Standard SP1 (64-bit)	
	Ubuntu Server 14.04 LTS	
	CentOS 7	
44.	**Agent based anti-malware support for below Linux servers**	
	Red Hat Enterprise Linux Server 6.7, 7.2	
	SUSE Linux Enterprise Server 12 SP1	
	CentOS 6.8, 7.2	
	Debian 8.5	
	Ubuntu Server 14.04, 16.04 LTS	

10.16. Enterprise Network Management System (EMS)

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	General	
1.	For effective operations and management of IT Operations , there is a need for an industry-standard Network Management System (NMS). Given the expanse and scope of the project, NMS becomes very critical for IT Operations and SLA Measurement. Some of the critical aspects that need to be considered for operations of IT setup ofare: a) Network Fault Management b) Network Performance Management c) Network Configuration Management d) Server	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	Performance Monitoring e) Network Traffic Analysis f) Centralized Log management g) Centralized and unified Dashboard h) Centralized and customizable service level reporting i) IT Service Management j)Asset Management	
2.	The Monitoring Solution should provide Unified Architectural design offering seamless common functions including but not limited to: Event and Alarm management, Auto-discovery of the Network environment, Correlation and root cause analysis, Reporting and analytics	
3.	There should be a tight integration between infrastructure metrics and logs to have the single consolidated console of Infrastructure & security events.	
4.	Consolidate IT event management activities into a single operations bridge that allows operator quickly identify the cause of the IT incident, reduces duplication of effort and decreases the time it takes to rectify IT issues.	
5.	The Operator should be able to pull up security events related to a given Configuration Item, from a single console which also has NOC events, and use the security events to triage the problem. This way the Operator gets consolidated system/network event details and security events (current and historical) from the same console and save time in troubleshooting / isolating the issue.	
6.	The solution should have capability to perform cross domain correlation with alarm correlation built-in algorithms from Network , Systems and other domain events as well as KPI patterns, also correlation should not be limited to only parent-child or service mapping relationships	
7.	The operator should be able to build correlation rules in a simple GUI based environment where the Operator should be able to correlate cross domain events	
8.	Scalability – The system should be capable of supporting at least 15 thousand network flow per second on single server with capability	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	to capture each unique traffic conversations	
9.	The solution shall provide future scalability of the whole system without major architectural changes.	
10.	The Solution shall be distributed, scalable, and multi-platform and open to third party integration such as Cloud, Virtualization, Database, Web Server, Application Server platforms etc.	
11.	Proposed NMS solution must be ISO 27001:2013 / ISO 27034 certified to ensure security compliances.	
12.	All the required modules should be from same OEM and should be tightly integrated for single pane of glass view of enterprise monitoring.	
DETAILED SPECIFICATIONS: NMS		
	Consolidated Dashboard	
1.	The platform must provide complete cross-domain visibility of IT infrastructure issues which should cover all the Network Devices but not limited to Camera, Servers and other SNMP based devices.	
2.	The platform must consolidate monitoring events from across layers such as Network, Server, Application, Database, UPS etc	
3.	The solution should support single console for automated discovery of enterprise network components e.g. network device, servers, virtualization, cloud, application and databases	
4.	The solution must support custom dashboards for different role users such as Management, admin and report users	
5.	The solution must allow creating custom data widget to visualize data with user preferences eg. Refresh time, time span, background colour, unit conversion	
6.	The solution must support custom query based widget with multiple visualization methods including Chart, Guage, Grid, Top N list etc. to visualize and represent collected data with ease.	
7.	The solution must provide comprehensive query language to pull and plot complex visualization with multiple arithmetic operator such as top, sum, min, max etc.	
8.	The solution must support out of the box data widgets for Metric, Log and network flow data with multiple visualization methods such as	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	gauge, grid, charts, Top N etc.	
9.	The solution should provide superior view of infrastructure health across system, networks, application and other IT Infrastructure components into a consolidated, central console	
10.	There should be only one dashboard/interface to collected network/server/application/log data after correlation and consolidation across the IT landscape to reduce/correlate number of metrics/alarms	
Network Performance Management		
1.	The solution must provide discovery & inventory of heterogeneous physical network devices like Layer-2 & Layer-3 switches, Routers and other IP devices and do mapping of LAN & WAN connectivity with granular visibility up to individual ports level.	
2.	The solution must support custom device template to support Generic SNMP devices as well as extensive support on traffic encryption including SNMP v3 with AES-256 encryption	
3.	The NMS should provide very powerful event correlation platform/engine and thus must filter, correlate & process, the events that are created daily from network devices. It should assist in root cause determination and help prevent flooding of non-relevant console messages.	
4.	It shall provide Real time network monitoring and Measurement offend-to-end Network performance & availability to define service levels and further improve upon them.	
5.	The Network performance operator console should provide operators with seamless transitions from fault data to performance data. For example - select a NMS fault event and fault drill down must also provide historical, near real time and correlated data without switching the page	
6.	The solution should have the ability to do "baseline" performance metrics and determine normal operating values and patterns by self-learning algorithms on a day, week, month, etc. and ability to configure threshold on these values. The solution should also have built in algorithms to start the monitoring with zero threshold	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	configurations	
7.	The proposed system should be able to auto-calculate resource utilization baselines for the entire managed systems and networks and allow user choose algorithms that is more relevant to specific KPI in case of false positive	
8.	The agents should be extensible and customizable allowing incorporation of any required monitoring source not included in the out-of-the-box monitoring policies. With capabilities to collect and analyze performance data from the operating system and installed applications and use historical patterns to establish performance baselines.	
9.	All baseline thresholds should have lower bound, higher bound, polarity, deviation set point and reset point for ease of use.	
10.	System should have anomalies detection, outlier detection and stop alarm flooding with these dynamic thresholds.	
11.	The solution should be capable of performing prediction- based anomaly detection to identify unusual or unexpected events and measurements within the monitored environment.	
12.	The Solution should provide AI and ML capabilities to help in preventing of Network problems before they occur The Solution should include unsupervised learning module to gather real time network data and which learns the behavior of devices, applications, and users on the network It should be capable to bring together and correlate network and application data to predict anomaly and performance issues	
13.	The solution must provide agentless and agent based method for managing the nodes and have the capability of storing events / data locally if communication to the management server is not possible due to some problem. This capability will help to avoid losing critical events.	
14.	The NMS admin consol must provide the ability to start, stop and restart the agent on target server infrastructure and the agent should	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	provide collection capabilities not limited to just KPIs but also support collecting raw logs as well as packets.	
15.	The proposed EMS solution must provide a gentles as well as agent based monitoring for server infrastructure. The agents should be able to set polling interval as low as 1 second with low overhead on target server infrastructure.	
16.	The proposed solution should include a distributed search engine data-store to ingest various types of textual, numerical, geospatial, structured and unstructured data.	
17.	The proposed solution must provide a customizable control of grouping of notable events in the such a way that it can Split events into multiple groups by one or more fields, such as source or host.	
18.	The notable event view can be configured to perform actions on notable events, including running a script, sending an email, creating a ticket in 3rd party ticketing tools, adding a link to a ticket in an external system, and any other custom actions that are configured.	
19.	The proposed solution must provide anomaly overlays to view these outliers and track anomalous trends in the KPI data by enabling anomaly detection algorithms that detect statistical outliers in KPI search results.	
20.	It shall provide Real time network monitoring and Measurement offend-to-end Network performance & availability to define service levels and further improve upon them.	
21.	The EMS solution shall keep historical rate and protocol data for a minimum of 30 days (most recent) in its short term operating database. All data in that database shall have a maximum 1- minute window granularity. User shall be able to select any 1-minute window over the last 30 days and display unique utilization and protocol data for every monitored interface	
22.	The proposed solution should be able to take back up of running and startup configuration of network devices. It should also provide versioning for backup to track changes.	
Fault Management		

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
1.	The proposed solution must should provide out of the box root cause analysis with multiple root cause algorithms inbuilt for root cause analysis. It should also have a strong event correlation engine which can correlate the events on the basis of event pairing, event sequencing etc.	
2.	The Platform must include an event correlation automatically fed with events originating from managed elements, monitoring tools or data sources external to the platform. This correlation must perform event filtering, event suppression, event aggregation and event annotation	
3.	The proposed solution should provide alert console with alert summary such as no. of correlated alert, network alert, server alert, virtualization alert, cloud alert, application alert etc.	
4.	The system must have provision to overlay alert on reported metric to understand alert triggering behavior across multiple drill down pages	
5.	The proposed solution should have drill-down and correlation page to correlate cross domain historical data points and result should be exported as image and tabular format.	
6.	The proposed solution should provide out of the box root cause analysis with multiple root cause algorithms inbuilt for root cause analysis. It should also have a strong event correlation engine which can correlate the events on the basis of event pairing, event sequencing etc.	
7.	Powerful correlation capabilities to reduce number of actionable events. Topology based and event stream based correlation should be made available.	
8.	The solution must offer relevant remedy tools,graphs in context of a selected fault alarm/event	
9.	The proposed monitoring solution should have capability to configure actions based rules for set of pre-defined alarms/alerts enabling automation of set tasks.	
10.	The Platform must support Event or Alarm Correlation integrations with service desk to trigger automated creation of incidents,	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	problems management	
11.	The solution should classify events based on business impact and also allow defining custom severity levels and priority metrics such as Ok, Critical, Major, Down, Info etc with color codes	
12.	The solution should allow creation of correlation or analytics rules for administrators	
13.	The proposed solution must provide default event dashboard to identify, accept and assign generated alarms	
Service Desk - Incident Management		
1.	The proposed helpdesk system shall provide flexibility of logging, viewing, updating and closing incident manually via web interface	
2.	Each incident shall be able to associate multiple activity logs entries via manual update or automatic update from other enterprise management tools.	
3.	The proposed helpdesk system shall be able to provide flexibility of incident assignment based on the workload, category, location etc.	
4.	The proposed solution should automatically provide suggested knowledge base articles based on Incident properties with no programming	
5.	The proposed solution should automatically suggest available technicians based on workload, average ticket closure time assigning ticket swith no programming	
6.	The proposed solution should tightly integrate with monitoring system to provide two way integration - E.g. when system down alarm created, it should automatically create ticket and assign it to technician, in case system comes up before ticket is resolved by technician, it should automatically close the ticket to minimize human efforts	
7.	The proposed system must not create more than one ticket for same recurring alarm to avoid ticket flooding from Monitoring system	
8.	The proposed solution should allow administrator to define ticket dispatcher workflow which automatically assign incoming tickets based on rules defined in workflow. E.g. Network fault keyword tickets gets assigned to network technician automatically within NOC	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
	team	
9.	The proposed helpdesk system shall provide grouping access on different security knowledge articles for different group of users.	
10.	The proposed helpdesk system shall have an updateable knowledge base for technical analysis and further help end-users to search solutions for previously solved issues	
11.	The proposed solution should allow Technician to relate Incidents to Problem, Change and vice versa to have better context while working on any of ticket type	
12.	The proposed helpdesk system shall support tracking of SLA (service level agreements) for call requests within the help desk through service types.	
13.	The proposed helpdesk system shall integrate tightly with the Knowledge tools and CMDB and shall be accessible from the same login window	
14.	The proposed helpdesk solution should be equipped with chatbot functionality for identifying the intent of the query and provide an accurate answer and suggest options to confirm or resolve the issue.	
15.	The chatbot should have NLP functions (Natural Language Processing) to analyze the context of the query.	
16.	Proposed solution should not be dependent on any third party NLP algorithm. It should be inbuilt in the product.	
17.	Proposed helpdesk should have support of inbuilt conversational AI.	
18.	Proposed helpdesk should support custom theme option including color scheme of GUI, Fonts and custom logo placement.	
Asset Inventory Management		
1.	A configuration management database shall be established which stores unique information about each type Configuration Item CI or group of CI.	
2.	The proposed solution allow scheduling periodic report to check current software and hardware inventory	
3.	The proposed solution must allow attaching CI record to generated service tickets	

Sl. No.	Minimum Specifications	Compliance (Yes/ No)
4.	The Proposed solution should provide end to end Asset Life Cycle Management: Makes it easier to handle the complete life cycle of an asset, that is, all stages/modules from procurement to disposal	
5.	The Proposed solution should support maintaining AMC/Warranty Information with Alerting when about to expire also provide Asset Deletion capabilities enabled with workflow engine	
6.	The Proposed solution should support Software License Metering: Helps to understand the software license compliance and the use of unauthorized software in the organization and helps to act proactively to curb illegal usage and problems associated with it.	
7.	The proposed solution should provide Asset Dashboards/Reporting: Graphical representation all the assets based on Category, location, aging of the asset, customer, which can be further level down to the incident record ID	
8.	The proposed solution should provide out of the box purchase and contract management modules to support end to end asset life cycle	
9.	The proposed solution must provide asset baselining to manage and track asset effectively.	
Reporting		
1.	Reporting solution should be able to report on Service Level status of configured business service.	
2.	It should be able to collect and collate information regarding relationship between IT elements and business service, clearly showing how infrastructure impacts business service levels.	
3.	The solution should be user configurable for building additional reports.	

10.17. Server for ICCC

S. No.	Parameter	Minimum Specification	Compliance (Yes/No)
1.	System	Enterprise class Server with latest generation Intel CPU/chipset on x64 bit architecture at the time of delivery.	
2.	Processor	Minimum 2 Processors populated in each server.	

S. No.	Parameter	Minimum Specification	Compliance (Yes/No)
		Minimum Intel Xeon Gold processor or equivalent having minimum of 24 core with 2.8 GHz Clock Speed or better should be provided. Bidder may propose 2.6 GHz or more Clock speed of processors	
3.	Memory	Minimum Memory: 256GB DDR4 RAM, Scalable upto Minimum 2TB. Memory should support advanced memory protection features like Advanced ECC & Online Spare/Memory Mirroring for higher reliability.	
4.	PCI-Slots	Minimum 6 PCIe Slots	
5.	Hard Disks	Minimum 2 x 1.9TB or Higher SSD	
6.	RAID Controller	12G SAS RAID controller with Minimum 2GB cache	
7.	IPv6 Compliance	All the servers must be IPv6 Compliant.	
8.	Accessories	All the accessories required for installation of configuration of the servers like Cables, Rails of installations, Cable Manager, PDUs etc. must be supplied with the servers.	
9.	IO Ports	2x 10G Fiber NIC ports (with Transceivers) with card level redundancy. 2x 1G NIC ports 2x 16Gb FC ports (with Transceivers)	
10.	OS Support	Latest Windows Server 2019 onwards, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES); Also server should support VMWare / Hyper-V etc as virtualization platform	
11.	System Monitoring & Management	Offered Server management should include following: 1. Remote management Interface with the management software from the same OEM 2. Must have the capability to provide proactive notification of actual or impending component failure alerts (CPU, Memory, Power Supply, Fan, Disk etc.) 3. Automatic event handling should be supported to configure actions to notify appropriate users of failures	

S. No.	Parameter	Minimum Specification	Compliance (Yes/No)
		through e-mail/ SMS 4. Automatic event alert forwarding to OEM remote support center and proactively call-logging system should support.	
12.	RAS features	The offered server should have below RAS (Reliability, availability, and serviceability) features: 1. Advanced ECC 2. Failed or failing component (Memory DIMM / IO Slot / CPU Core) de configuration at boot	
13.	Power Supply & Fan	Power supplies in N+N and Fans in N+1/N+N configuration & should be hot-swappable.	
14.	Form Factor	2U or better	

10.18. Storage for ICCC

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Capacity & Scalability	1. Offered Storage array shall be supplied minimum with **2.2PB usable** Capacity (encrypted),(minimum 200TB SSD and minimum 2 PB NL-SAS) and shall be configured in Raid 6 or better. Vendor shall not use more than 10D+2P while sizing the array, however larger raid groups can be considered if more than two drive failure is supported without data unavailability and data loss. 2. Offered array shall support at-least 1400 drives. 4. Offered Storage shall be able to protect at-least 2 drives failure simultaneously within a given raid group. 5. Offered storage shall support both SSD and HDD. HDD shall support both SAS and NL SAS drives. 6. All the recording shall be stored for a period of 30 days at 25 FPS. 5% of bookmarked videos shall be stored for a	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		period of 1 year.	
2.	Data Availability	1. Offered storage shall be an enterprise storage array &99.9999% availability architecture. Shall be published as enterprise array on the vendor web site. 2. 99.9999% availability shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 99.9999% availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations.	
3.	Operating System & Clustering Support	The storage array should support industry-leading Operating System platforms & clustering including: Windows Server 2019 / 2022, VMware 7/8, Linux and HP-UX etc.	
4.	Storage Encryption	1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor can offer any controller based or Software based encryption.	
5.	No. of Controllers	1. Offered Storage shall be supplied with at-least Dual controller.	
6.	Cache and CPU Processing Power	1. Offered Storage array should have at-least 512GB protected DRAM cache and shall be scalable to at-least 1TB in a scale up/scale out architecture. Offered storage must support additional 2TB of NVMe/SSD based cache. 2. Complete offered cache shall be both Global /federated and coherent. 3. Offered storage shall be based upon latest generation Intel CPUs and shall be supplied with at-least 64 numbers of CPU cores.	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
7.	Processing Power - Parallel processing engine	Clause Stands Deleted	
8.	Architecture & Processing Power	1. Controllers shall be true symmetric/asymmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical / asymmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc. 2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application. 3. Offered storage must be configured with single unified operating system that offers file and block protocols natively. General purpose OS must not be offered.	
9.	No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	
10.	Cloud Enabled Monitoring and Analytics	Offered storage must support optional cloud-based management tool which must allow capacity and performance monitoring.	
11.	Site Assessment	Clause stands Deleted	
12.	Data Protection	1. In case of power failure, storage subsystem shall have de-staged mode so that un-committed information can be protected. De-staging shall happen to vault drives and vault drives shall be encrypted. 2. Vendor shall not use any Vault drive(if required for the architecture) as data drives for capacity calculation. Offered Vault drives shall not be the part of supplied disk enclosures.	
13.	Host Ports and Back-	1. Offered Storage array shall have	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
	end Ports	minimum of 16 x 32Gbps Fiber Channel ports 8 x 25Gbps ISCSI ports. All ports shall have capability to work at line speed. 2. Offered Storage array shall be scalable to at-least 32 x 32Gbps Fiber channel ports and 16 x 25Gbps ISCSI ports. 3. Offered Storage array shall have minimum of 16 SAS lanes in the back-end for disk connectivity running at 12Gbps speed and shall be scalable to 64 SAS Lanes without replacing the existing controllers. 4. Offered Storage array system shall be supplied with quad additional native 10Gbps IP ports for storage based replication and shall be scalable to 8 Native 10Gbps IP ports. All ports shall be provided with SFP+ transceiver for fiber connectivity.	
14.	Global Hot Spare	1. offered Storage Array shall support distributed Global hot Spare for offered Disk drives. 2. Global hot spare shall be configure as per industry practice.	
15.	Quality of service	1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units.	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array.	
16.	Capacity efficiency	1. Offered storage array shall support inline data efficiency engine (Supporting Thin Zero detect and re-claim, De-duplication and Compression) and shall be enabled by default. 2. Vendor shall have flexibility to enable / disable the data efficiency engine at the time of Volume creation. 3. Storage subsystem shall be supplied with Thin Provisioning, Thin Re-claim, Snapshot, De-duplication, Compression, Performance Monitoring, and Quality of service on day 1 for the maximum supported capacity of array.	
17.	Firmware Upgrade	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller/Storage.	
18.	Storage Management	Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities: a. Common Dashboard for all managed arrays through a single management console. b. Data migration through same console for all supported heterogeneous arrays c. On-premise performance analysis, workload planning etc. through a single console.	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.	
19.	Integration - VMWARE	1. Offered storage array shall be tightly integrated with VMware and shall be certified for VVOL. Shall provide following functionalities for VVOL 2. Shall be certified for vVol based replication 3. Shall support more than 25,000 vVol and at-least 5000VMs using Vvol. 4. Shall support both compression and de-duplication for VVOL 5. Shall be qualified to work with both Fiber Channel and ISCSI for VVOL.	
20.	Integration - Container	Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration : a. Shall support both Static and Dynamic provisioning b. Shall be able to expand, re-size the persistent volumes given to stateful set applications. c. Shall be able to create and delete the snapshots. d. Shall support CSI Raw block volume as	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		well as CSI Volume cloning. e. Support for both NFS as well as ISCSI.	
21.	Snapshot / Point in time copy & No. of Volumes	1. The storage array should have support for controller-based snapshots (At-least 1000 copies for a given volume). 2. Offered Storage array shall support more than 24000 base volume on the storage array without snapshot and clone.	
22.	Remote Replication	1. The storage array should support hardware-based data replication at the array controller level across all models of the offered family. 2. Offered Storage array shall support both Synchronous and Asynchronous replication across 2 storage arrays natively without using any third party or software-based solution. 3. Offered Storage array shall support 3 Data center solution natively where Primary site shall be able to replicate synchronously to near-by / Bunker location and at the same time shall be able to replicate to Far location asynchronously. 4. In case of Primary site failure – Far site shall have capability to pull the incremental information from Near-by / Bunker location natively without using any third party or software-based solution. 5. Offered storage array shall have	

S. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		capability to create the application consistency group for replication operations. Shall have flexibility to have more than 256 volumes per consistency group. 6. Offered storage subsystem shall support incremental replication after resumption from Link Failure situation or during failback operations between 2DC or 3DC solution	
23.	Active / Active stretch clustering	1. Offered Storage array shall have capability to provide true Active / Active Replication and Stretch clustering at metro distances for Zero RPO and RTO so that a given volume pair between primary and DR location can have concurrent access to both read and write operations simultaneously. 2. Active / Active replication shall be supported for all well-known OS like VMware, Redhat, Windows etc.	

10.19. Type 1: Dome Camera

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Camera Type	Fixed Dome Camera	
2.	Image Sensor	1/2.8-inch CMOS or better OR 1/3-inch CMOS or better	
3.	Resolution	Min. 1920 × 1080 at 25 FPS or better	
4.	Video Compression	H.264, H.265	
5.	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC/G.711a,	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
6.	Streaming	Min. three compressed stream (Individually Configurable)	
7.	ID/Password	Multi-level user ID/Password	
8.	Physical Layer	1 RJ45 10M/100M self-adaptive Ethernet port	
9.	Security	Password protection, complicated password, HTTPS encryption, IP address filter	
10.	Protocol	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, SSL/TLS, ARP	
11.	Lens Type	Fixed focal lens 2.8 / 4 mm	
12.	Image Enhancement	BLC, HLC, 3D DNR	
13.	Image Parameters Switch	Yes	
14.	Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser	
15.	Illumination	Color: 0.01 Lux or better at (F1.4), 0 Lux with IR Inbuilt IR (Up to 30 mtrs. or better)	
16.	Privacy Mask	Yes	
17.	Electronic Shutter	1/3 s to 1/32 ,000 s or better	
18.	Wide Dynamic Range	120dB	
19.	Day and Night	Day, Night, Auto, Schedule	
20.	Edge Storage	Micro SD/ micro SDHC/ micro SDXC slot supporting memory card for min. 256 GB. (Bidder Shall Supply the memory card along with Camera)	
21.	Operating	0 °C to +60 °C or better	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
	Temperature	Humidity 95% or less (non-condensing)	
22.	Housing	IP67, IK10	
23.	Video content Analytics	Intrusion detection, Motion Detection, Video tampering, Scene change detection, , Region entrance detection, Region exiting detection. (Bidder may propose Edge based or Server based Analytics. Hardware and Software for server based Analytics is bidders responsibility.)	
24.	Power Source	12 VDC / PoE: 802.3at/af	
25.	Certification	CE, FCC, BIS	

10.20. Type 2: Bullet Camera

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Camera Type	Vari focal Bullet Camera	
2.	Image Sensor	1/3-inch CMOS or better	
3.	Resolution	Min.1920 × 1080 at 25 FPS or better	
4.	Video Compression	H.264, H.265 or above	
5.	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC/G.711a	
6.	Streaming	Min. three compressed stream (Individually Configurable)	
7.	ID/Password	Multi-level user ID/Password	
8.	Physical Layer	1 RJ45 10M/100M self-adaptive Ethernet port	
9.	Security	Password protection, complicated password, HTTPS encryption, IP address filter	
10.	Protocol	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, SSL/TLS, PPPoE, ARP	
11.	Lens Type	2.7 to 13.5 mm	
12.	Alarm	1 input, 1 output	
13.	Audio	1 input, 1 output	
14.	Image	BLC, HLC, 3D DNR	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
	Enhancement		
15.	Image Parameters Switch	Yes	
16.	Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser	
17.	Illumination	Color: 0.01 Lux or better at (F1.4,), 0 Lux with IR	
18.	IR Distance	50 mtrs. or better	
19.	Privacy Mask	Yes	
20.	Electronic Shutter	1/3 s to 1/32,000 s with slow shutter support	
21.	Wide Dynamic Range	120dB	
22.	Day and Night	Day, Night, Auto, Schedule	
23.	Edge Storage	Micro SD/micro SDHC/micro SDXC slot supporting memory card for min. 256 GB. (Bidder Shall Supply the memory card along with Camera)	
24.	Operating Temperature	0 °C to +60 °C Humidity 95% or less (non-condensing)	
25.	Housing	IP67, IK10	
26.	Video content Analytics	Line crossing detection, Intrusion detection, Motion Detection, Video tampering, Scene change detection, Unattended baggage detection, Object removal detection, Region entrance detection, Region exiting detection Bidder may propose Edge based or Server based Analytics. Hardware and Software for server based Analytics is bidders responsibility.	
27.	Power Source	12 VDC, PoE: 802.3at/af	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
28.	Certification	CE, FCC, BIS	

10.21. Type 3: PTZ Camera

Sl. No.	Features	Description	Compliance (Yes / No)
1.	Camera Type	PTZ Camera	
2.	Image Sensor	1/2.8 inch CMOS or better	
3.	Resolution	4 MP (2560 × 1440) at 25 FPS or better	
4.	Video Compression	H.265 or better	
5.	Audio Compression	G.711alaw /G.711ulaw/ G.722.1/ G.726, MP2L2/ PCM/AAC/G.711a	
6.	Streaming	Min. Three compressed stream (Individually Configurable) & each stream support Min. 25fps	
7.	Security	User/802.1x Authentication, IP Address filtering, Watermark, HTTPS encryption	
8.	Protocol	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE	
9.	Focal Length & Optical Zoom	6 mm to 188 mm or equivalent, 30 × Optical or better	
10.	Focus	Auto	
11.	Digital Zoom	16x	
12.	Pan & Tilt Range	360° endless, -15° ~ 90°(auto-flip)	
13.	Pan & Tilt Speed	Pan Manual Speed: 0.1° - 150°/s,	
		Pan Preset Speed: 220°/s	
		Tilt Manual Speed: 0.1° ~ 100°/s	
		Tilt Preset Speed: 200°/s	
14.	Scan	8 patrols [Min. 32 Presets in each patrol] & 4 pattern	
15.	Number of Preset	Min. 64	
16.	Dynamic Noise	3D DNR	

Sl. No.	Features	Description	Compliance (Yes / No)
	Reduction		
17.	Defog	Support	
18.	Illumination	Colour: 0.01 Lux @ (F1.4/F1.5,) B/W: 0 Lux with IR or better	
19.	IR Range	Smart IR 200m or better	
20.	Edge Storage	Built-in memory card slot, support micro SD/SDHC/SDXC card, up to 256 GB (Bidder Shall Supply the memory card along with Camera)	
21.	Auto Gain Control	Support	
22.	Back Light Compensation	Support	
23.	High Light Compensation	Support	
24.	Region Of Interest	Support	
25.	Electronic Shutter	1/1 sec ~1/30, 000 sec slow shutter	
26.	White Balance	Auto	
27.	Wide Dynamic Range	120 dB Support	
28.	S/N Ratio	＞52dB	
29.	Privacy Mask	24 privacy masks programmable	
30.	Video content Analytics	Line crossing detection, Region entrance detection, Region exiting detection Bidder may propose Edge based or Server based Analytics. Hardware and Software for server-based Analytics is bidders responsibility.	
31.	Smart Tracking	Manual tracking, Auto-tracking	
32.	Day and Night	Support ICR	
33.	Audio Interface	1 input, 1 output	
34.	Alarm Interface	1input, 1 output	

Sl. No.	Features	Description	Compliance (Yes / No)
35.	Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet port	
36.	Protection Level	IP66/IP67, TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection	
37.	Anti-Vandalism rating	IK10 (Excluding glass window)	
38.	Mounting Bracket	Wall/Pole Mount	
39.	Operating Temperature & Humidity	0°C to 60°C Humidity 90% or less (non-condensing)	
40.	Power Supply	Hi-PoE/PoE+ & 24 VAC/VDC	
41.	Certification	CE, FCC, BIS	

10.22. Type 4: Long Range PTZ Camera

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Camera Type	PTZ Camera	
2.	Thermal module	Image Sensor: Vanadium Oxide Un cooled Focal Plane Arrays Resolution: 384 × 288 NETD: Less than 40 mK (@ 25°C,F# = 1.0) field of view - 7.5° × 5.6° (H × V) Focal Length: 50mm Aperture: F 1.0	
3.	Optical module	Image Sensor: 1/1.8" Progressive Scan CMOS Resolution: 2688 × 1520, 4 MP Color: 0.005 Lux @ (F1.3, AGC ON), B/W: 0.001 Lux @ (F1.3, AGC ON) Shutter Speed: 1 s to 1/30,000 s Focal Length: 6 mm to 240 mm, 40x Field of View: 56° × 33° (H × V) to 1.8° × 1.0° (H × V)	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
		Aperture: F1.3 to F4.6 WDR: 120 dB	
4.	Video Compression	H.265/H.264/MJPEG	
5.	Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM	
6.	Image Effect	Picture in Picture- Display partial image of Thermal channel on the full screen of optical channel	
7.	Smart Function	line crossing, intrusion, region entrance, and region exiting. Dynamic fire detection, up to 10 fire points detectable	
8.	Temperature Measurement	3 temperature measurement rule types, 20 rules in total	
9.	Temperature Range & Accuracy	Range: 0 °C to 150 °C. Accuracy: ± 8 °C (± 14.4 °F)	
10.	Pan & Tilt Range	360° endless, -20° ~ 90°(auto-flip)	
11.	Pan & Tilt Speed	Pan Manual Speed: 0.1° - 200°/s,	
		Pan Preset Speed: 220°/s	
		Tilt Manual Speed: 0.1° ~ 100°/s	
		Tilt Preset Speed: 200°/s	
12.	Scan	8 patrols[Min. 32 Presets in each patrol] & 4 pattern	
13.	Number of Preset	Min. 300	
14.	Storage	Support SD card storage Slot Micro SD/Micro SDHC/Micro SDXC card up to 256GB	
15.	Network	IPv4/IPv6, HTTP, HTTPS, UPnP, SNMP, DNS, 802.1x, Qos, FTP, SMTP, DDNS, NTP, TCP, UDP, IGMP, ICMP, RTSP, RTCP, RTP, DHCP, PPPoE	
16.	Simultaneous Live View	10	
17.	Safety strategy	User ID and password authentication, HTTPS encryption, IEEE 802.1x control, IP address filtering	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
18.	Alarm Interface	7-ch inputs, 2-ch relay outputs	
19.	Audio Interface	1 input and Linear Level	
20.	Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface 1, RS-485 interface	
21.	Power	24 VAC ± 25% / 24 VDC / 48 VDC, Hi-PoE	
22.	Operation temperature and humidity	0 °C to 60 °C with Humidity: 95% or less	

10.23. Ruggedized Switch

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes/ No)
1	Type	Managed Outdoor Industrial grade switch	
2	Ports	Minimum 8*10/100/1000Base-TX PoE/PoE+ with additional 4 uplink SFP based ports. There should be 12 ports on the switch.	
3	PoE+ Standard	IEEE 802.3af/IEEE 802.3at or better, Minimum 240W PoE budget.	
4	Capacity and MAC Table	Shall have switching capacity of 24 Gbps for providing non-blocking performance ,at least 17 Mbps forwarding capacity, 8K MAC table size	
5	Protocols	Should support 802.1D STP/802.1w RSTP/ 802.1s MSTP support, IP source guard, flow and Console port or equivalent.	
		Should support 802.1Q Tagged VLAN	
		Should have support for 802.3x flow control.	
		"Should support IGMP Snooping, IGMP	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes/ No)
		v1/v2/v3 or MLD Snooping v1/v2.	
		Should support security features like SSL (HTTPS)/SSH, Broadcast/Multicast/ Unicast Storm Control	
		Switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.	
		Should support jumbo frame. (9216 Byte).	
		Should support management features like Web-based GUI, SNMP, TFTP Client, System Log, DHCP Client	
		Switch should support access control list, RADIUS/ TACACS+ for access restriction and authentication. Should support port level security.	
		Should support NTP/SNTP or IEEE 1588v2 PTP	
5	Industrial Rating	IP 30	
6	EN/IEC Standard Ratings	EN/IEC 60068-2-27, ESD EN/IEC 61000-4-2,EN/IEC 61000-4-3, EN/IEC 61000-4-4 , EN/IEC 61000-4-6, EN/IEC 61000-4-8, EN/IEC 60068-2-6,RoHS and EMC as FCC Part 15,Class A.	
7	Operating Temperature	0 to +75degrees C or better	
8	Power consumption	The Switch should have <15W power consumption without PoE load.	
9	Certification	UL/ IEC 62368, CE and IPV6 Logo ready	
10	Operating Humidity	5% to 95% non-condensing	

10.24. Junction Box / Rack

Its bidder responsibility to deploy the solution. Bidder may use MCB/MCCB/ELCB/RCCB/UPS/regulated power etc. to protect the equipment.

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
1.	Size	Suitable size as per site requirements to house the field equipment	
2.	Cabinet Material	Powder coated CRCA sheet/ Stainless steel	
3.	Material Thickness	Min 1.2mm	
4.	Number of Locks	Two	
5.	Protection	IP65 / NEMA 4X	
6.	Mounting	On Camera Pole / Ground mounted on concrete base	
7.	Form Factor	Rack Mount/ DIN Rail	
8.	Other Features	Rain Canopy, Cable entry with glands and Fans/any other accessories as required for operation of equipment's within junction box.	

10.25. Poles / Cantilever / Gantry

Sl. No.	Minimum Specifications	Compliance (Yes / No)
1.	**Material:** GI Class 'B'	
2.	Pole / Gantry shall suitable for costal areas.	
3.	**Paint**: Pole / Gantry painted with two coats of zinc chromate primer and two coats of Asian apostolate paint or otherwise as required by architect and in addition bituminous painting for the bottom 1.5 m portion of pole.	

10.26. Smart Pole

It should have Light, Smart Bill Board, PA System (2 Speakers), One CCTV Camera. These Cameras would be as per Smart Pole Number and Bullet Camera Specs shall be followed for same.

Sl. No.	Parameter	Compliance Yes/No
1.	Intelligent pole should able to meet city aesthetic requirement and it should visual appealing. It should easily blend-in into city street pole master plan.	

Sl. No.	Parameter	Compliance Yes/No
2.	It should be possible to support LED luminaries from reputed OEMs.	
3.	The allowed diameter will be as per the BIS regulations and wind speed requirement	
4.	All cabling, cooling/heating etc should either be via/inside the pole or should be camouflaged (aesthetically concealed) so that it is not visible from outside.	
5.	The minimum power backup requirement is minimum 2 hrs	
6.	It should be possible to provide multiple color options as asked by KSCL/user as per city light pole colors	
7.	It should support minimum two light arm per smart pole. However, the same may vary depending on location to be surveyed and finalized by the selected bidder.	
8.	The minimum life requirement of above intelligent pole structure is 10 years	
9.	The Concessionaire should not use any banned /restricted material as per Indian regulations	
10.	**LED based Smart Street light**	
a.	National Lighting Code by Bureau of Indian Standards (IS)- SP 72, 2010, IS 1944, IS 1977 and IEC Standards shall be complied for design and development of street lighting calculations, selection of lighting fixtures, lighting technologies, pole structure & erection, cable selection and sizing, insulation requirements, conductor specifications etc.	
b.	The smart street lighting solution should be able to operate in any weather conditions	
c.	The smart street lighting solution should be able to communicate to the centralized software installed at Command and Control Centre	
d.	The solution should be able to operate the luminaries on/off, increase/decrease luminosity (Dimming) as per the command received from the centralized software.	

Sl. No.	Parameter	Compliance Yes/No
	This control of smart street lights should also be available through a mobile App (compatible with iOS, Android)	
e.	The software should have the capability to apply policies to the smart lighting system.	
f.	The city administration should be able to see the real time status of the LED luminaries (like state, power consumption etc) on a city map view of the centralized software	
g.	The city administration should be able to operate the Smart Lighting System manually too.	
11.	**LED Luminaries**	
a.	High bright white power LEDs shall be used in the Luminaries and the wattage of these LEDs shall be>1W and <3W.	
b.	Color temperature of the proposed white color LED shall be 5000K-6500K	
c.	Power Factor:0.9	
d.	LED driver efficiency: >=350ma<=1000Ma	
e.	Should have Open Circuit protection	
f.	Operating temperature: As per city weather condition	
g.	Working humidity: 10% to 90% RH	
h.	Compliance: RoHS/CE/ERTL/ERDI	
i.	Surge protection:	
12.	**Smart Bill Board**	
a.	The Billboards should be hanged at the height of at least 5 meters or above, however the uniformity should be maintained on all the poles	
b.	The Smart Billboard will be operated from Command & Control Center	
c.	It should have provision for incoming power input cables and fiber connectivity	

Sl. No.	Parameter	Compliance Yes/No
d.	It should be Vandal Proof	
e.	It should have display of minimum 60 inch.	
f.	It should be Aesthetical	

10.27. Public Address System

The system shall deliver pre-recorded and live messages to the loudspeakers attached to them for public announcements.The system shall contain an IP based amplifier and uses power that could drive the speakers. The system shall also contain the control server that could be used to control/monitor all the components of the system that includesController,Calling Station &Amplifier.

The SI shall describe in detail the design, operational and physical requirements of the proposed public announcement system to demonstrate compliance with all the specifiedrequirements.

Sl. No.	Parameter	Compliance Yes/No
13.	Should have the capability to control individual PAS i.e., to make an announcement at select location (1:1) or multiple locations (1: many). The PAS should also support both, Live and Recorded inputs	
14.	IP amplifier with minimum 125 Watts, Class D.	
15.	Native IP connectivity, no convertors to be used	
16.	0 to 55 C Temperature rating for Amplifier	
17.	Automatic Volume Control	
18.	Frequency Response: 50Hzto 15000 Hz for Amplifier	
19.	2 Inputs and 1 Output relay contacts in Amplifier for connecting external beacon	
20.	Speaker: Minimum 2 Speakers 30 W capacity per location	
21.	Frequency Response of Speaker 350 -10, 000 Hz	
22.	Line Monitoring Facility for speakers	
23.	230V mains supply and 24VDC backup supply for amplifier.	
24.	Central Software for operating on Linux Debian 10 (64bit)	
25.	Access control mechanism would be also required to establish so that the usage is regulated.	
26.	Integration with VMS /ICCC and any other component if	

Sl. No.	Parameter	Compliance Yes/No
	required	
27.	PA Master Controller to have facility 8 no's direct dialling buttons, LCD screen and gooseneck microphone	
28.	IP interfaces: ICX over IPv4/IPv6, RTP, SIP over TLS and (S)RTP	
29.	Call recording of all PA announcements with date and time	
30.	Transmission bandwidth 16000 KHz	
31.	Operating temperature for control desk 0 to +50C	
32.	Certification – UL for Amplifier	
33.	ISO 27001 Certified manufacturer	
34.	OEM should have minimum 5 smart/ Safe city projects and successfully working for the past 1 year.	

10.28. 65" Screen

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1.	Screen Size (Diagonal) Minimum(Cm)	165 Cm	
2.	Orientation	Landscape	
3.	Native Resolution (Pixels)	3840 x 2160 - UHD	
4.	Brightness	600 cd/m^2	
5.	Viewing Angle (Horizontal: Vertical)	178:178	
6.	CPU	Quad-Core ARM Cortex-A55/or As Per OEM Standards	
7.	GPU	ARM Mali-G31 MP2/ Or As per OEM Standards	
8.	Bezel Width (Mm)	14	
9.	Number Of Speakers	2 x 10 W	
10.	Arrangement Of Speakers	Inbuilt	
11.	Video Input	2 xHDMI2.0, 1xDP1.2, 2xUSB-2.0	
12.	Connectivity	10/100/1000 Mbps Ethernet, Wi-Fi 5	
13.	Operating Temperature	0-40°C	
14.	Operating Humidity	10-90%	

Sl. No.	Parameter	Specification	Compliance (Yes/No)
15.	Power Consumption	194 W	
16.	Operation Hours	24 X 7	
17.	Mounting Arrangement	Wall Mount & Table Top as Per Requirement 5Years Warranty Support to Be Provided	
18.	Compliance	BIS,	
19.	Power Supply	110 VAC - 240 VAC - 50/60 Hz	
20.	Dimensions (WxDxH)	As Per OEM Standards	
21.	Features	HDMI-Wakeup, No Signal Power Off, SNMP	
22.	Accessories To Be Supplied: AC Power Cord, Remote Control, User Manual, 5 Mtr HDMI Cable, Wall Mount Bracket, Necessary Cables And Connectors		

10.29. Electrical works and power supply

KSCL will interact with electricity boards for provision of mains power supply at select/permanent locations for Control Room and field systems. KSCL will be responsible to pay the electricity bills including connection charge, meter charge, recurring charges etc. to the electricity board directly. MSI shall be responsible for the extension of power from electricity board meter till their devices / JB. MSI has to do this work for locations, where equipment's i.e. cameras, PA system, field switches etc. are going to be installed. KSCL will provide the electrical connection near the Junction Box, however its bidders responsibility to pull the electricity connection up to the devices. Secondly bidder shall be responsible for entire network cabling (Cate6/ fiber/ etc) for devices and do the earthing work for devices at each location.

11. Detailed Scope of Work and Considerations

11.1. Inception Phase

i. MSI will be responsible for preparation of detailed project plan. The plan shall address the following:
   a. Define an organized set of activities for the project and identify the interdependence between them.

b. Resource planning and loading for each phase/activity. This must also indicate where each resource would be based during that phase, i.e., onsite at the Kavaratti Smart City office or off site at MSI premises.
c. Establish and measure resource assignments and responsibilities.
d. Highlight the milestones and associated risks.
e. Communicate the project plan to stakeholders with meaningful reports.
f. Measure project deadlines and performance objectives.

ii. Project Progress Reporting. During the implementation of the project, MSI should present weekly reports. This report will be presented in the steering committee meeting to Kavaratti Smart City. The report should contain at the minimum the under mentioned:
a. Results accomplished during the period (weekly)
b. Cumulative deviations from the schedule date as specified in the finalized Project Plan
c. Corrective actions to be taken to return to planned schedule of progress.
d. Plan for the next week
e. Proposed revision to planned schedule provided such revision is necessitated by reasons beyond the control of MSI
f. Support needed.
g. Highlights/lowlights
h. Issues/Concerns
i. Risks/Show stoppers along with mitigation

iii. Identify the activities that require the participation of client personnel (including Kavaratti Smart City, the Program Management Unit etc.) and communicate their time requirements and schedule early enough to ensure their full participation at the required time.

11.2. Requirement Phase

MSI must perform the detailed assessment of the business requirements and IT Solution requirements as mentioned in this RFP. Based on the understanding and its own individual assessment, MSI shall develop & finalize the System Requirement Specifications (SRS) in consultation with Kavaratti Smart City and its representatives. While doing so, MSI at least is expected to do following.

a. MSI shall conduct a detailed survey and prepare a gap analysis report, detailed survey report of the physical and Central infrastructure requirements. MSI shall duly assist the department in preparing an action plan to address the gaps.
b. MSI shall study and revalidate the requirements given in the RFP with Kavaratti Smart City and submit as an exhaustive FRS document. MSI shall develop the FRS and SRS documents.
c. MSI shall develop and follow standardized template for requirements capturing and system documentation.
d. MSI shall submit HLD and LLD documents.
e. MSI must maintain traceability matrix from SRS stage for the entire implementation.

f. MSI must get the sign off from user groups formed by Kavaratti Smart City

g. For all the discussion with Kavaratti Smart City team, MSI shall be required to be present at Kavaratti Smart City office with the requisite team members.

h. Prior to starting the site clearance, MSI shall carry out survey of location as determined by Kavaratti Smart City

11.3. Design Phase

MSI shall build the solution as per the Design Considerations. The solution proposed by MSI should comply with the design considerations requirements as mentioned therein.

11.4. Development Phase

MSI shall carefully consider the scope of work and provide a solution that best meets the project's requirements. Considering the scope set in this RFP, MSI shall carefully consider the solutions it proposes and explicitly mention the same in the technical proposal. The implementation of the application software will follow the procedure mentioned below:

i. Software Products (Configuration and Customization): In case MSI proposes software products the following need to be adhered.

   a. MSI will be responsible for supplying the application and licenses of related software products and installing the same so as to meet project requirements.

   b. MSI shall have provision for procurement of licenses in a staggered manner as per the actual requirement of the project.

   c. MSI shall perform periodic audits to measure license compliance against the number of valid End User software licenses consistent with the terms and conditions of license agreements, volume purchase agreements, and other mutually agreed upon licensed software terms and conditions. MSI shall report any exceptions to license terms and conditions at the right time to Kavaratti Smart City. However, the responsibility of license compliance solely lies with MSI. Any financial penalty imposed on Kavaratti Smart City during the contract period due to license non-compliance shall be borne by MSI.

   d. MSI shall also supply any other tools & accessories required to make the integrated solution complete as per requirements. For the integrated solution, MSI shall supply:

      - Software & licenses.
      - Supply tools, accessories, documentation and provide a list of the same. Tools and accessories shall be part of the solution.
      - System Documentation: System Documentation both in hard copy and soft copy to be supplied along with licenses and shall include but not limited to following. Documentation to be maintained, updated and submitted to Kavaratti Smart City regularly. i.e. Functional Requirement Specification (FRS), High level design of whole system, Low Level design for whole system /

Module design level, System Requirements Specifications (SRS), Any other explanatory notes about system, Traceability matrix, Technical and product related manuals, Installation guides, User manuals, System administrator manuals, Toolkit guides and troubleshooting guides, Other documents as prescribed by Kavaratti Smart City, Quality assurance procedures, Change management histories, Version control data, Test cases, SOPs, procedures, policies, processes, etc. developed for Kavaratti Smart City

(These documents need to be updated after each phase of project and to be maintained updated during entire project duration. The entire documentation will be the property of Kavaratti Smart City)

11.5. Integration Phase

The Operation Control Room should be integrated with feeds of all tracks/component through deployed under this Project. MSI shall provide the testing strategy including traceability matrix, test cases and shall conduct the testing of various components of the software developed/customized and the solution as a whole. The testing should be comprehensive and should be done at each stage of development and implementation.

11.6. Go-Live

- MSI shall prepare and agree with Kavaratti Smart City, the detailed plan for Go- Live (in-line with Kavaratti Smart City's implementation plan as mentioned in RFP).
- MSI shall define and agree with Kavaratti Smart City, the criteria for Go-Live.
- MSI shall submit signed-off UAT report (issue closure report) ensuring all issues raised during UAT are being resolved prior to Go-Live.
- MSI shall ensure that Go –Live criteria as mentioned in User acceptance testing of Project is met and MSI needs to take approval from Kavaratti Smart City team on the same.
- Go-live of the application shall be done as per the finalized and agreed upon Go-Live plan.

11.7. Project Management and Governance

11.7.1. Project Management Office (PMO)

A Project Management office will be set up during the start of the project. The PMO will, at the minimum, include a designated full time Project Manager from MSI. It will also include key persons from other relevant stakeholders including members of KAVARATTI SMART CITY LIMITED and other officials/representatives by invitation. The operational aspects of the PMO need to be handled by the MSI including maintaining weekly statuses, minutes of the meetings, weekly/monthly/project plans, etc.

PMO will meet formally on a weekly basis covering, at a minimum, the following agenda items:

i. Project Progress
ii. Delays, if any – Reasons thereof and ways to make-up lost time
iii. Issues and concerns

iv. Performance and SLA compliance reports;
v. Unresolved and escalated issues;
vi. Project risks and their proposed mitigation plan
vii. Discussion on submitted deliverable.
viii. Timelines and anticipated delay in deliverable if any
ix. Any other issues that either party wishes to add to the agenda.

During the development and implementation phase, there may be a need for more frequent meetings and the agenda would also include:

i. Module development status
ii. Testing results
iii. IT infrastructure procurement and deployment status
iv. Status of setting up/procuring of the Helpdesk, DC hosting
v. Any other issues that either party wishes to add to the agenda.

Bidder shall recommend PMO structure for the project implementation phase and operations and maintenance phase.

11.7.2. Planning and Scheduling

MSI will prepare a detailed schedule and plan for the entire project covering all tasks and sub tasks required for successful execution of the project. MSI must get the plan approved from Kavaratti Smart City at the start of the project and it should be updated every week to ensure tracking of the progress of the project.

The project plan should include the following:

i. The project break-up in logical phases and sub-phases;
ii. Activities making up the sub-phases and phases;
iii. Components in each phase with milestones;
iv. The milestone dates are decided by Kavaratti Smart City in this RFP. MSI cannot change any of the milestone completion dates. MSI can only propose the internal task deadlines while keeping the overall end dates the same. MSI may suggest improvement in project dates without changing the end dates of each activity.
v. Key milestones and deliverables along with their dates including those related to delivery and installation of hardware and software;
vi. Start date and end date for each activity;
vii. The dependencies among activities;
viii. Resources to be assigned to each activity;
ix. Dependency on Kavaratti Smart City

11.8. Change Management & Control

11.8.1. Change Orders / Alterations / Variations

i. MSI agrees that the requirements given in the Bidding Documents are minimum requirements and are only indicative. The vendor would need to etch out the details at the time of preparing the design document prior to actual implementation. It shall be the responsibility of MSI to meet all the functional requirements and technical specifications contained in the RFP and any upward revisions and/or additions of quantities, specifications sizes given in the Bidding Documents required to be made during execution of the works, shall not constitute a change order and shall be carried out without a change order and shall be carried out without any time and cost effect to Purchaser.

ii. Further upward revisions and or additions required to make MSI's selected equipment and installation procedures to meet Bidding Documents requirements expressed and to make entire facilities safe, operable and as per specified codes and standards shall not constitute a change order and shall be carried out without any time and cost effect to Purchaser.

iii. Any upward revision and/or additions consequent to errors, omissions, ambiguities, discrepancies in the Bidding Documents which MSI had not brought out to the Purchaser's notice in his bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by MSI without any time and cost effect to Purchaser.

11.8.2. Change Order

i. The Change Order will be initiated only in case.
   a. the Purchaser directs in writing MSI to include any addition to the scope of work covered under this Contract or delete any part of the scope of the work under the Contract,
   b. MSI requests to delete any part of the work which will not adversely affect the operational capabilities of the facilities and if the deletions proposed are agreed to by the Purchaser and for which cost and time benefits shall be passed on to the Purchaser,
   c. the Purchaser directs in writing MSI to incorporate changes or additions to the technical specifications already covered in the Contract.

ii. Any changes required by the Purchaser over and above the minimum requirements given in the specifications and drawings etc. included in the Bidding Documents before giving its approval to detailed design or Engineering requirements for complying with technical specifications and changes required to ensure systems compatibility and reliability for safe operation (As per codes, standards and recommended practices referred in the Bidding Documents) and trouble free operation shall not be construed to be change in the Scope of work under the Contract.

iii. Any change order comprising an alteration which involves change in the cost of the works (which sort of alteration is hereinafter called a "Variation") shall be the Subject of an

amendment to the Contract by way of an increase or decrease in the schedule of Contract Prices and adjustment of the implementation schedule if any.

iv. If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate a revision of the Contract Price which shall represent the change in cost of the works caused by the Variations. Any change order shall be duly approved by the Purchaser in writing.

v. Within ten (10) working days of receiving the comments from the Purchaser or the drawings, specification, purchase requisitions and other documents submitted by MSI for approval, MSI shall respond in writing, which item(s) of the Comments is/are potential changes(s) in the Scope of work of the RFP document covered in the Contract and shall advise a date by which change order (if applicable) will be submitted to the Purchaser.

11.8.3. Testing and Acceptance Criteria

MSI shall demonstrate the following mentioned acceptance criteria prior to acceptance of the solution as well as during project operations phase, in respect of scalability and performance etc. MSI may propose further detailed Acceptance criteria which the Kavaratti Smart City will review. Once Kavaratti Smart City provides its approval, the Acceptance criteria can be finalized. In case required, parameters might be revised by Kavaratti Smart City in mutual agreement with bidder and the revised parameters shall be considered for acceptance criteria. A comprehensive system should be set up that would have the capability to log & track the testing results, upload & maintain the test cases and log & track issues/bugs identified.

Note:

i. Bidder needs to provide the details of the testing strategy and approach including details of intended tools/environment to be used by MSI for testing in its technical proposal. Kavaratti Smart City does not intend to own the tools.

ii. MSI shall work in a manner to satisfy all the testing requirements and adhere to the testing strategy outlined. MSI must ensure deployment of necessary resources and tools during the testing phases. MSI shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs found during the testing. It is the responsibility of MSI to ensure that the end product delivered by MSI meets all the requirements specified in the RFP. MSI shall take remedial action based on outcome of the tests.

iii. MSI shall arrange for environments and tools for testing and for training as envisaged. Post Go-Live; the production environment should not be used for testing and training purpose. If any production data is used for testing, it should be masked and it should be protected. Detailed process in this regard including security requirement should be provided by MSI in its technical proposal. The process will be finalized with the selected bidder.

iv. The cost of rectification of non-compliances shall be borne by MSI.

11.8.4. Final Acceptance Testing

The final acceptance shall cover 100% of the Project, after successful testing by the Kavaratti Smart City; a Final Acceptance Test Certificate (FAT) shall be issued by Kavaratti Smart City to MSI.

Prerequisite for Carrying out FAT activity:

i. Detailed test plan shall be developed by MSI and approved by Kavaratti Smart City. This shall be submitted by MSI before FAT activity to be carried out.
ii. All documentation related to the Project and relevant acceptance test document (including IT Components, Non-IT Components etc.) should be completed & submitted before the final acceptance test to the Kavaratti Smart City.
iii. Successful hosting of Application, Software.
iv. For both IT & Non-IT equipment's / software manuals / brochures / Data Sheets / CD / DVD / media for all the Gorakhpur Project supplied components.

The FAT shall include the following:

i. All hardware and software items must be installed at respective sites as per the specification.
ii. Availability of all the defined services shall be verified.
iii. MSI shall be required to demonstrate all the features / facilities / functionalities as mentioned in the RFP.
iv. MSI shall arrange the test equipment required for performance verification and will also provide documented test results.
v. MSI shall be responsible for the security audit of the established system to be carried out by a certified third party as agreed by Kavaratti Smart City but cost will be borne by department.

Any delay by MSI in the Final Acceptance Testing shall render him liable to the imposition of appropriate Penalties. However, delays identified beyond the control of MSI shall be considered appropriately and as per mutual agreement between Kavaratti Smart City and MSI. In the event MSI is not able to complete the installation due to non-availability of bandwidth from the bandwidth service providers, the Supplier and Kavaratti Smart City may mutually agree to redefine the Network so MSI can complete installation and conduct the Final Acceptance Test within the specified time.

Volume 3

A. PART A – GENERAL CONDITIONS OF AGREEMENT

1. Definition of Terms

In this RFP, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meanings hereinafter respectively assigned to them:

1.1. "**Acceptance of System**" means the System, including the hardware, software, solution or any Deliverable accepted or deemed to have been accepted by the Authority, subsequent to its installation, rollout and deployment of trained manpower, when all the activities as defined in Scope of Work have been successfully executed and completed to the satisfaction of the Authority and the Authority has given its acceptance by signing the Acceptance Certificate.

1.2. **"Acceptance Certificate**"- refers to that document/certificate issued by the Authority signifying acceptance of a hardware, software, solution, or any other Deliverable pursuant to the successful completion of the Acceptance Test of the System;

1.3. **"Acceptance Test" or "User Acceptance Test"** - means the test, standard procedure, trial runs to be conducted by the MSI as per this RFP or as per the Agreement in relation to the Works.

1.4. **"Affiliate(s)"** means, with respect to any Person, any other Person, directly or indirectly controlled by, controlling or under common control with such Person. For purposes of this Agreement, the term "control" means the power to direct the management and policies of a Person, whether through the ownership of voting securities, by agreement or otherwise. An Affiliate shall remain an Affiliate only as long as such control exists.

1.5. **"Agreement"** means this Master Service Agreement including the Annexure hereto and any amendments thereto made in accordance with the provisions contained in this Agreement and includes inter alia (a) the complete RFP documents and Corrigendum and addendum, (b) MSI's offer, (c) letter of acceptance or letter of award or letter of intent issued by the Authority, (d) the acceptance of letter of award from MSI, (e) notice to proceed with the Work, and (f) any other document listed in the Agreement data;

1.6. **"Agreement Value**" means the amount quoted by the MSI in its commercial Bid and which has been duly accepted by Kavaratti Smart City Ltd for the full and proper performance of its obligations under the Agreement;

1.7. **"Applicable Law(s)"**means all laws in force and effect as of the date hereof and/or laws which may be promulgated or brought into force and effect after the date of execution of the Agreement and includes any statute, law, ordinance, notification, rule, regulation, judgment, order, decree, injunctions, by-laws, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision applicable to the relevant Party and all judgments, decrees, injunctions, and orders of any court, tribunal or any quasi-judicial authority, as may be in force and effect during the subsistence of the Project;

1.8. **"Applicable Permits" / "Approvals"** means all clearances, licenses, permits, authorizations, no objection certificates, consents, approvals and exemptions under or pursuant to any of the Applicable Laws or from any Government Agency or third party, required to be obtained and/or maintained by the MSI or it's Sub Contractor(s) in order to implement the Project and for undertaking, performing or discharging the obligations contemplated under the Agreement, including but not limited to clearances required for importing equipment, exemption of tax/duties/levies/work permits/clearances for MSI/MSI's Team;

1.9. "**Appointed Date"** shall mean the date so specified in the by the Authority or an earlier or later date that Authority and the MSI may by mutual consent determine, prior to which all the Conditions Precedent specified in the Agreement for the full effectiveness of the provisions of the Agreement shall have to be met by Authority and the MSI.

1.10. "**Approved Plan**" shall mean the approval given by the Authority to the plan submitted by the MSI for executing the Works under the Agreement.

1.11. **"Authority"/** "**Kavaratti Smart City Ltd**" means the ******* {Kavaratti Smart City Ltd}. The Project shall be executed in Kavaratti and shall be owned by Kavaratti Smart City Ltd.

1.12. **"Bank Guarantee"** means an irrevocable and unconditional bank guarantee payable on demand and issued by a bank in favour of the Authority and furnished by the MSI or its Sub Contractor(s) to Authority for guaranteeing the due performance of its obligations under the Agreement.

1.13. **"Bid"** means the documents in their entirety comprised in the bid submitted by the Bidder in response to this RFP No. [_____] dated **********

1.14. **"Bidder**" shall mean Person, organization or consortium submitting the proposal in response to this RFP;

1.15. **"Business Day**" means the working day in the city of Kavaratti;

1.16. "**Change Control Note"** shall have the meaning as set forth under Article 55 and in the format specified under Annexure of this RFP;

1.17. "**Commercial Off-The-Shelf (COTS)"** refers to software products that are ready-made and available for sale, lease, or license to the general public;

1.18. **"Completion Date**" shall mean the date on which the Completion Clearance is issued by the Authority to the MSI, upon the completion of the Project;

1.19. **"Conditions Precedent**" shall have the meaning set forth in Article [3] of this RFP;

1.20. "**Confidential Information**" means all information including any information (whether in written, oral, electronic or other format) which relates to the technical, financial and business affairs, dealers, suppliers, products, developments, operations, processes, data, trade secrets, design rights, know-how, plans, budgets and information and data which is proprietary to Authority and which is disclosed to or otherwise learned by MSI in the course of or in connection with the Agreement but does not include information (i) which is available lawfully

in the public domain; (ii) publicly known through no fault of the MSI; (iii) already known to the MSI from someone other than the Authority who is not bound by confidentiality restrictions; or (iv) independently developed by the MSI without access to or use of the Confidential Information disclosed.

1.21. **"Consortium"** means a group of Persons/entities who have jointly formed a consortium for submitting a joint bid/proposal in accordance with this RFP for the Project. The Consortium shall be represented/headed by a Lead Member and shall be the entity/Person named in the Agreement for any part of the Work and/or who has been sublet with the consent in writing of the Authority and shall include its successors, representatives approved by Authority, heirs, executors, administrators and permitted assigns, as the case may be, unless excluded by the terms of the Agreement.

1.22. **"Consortium Member(s)"** means each entity/member who have come together to form the consortium for the purposes of submitting a joint bid in response to this RFP.

1.23. **"Cure Period"** shall mean a period of 60 (sixty) days or such greater period as may be specified in the Notice of Intention to Terminate.

1.24. "**Data Centre"/ "DC"/ "Data Centre Site"/ "DC Site"/ "Server Room**" means the data centre sites including their respective data centre space, wherein the delivery, installation, integration, management and maintenance services as specified under the Scope of Work are to be carried out for the purpose of this Agreement. The DC Site will be located at premise decided by Authority on third party Cloud environment or on-premises in the city. (To review in accordance with Article 18)

1.25. "**Deliverable(s)"** shall mean all of the equipment, sub-systems, hardware, software, products accessories, software, source code, documentation, reports and/or other material/items which MSI is required to supply, install and maintain under the scope of the Agreement.

1.26. "**Developed Materials**" shall have the meaning ascribed to it in Article 27.3;

1.27. **"Document"** means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes, databases or any other electronic documents /records as contemplated as per Information Technology Act 2000 and the rules framed under the said Act;

1.28. **"Effective Date"** means the date on which the Agreement is signed or letter of intent is issued by Authority, whichever is earlier and executed by the Parties hereto. If the Agreement is executed in parts, then the date on which the last of such Agreements is executed shall be construed to be the Effective Date;

1.29. **"Fixes"** means product fixes that are either released generally (such as commercial product service packs) or that are provided to MSI or their Subcontractor when performing services (such as workarounds, patches, bug fixes, beta fixes and beta builds) and any derivatives of the foregoing.

1.30. **"Force Majeure" or "Force Majeure Event"** shall have the meaning set forth in as per Article 38;

1.31. **"Goods"** means all of the equipment, sub-systems, hardware, software, products accessories, components, software and/or other material/items and includes their user manuals, technical manuals, operating manuals, service mechanisms, policies and guidelines (such as security related, data migration related) and all its modifications which MSI is required to supply, install and maintain under the Agreement;

1.32. **"Good Industry Practice"** means the practices, methods, techniques, designs, standards, skills, diligence, procedure, efficiency, reliability and prudence which would reasonably and ordinarily be expected from a skilled and experienced contractor engaged in activities of a similar scope and complexity to those that are the subject of the Agreement and as envisaged under this RFP and under the same or similar circumstances, where such contractor is seeking to comply with its contractual obligations and all Applicable Laws and regulatory requirements. It would include good engineering practices in the design, engineering, construction and project management and acting generally in accordance with the provisions of this RFP and would include which would be expected to result in the performance of its obligations by the MSI in accordance with the Agreement, this RFP, Applicable Laws and Applicable Permits in reliable, safe, environment protected, economical and efficient manner;

1.33. **"Go- Live"** means installation, testing, commissioning of Project, including training as per Scope of Work mentioned in the Agreement or this RFP. MSI should have the approval from Authority for carrying out User Acceptance Test.;

1.34. **"Government Instrumentality" / "Government Agency"/ "Government Authority"** means any department, division or sub-division of the Government of India or the Government of UT or any other State Government or any other UT, including but not limited to the Kavaratti Municipal Corporation, Authority, as may be applicable, including any commission, board, body, bureau, authority, agency, instrumentality, court or other judicial or quasi-judicial or administrative body, at central, state or local level, or municipal and other local authority or statutory body including Panchayat under the control of the Government of India or the Government of UT, as the case may be, and having jurisdiction over the MSI, MSI's Sub Contractor the Project or any portion thereof or the performance of all or any of the Services or obligations of the MSI or MSI's Sub Contractor under or pursuant to this RFP or under the Agreement;

1.35. **"Integrated Command and Control Centre" OR "ICCC"** means the integrated/centralized operation centre as contemplated under this RFP to implement holistic and integrated solution for multiple (existing and future) IT initiative for Authority. The IT initiative may be of any department approved by Authority ,such as Kavaratti Municipal Corporation/UT / UT Police

department or any other authority/body which would conduct inter-alia activities like surveillance on security and civil issues through IOT based network for the entire Authority;

1.36. **"Intellectual Property Rights"** means all rights pertaining to patent, trademarks, copyrights, trade secrets, service marks, logos, brands, trade names, internet domain names, formulae, designs, software (whether in object code or source code), know-how, processes, techniques, methods, technical data, databases, proprietary information, utility models, rights in know- how and other intellectual property rights, whether existing as of the Effective Date or arising thereafter, and all of the goodwill associated with the use of, and symbolized by, any of the foregoing, all rights of indemnification with respect to any of the foregoing, the right to prosecute and sue for past, present and future infringements, dilutions, violations or misappropriations with respect to any of the foregoing, all rights corresponding to any of the foregoing throughout the world, and all proceeds of any the foregoing, including licenses, royalties and proceeds of suit, and any right to any of the foregoing granted under any License.

1.37. **"Key Personnel"** means employees of MSI whether employed directly on rolls of MSI or engaged indirectly, providing services to MSI through a contractor and the key personnel of MSI as referred in the RFP proposed.

1.38. **"Material Adverse Effect"** shall mean circumstances which may or do (i) render any right vested in a Party by the terms of the Agreement ineffective, or (ii) adversely affects or restricts or frustrates the ability of any Party to observe and perform in a timely manner its obligations under this Agreement or the legality, validity, binding nature or enforceability of the same;

1.39. **"Milestone" or "Project Timeline(s)":** means the stipulated time period fixed under the Agreement or under the RFP for completion of Works or part of the Works by the MSI.

1.40. **"MSI"** shall mean the successful bidder (Person, organization, Consortium) who is selected by the Authority at the end of the RFP process for execution of the Project and shall be deemed to include the MSI's successors, agent(s), agency, representatives (approved by Authority), heirs, Affiliates, executors, administrators and permitted assigns, as the case may be, unless excluded by the terms of the Agreement.

1.41. **"MSI's Team"** means the team established/formed by MSI for executing the Works under the present RFP and the Agreement and shall include any and/or all of the employees of MSI, agent(s), agency, authorized service providers/partners and representatives or other Personnel employed or engaged either directly or indirectly by MSI for the purposes of the Agreement;

1.42. **"Notice"** means a written notice, consent, approval or other communication required to be sent to the parties under the Agreement;

1.43. **"Notice of Intention to Terminate"** shall mean the notice issued by a Party to the other Party expressing its intention to terminate the Agreement.

1.44. **"OEM**" means the original equipment manufacturer of any equipment/system/software/product who is/are providing such Goods to the Authority under the scope of this RFP or the Agreement;

1.45. **"O & M":** shall mean Operations and Maintenance services for the software, hardware and other IT and Non-IT infrastructure installed as part of the project after Go-Live or Phase wise Go-Live and for a period of 5 years from the date of Go-Live or phase wise Go-Live. Warranty period of the products supplied under the project i.e., hardware, software, IT/Non-IT systems etc., will be considered after phase wise Go-Live only.

1.46. **"Person"** includes any individual, company, corporation, partnership, joint venture, trust, unincorporated organization, government or Governmental Authority or Government Agency or any other legal entity;

1.47. **"Performance Bank Guarantee"/ "PBG**" means performance bank guarantee as defined under Annexure of the RFP .

1.48. **"Project"** means the project of implementation of ICCC in Kavaratti by the MSI or by its Sub Contractor(s) in pursuance of the terms and conditions of this RFP/Agreement.

1.49. **"Project Location(s)"** shall mean the location(s)/ site(s) where the Works are to be executed by the MSI.

1.50. **"Project Manager"/ "Authority's Representative**" shall mean the person appointed by the Authority for supervising and managing the affairs in relation to the Project.

1.51. **"Project Office"** means the site office to be set up by the MSI for the execution of the Project. The Project office shall be set up by the MSI at a location to be suggested by the Authority;

1.52. **"Project Report(s)"** shall mean the report(s) or the updates to be submitted by the MSI in relation to the Works at regular intervals;

1.53. "**Project Team"** means the MSI's Key Personnel, team members or any other person duly authorized by the Authority for the execution of the Works and the Project.

1.54. **"Project Plan" or "Plan" or "Revised Plan" or "Work Plan" or "Program of Work(s)":** means the plan/ schedule, methodology, design documents, specifications, or any other document submitted by the MSI to the Authority for executing the Works under the Agreement or for the fulfilment of its various obligations under the Agreement.

1.55. **"Replacement Service Provider"** means the organization or agency replacing MSI or its Sub Contractor in case of termination of the Agreement for any reasons whatsoever;

1.56. **"RFP"** means this Request for Proposal for the selection of MSI for implementation of the Project;

1.57. **"Scope of Work"** shall have the meaning as set forth in this RFP;

1.58. "**Service Levels":** shall mean the level of service to be provided/rendered by MSI for executing/completing the Works and for meeting its various obligations under the Agreement and shall include the meaning set forth in this RFP;

1.59. "**Service(s)" or "Activity" or "Activities**": shall means the Works/Services to be carried out or rendered by the MSI and or its Sub Contractor pursuant to this RFP and the Agreement or any other specific assignment awarded by the Authority to MSI;

1.60. **"Service Specifications**" shall mean the specifications as set out in PART C-SERVICE LEVELS of this RFP;

1.61. **"Steering Committee" or "High Powered Committee" or "Project Information Committee**" shall mean a committee formed to supervise/monitor the work of the Project Management Committee and also the Project Manager. It shall consist of N numbers of members and shall act as the appellate body over the decision rendered by the Project Management Committee;

1.62. **"Site"** means the lands and other places on, under, in or through which the permanent works are to be carried out and any other lands or places provided by the Authority for the purpose of the Agreement.

1.63. **"Sub-Contractor"** shall mean the entity or agency working on behalf of MSI and who is named in the Agreement for any part of the Scope of Work or any Person to whom any part of the Agreement has been sublet with the consent in writing by the Authority and shall include the heirs, legal representatives, successors and assignees of such Person;

1.64. **"Termination Notice"** shall mean the notice issued by either Party to the other Party in accordance with the provisions of the Agreement terminating the Agreement;

1.65. **"Work(s)" or "Program of Work(s)"** means the entire work or a part of it to be undertaken by MSI for implementation of the ICCC Project in Authority as envisaged in the present RFP and the Agreement together with all Annexures, Schedules, referenced documents and all amendments, corrigendum, addendums and changes thereto.

2. Interpretation

2.1. **In this RFP unless a contrary intention is evident:**

a. **"Party"** shall mean MSI or Authority individually and "Parties" shall mean MSI and Authority collectively;

b. the clause headings are for convenient reference only and do not form part of the Agreement;

c. unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses;

d. the word "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" whether or not they are followed by such phrases;

e. unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of the Agreement including any amendments or modifications to the same from time to time;

f. a word in the singular includes the plural and a word in the plural includes the singular;

g. a word importing a gender includes any other gender;

h. a reference to a person includes a partnership and a corporate body;

i. a reference to legislation includes legislation repealing, replacing or amending that legislation;

j. Where a word or phrase is given a particular meaning, it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.

k. In the event of an inconsistency between the terms of the Agreement and the RFP and the Bid, the terms of the RFP shall prevail.

l. In case there is a contradiction between the clauses mentioned in the RFP, the below hierarchy of clauses in order of precedence shall be applicable:

i. Pre-bid clarification and Corrigendum, if any

ii. RFP Volume III

iii. RFP Volume II

iv. RFP volume I

3. Conditions Precedent

3.1. Save and except as expressly provided, the respective rights and obligations of the Parties under the Agreement shall be subject to the satisfaction in full of the conditions precedent specified in this Article 3.

3.2. Conditions Precedent required to be satisfied by Authority prior to the Appointed Date shall be deemed to have been fulfilled when Authority shall have granted to the MSI the right of way to the Site as per provisions of the Agreement. Provided that, where the project implementation is phase wise, the condition precedent will be satisfied when the authority shall have granted right of way for [Phase-1] of the project. Authority shall handover, to the MSI, the right of way to the Site as per provisions of the Agreement only when the Conditions Precedent required to be satisfied by the MSI have been duly fulfilled.

3.3. The Conditions Precedent required to be satisfied by the MSI prior to the Appointed Date shall be deemed to have been fulfilled when the MSI shall have:

a. Furnished an unconditional and irrevocable Performance Bank Guarantee (PBG) as per (Annexure of the RFP) from a nationalized bank and in a form and manner which is acceptable to the Authority, which would remain valid until such time as stipulated by the Authority.

b. Obtained all statutory Approvals and Permits required for the performance of the Services under the Agreement; this may include Approvals/clearances, wherever applicable, that may be required for execution of the Agreement e.g., clearances from Government authorities for importing equipment, exemption of tax/duties/levies, work permits/clearances for MSI/MSI's team, etc.

c. Furnished the notarized copies of any/all contract(s) duly executed by MSI and its OEMs existing at the time of signing of the Contract in relation to the Project.

3.4. The Authority reserves the right to waive any or all the conditions specified in Article 3.3 above in writing and no such waiver shall affect or impair any right, power or remedy that the Authority may otherwise have.

3.5. Each Party shall make all reasonable endeavours to satisfy the Conditions Precedent within the time stipulated herein and provide the other Party with such reasonable cooperation as may be required to assist that Party in satisfying the Conditions Precedent for which that Party is responsible. The Parties shall notify in writing at least once a month on the progress made in satisfying the Conditions Precedent. The MSI shall promptly inform the Authority when any Conditions Precedent for which it is responsible has been satisfied.

3.6. In the event that any of the conditions set forth in Clause 3.2 and 3.3 hereinabove are not fulfilled within the Appointed Date, or such later date as may be mutually agreed upon by the Parties, the Authority may terminate the Contract and upon such termination, MSI shall have no right to claim any damages from the Authority on such account.

4. Scope of work

4.1. The Scope of the Work under the Agreement shall be as defined in RFP Volume II and Annexure thereto of the said RFP.

4.2. The Authority has engaged MSI to provide services related to implementation of ICCC in Kavaratti, using which the Authority intends to perform its business operations. MSI with prior written approval of the Authority would have the right to appoint a Sub Contractor for subcontracting any part of the Works/Services to such nominated Subcontractor. The Sub Contractor to be appointed and the subcontract shall be in a form and manner acceptable to the Authority. The Subcontractor shall fully abide by the terms and conditions of the Agreement. It is a fundamental term of the Agreement that appointment of a Sub Contractor would not absolve MSI of any obligations to be performed by the Sub Contractor under the Agreement, and MSI shall be responsible for all acts of the Sub Contractor and indemnify the Authority for losses, damages, claims suffered by the Authority due to any acts of omission and commission by the Sub Contractor while performing its obligations under the subcontract.

4.3. In addition to the above scope of work mentioned in Article 4.1 of this RFP, Authority may require MSI to provide such Goods, Products, Services and support as the Authority may deem fit and proper and necessary, during the Term of the Agreement, and may include all such processes and activities which are consistent with the proposals set forth in the Bid, the Tender and the Agreement and are deemed necessary by the Authority, in order to meet its business requirements related to the Project.

5. Key Performance Measurements

5.1. Unless specified by the Authority to the contrary, MSI shall deliver the Goods, perform the Services and carry out the Scope of Work in accordance with the terms of the RFP and the Agreement.

5.2. If the Agreement, Scheduled Requirements, Service Specification includes more than one Document, then unless the Authority specifies to the contrary, the later in time shall prevail over a Document of earlier date to the extent of any inconsistency.

5.3. The Authority may propose to amend any of the terms and conditions in relation to the Agreement/Service Specifications which shall be amended in consensus and mutual consent of MSI and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the Schedule of Requirements and if such directions are resulting in extra time/fund requirement on part of MSI/ consortium members; accordingly Authority shall by way of issuing a change request or otherwise extend the timelines and/or increase the price.

6. Commencement and Progress

6.1. Subject to the fulfilment of the Conditions Precedent under Article 3.1 above, MSI shall commence the performance of its obligations in a manner as per the Scope of Work specified under Article 4 above.

6.2. MSI shall proceed to carry out the Activities/Services with diligence and efficiently in accordance with any stipulation as to the time, manner, mode, and method of execution contained in the Agreement.

6.3. MSI shall be responsible for and shall ensure that all Activities/Services are performed in accordance with the Agreement, Scope of Work, Scheduled Requirements and Service Specifications and that MSI's Team complies with such Service Specifications and all other standards, terms and other stipulations/conditions set out in this RFP and or the Agreement.

7. Standards of Performance

7.1. MSI shall perform the Activities/Services and carry out its obligations under the Agreement with due diligence and in accordance with Good Industry Practices. MSI shall employ appropriate advanced technology and engineering practices, shall maintain high safety standards, safe and effective equipment, machinery, material and methods and shall always act, in respect of any matter relating to this Agreement, as faithful advisors to the Authority and shall, at all times, support and safeguard the Authority's interests in any dealings with third parties.

8. Approvals and Required Consents

8.1. The Authority shall extend all necessary support to MSI to obtain, maintain and observe all Applicable Permits/Approvals as may be necessary for MSI to fulfil all its obligations under the Agreement and/or for providing Goods and Services to the Authority. The costs of such

Applicable Permits/Approvals shall be solely borne by MSI. Authority shall provide all reasonable co-operation, support and information available with it for obtaining such Approvals.

8.2. In the event, despite the support provided by the Authority, the Applicable Permit/Approval could not be obtained by MSI within the Appointed Date, MSI and the Authority shall discuss and co-operate with one another for achieving a reasonable alternative arrangement at the earliest, so that there is minimal disruption of Work or business operations, until such Approval(s) is/are obtained. However, if for any reason, no alternative arrangement could be achieved, Parties shall mutually decide the further course of action, however, until then, MSI shall not be relieved of its obligations to provide the Services and to achieve the Service Levels.

9. MSI's Obligations

9.1. MSI's obligations shall include performance of all the Services as specified in the Scope of Work under Article [4].

9.2. of this Volume III and also under the other clauses of the RFP (Volume I, II and III), the Agreement and any amendments/changes thereof to enable the Authority to meet the objectives and operational requirements in the Agreement. It shall be MSI's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of its Bid, the RFP and the Agreement. In addition to the aforementioned, MSI shall provide Services to manage and maintain the said system and infrastructure as mentioned in RFP Volume II.

9.3. MSI shall ensure that the Services are performed through the efforts of MSI's Team/Key Personnel and are in accordance with the terms hereof and to the satisfaction of the Authority. Nothing in this RFP or the Agreement will relieve MSI from its liabilities or obligations under the RFP or the Agreement to provide the Services in accordance with the Authority's directions and requirements and as stated in the Agreement and the Bid to the extent acceptable by the Authority and MSI shall be liable for any non-performance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its team.

9.4. MSI shall be fully responsible for development /installation/ deployment and integration of all the software and hardware components and for resolving any problems/issues that may arise due to integration of components.

9.5. In addition to the aforementioned, MSI shall provide Services to manage and maintain the said system and infrastructure as mentioned in RFP Volume II.

10. Selection of MSI's Key Personnel

10.1. MSI shall ensure that MSI's Team/Key Personnel is/are competent, professional and possesses the requisite qualifications, skills and experience appropriate to the task they are required to perform under the Agreement.

10.2. The Authority reserves the right to interview and reject, if found unsuitable, the Key Personnel proposed by MSI that shall be deployed as part of the Project team.

10.3. MSI shall submit profiles of only those Key Personnel who are to be deployed on the Project.

11. Changes in MSI's Key Personnel:

11.1. The Authority reserves the right to require changes in MSI's Key Personnel, which shall be communicated to MSI.

11.2. With the prior approval of the Authority, MSI may make additions to the Project team. MSI shall provide the Authority with the resume of the proposed Key Personnel and provide such other information as the Authority may reasonably require.

11.3. In case of change in MSI's Key Personnel/team members, for any reason whatsoever, MSI shall also ensure that the exiting team members are replaced with at least equally qualified and professionally competent members.

11.4. In case of change in its team members and for ensuring a smooth transition between an outgoing team member with a new team member, MSI shall ensure a reasonable amount of time overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.

12. Exit of MSI's Key Personnel

12.1. MSI shall ensure that none of the Key Personnel and manpower exit from the Project during the first 6 (six) months of the beginning of the Project. In cases where such exit is unavoidable, MSI shall replace such Key Personnel and manpower with a suitable replacement with prior written approval from the Authority.

13. Services provided by OEMs

13.1. MSI shall ensure that the OEMs supply all Goods, including associated accessories and software required for the execution of the Works and shall support MSI in the installation, commissioning, integration and maintenance of these components during the entire period of Agreement.

13.2. MSI shall ensure that the Commercially available Off-The-Shelf (COTS) products supplied by the OEMs support MSI in the installation/deployment, integration, roll-out and maintenance of the software applications during the entire period of Agreement. It must clearly be understood by MSI that O & M of the System, Products and Services incorporated as part of System would commence from the day of Go-Live of the respective phase (of urban solution) including all the solutions proposed.

13.3. MSI would be required to explicitly display that it/they have a back-to-back arrangement for provisioning of warranty/O&M support till the end of Agreement period with the relevant OEMs. The annual maintenance support shall include patches and updates of the software, hardware components and other devices.

14. Software, Licenses obtained by MSI

14.1. All the software licenses that MSI proposes to obtain or use for the purposes of fulfilling its various obligations under the Agreement have to be genuine and should be perpetual in nature. The software licenses shall not be pirated or restricted based on location and the Authority should have the flexibility to use them for other requirements if necessary. All Applicable Permits/Approvals/software licenses shall be obtained by MSI in the name of Authority only unless the Authority expressly agrees to give its consent in writing to do otherwise.

14.2. The Authority reserves the right to review the terms of the warranty and annual maintenance agreements entered into between MSI and OEMs. If any such agreement /contract is executed, terminated and/ or amended / varied to the detriment of the Authority, then the Authority shall be informed and prior written consent of the Authority shall be taken for the agreements/ contracts, otherwise the authority shall have the right to consider this event as an " Event of default" of MSI. The MSI shall ensure that none of the components and sub-components is declared end-of-sale or end-of-support by the respective OEM at the time of submission of Bid. If the OEM declares any of the products/solutions end-of-sale subsequently, the MSI shall ensure that the same is supported by the respective OEM for Agreement period.

14.3. If a product is de-supported by the OEM for any reason whatsoever, from the date of Acceptance of System till the end of Agreement, MSI shall replace the products/solutions with an alternate that is acceptable to the Authority at no additional cost to the Authority and without causing any performance degradation.

14.4. MSI shall ensure that the OEMs provide the support and assistance to MSI in case of any problems/issues arising due to integration of components supplied by it with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, MSI shall replace the required component(s) with an equivalent or better substitute that is acceptable to Authority without any additional cost to the Authority and without impacting the performance of the solution in any manner whatsoever.

14.5. MSI shall ensure that the OEMs shall provide for all hardware servers/equipment supply and/or installation of all types, updates, patches, fixes and/or bug fixes for the firmware or software from time to time at no additional cost to the Authority.

14.6. MSI shall ensure that the OEMs for hardware, software, applications and other related equipments/accessories or MSI's trained engineers conduct the preventive maintenance on a quarterly basis and break-fix maintenance in accordance with the Good Industry Practices. MSI shall ensure that the documentation and training services associated with the components shall be provided by the OEM partner or OEM's certified training partner without any additional cost to the Authority. The training mentioned in Article 13.8 above shall be conducted using official OEM course curriculum, mapped with the hardware/software product(s) to be implemented in the Project.

14.7. MSI and their Personnel/representative shall not alter/change/replace any hardware component proprietary to the Authority and/or under warranty or during operation and maintenance of third party without prior consent of the Authority.

14.8. MSI shall keep and provide the required critical spares/components at the designated Data Centre Sites/Project locations/office locations of the Authority (Collectively "Facilities") for meeting any unforeseen eventuality and for ensuring the various compliances and obligations under the Agreement.

15. Powers of MSI's representative(s)/Key Personnel:

15.1. MSI's representative(s) shall have all the powers requisite for the execution of Scope of Work and performance of Services under the Agreement. MSI's representative(s) shall liaise with the Authority's representative for the proper coordination and timely completion of the Works and on any other matters pertaining to the Works.

15.2. MSI's representative(s) shall extend full co-operation to Authority's representative in the manner required by them for supervision/inspection/observation of the equipment/goods/material, procedures, performance, progress, reports and records pertaining to the works. MSI shall also have complete charge of MSI's Team engaged in the performance of the Works and to ensure compliance of rules, regulations and safety practice. MSI's representative(s) shall also cooperate with the other service providers/vendors of the Authority working at the Authority's office locations & field locations and DC Site. Such MSI's representative(s) shall be available to the Authority's Representative at respective Data Centre/ICCC/ Project office during the execution of Works.

15.3. MSI shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Authority in order to resolve issues and oversee implementation of the same. MSI shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.

16. Setting up of Project Office

16.1. MSI shall set up a Project Office at the location to be suggested by the Authority. The technical manpower deployed on and necessary at the Project Office for the execution of the Works shall work from the said Project Office. However, some work may be carried out by MSI from its other offices during the Agreement period.

17. Access to Data Centre Site

17.1. Data Centre Site would include Data Centre's Server Room and ICCC.

17.2. The Authority's representative upon receipt of request from MSI intimating commencement of activities at various locations shall give to MSI access to as much of the DC Sites as may be necessary to enable MSI to commence and proceed with the installation of the Works in accordance with the Program of Work or for performance of O&M services. Any reasonable

proposal of MSI for access to DC Site to proceed with the installation of any Works in accordance with the Program of Work shall be considered for approval and shall not be unreasonably withheld by the Authority. Such requests shall be made to the Authority's representative in writing at least 7 (seven) days prior to start of the Work.

18. Commencement of Installation

18.1. MSI shall co-ordinate with the Authority and stakeholders for setting up of ICCC as per Scope of Work mentioned in RFP Volume II document.

18.2. As per guidelines of Telecom Regulatory Authority of India (TRAI), resale of bandwidth connectivity is not allowed. In such a case tripartite agreement should be entered into between the Authority, MSI and internet/Network service provider(s). Tri partite agreement to be provided later.

18.3. The plan and design documents thus developed shall be submitted by MSI for approval by the Authority

18.4. After obtaining the approval from the Authority, MSI shall commence the installation of products.

19. Reporting Progress

19.1. MSI shall monitor progress of all the activities related to the execution of the Agreement and shall submit to the Authority progress reports with reference to all related work, Milestones and their progress during the implementation phase.

19.2. Formats for all above mentioned reports and their dissemination mechanism shall be discussed and finalized along with Project Plan. The Authority on mutual agreement between both Parties may change the formats, periodicity and dissemination mechanism for such reports.

19.3. Periodic meetings shall be held between the representatives of the Authority and MSI once in every 15 days during the implementation phase to discuss the progress of implementation. After the implementation phase is over, the meeting shall be held as an ongoing basis, as desired by Authority, to discuss the performance of the Agreement.

19.4. MSI shall ensure that the respective solution teams involved in the execution of Works are part of such meetings.

19.5. Several review committees involving representative of the Authority and senior officials of MSI shall be formed for the purpose of the Project. These committees shall meet at regular intervals, as decided by the Authority at a later stage, to oversee the progress of the implementation of the Project.

19.6. All the Goods, Services and manpower to be provided / deployed by MSI under the Agreement and the manner and speed of execution and maintenance of the Work and Services are to be conducted in a manner to the satisfaction of Authority's representative in accordance with the Agreement.

20. Inspection by the Authority:

20.1. The Authority reserves the right to inspect and monitor/assess the progress/performance of the Works/Services/Project at any time during the course of the Agreement. The Authority may demand and upon such demand being made, MSI shall provide documents, data, material or any other information which the Authority may require, to enable it to assess the progress/performance of the Works/Services/Project.

21. Monitoring of MSI's performance

21.1. At any time during the course of the Agreement, the Authority shall have the right to conduct, either itself or through another agency as it may deem fit, an audit to monitor the performance by MSI of its obligations/functions in accordance with the standards committed to or required under the Agreement and MSI undertakes to cooperate with and provide to the Authority or to the said agency any Document(s) and other details as may be necessary/required by them for this purpose. Such audit shall not include 'MSI's books of accounts.

21.2. Should the rate of progress of the Works or any part of it, at any time falls behind the stipulated time for completion of any Milestone related to the Works or is found to be too slow to ensure completion of the Works by the stipulated time, or is in deviation to Tender requirements/standards, the Authority's representative shall so notify MSI in writing.

21.3. MSI shall send reply to the written notice giving details of the measures it proposes to take to expedite the progress so as to complete the Works by the prescribed time or to ensure compliance to RFP requirements/Agreement. MSI shall not be entitled to any additional payment for taking such steps. If at any time it should appear to the Authority or Authority's representative that the actual progress of the Works does not conform to the Approved Plan, MSI shall produce at the request of the Authority's representative a revised Plan showing the modification to the Approved Plan necessary to ensure completion of the Works within the time for completion or steps initiated to ensure compliance to the stipulated requirements.

21.4. The submission seeking approval by the Authority or its representative of such Plan shall not relieve MSI of any of its obligations or responsibilities under the Contract

21.5. In case during execution of Works, the progress falls behind schedule or does not meet the Tender requirements, MSI shall deploy extra manpower/resources to make up the progress or to meet the RFP/Agreement requirements. Plan for deployment of extra manpower/resources shall be submitted to the Authority for its review and approval. All time and cost effect in this respect shall be borne, by MSI within the Agreement value.

22. Knowledge of Data Centre's Server Room and ICCC

22.1. The Authority shall grant MSI access to the Data Centre's Server Room and ICCC for inspection of such facilities before commencement of installation. Upon such inspection a plan shall be drawn up mutually by the Parties.

22.2. MSI shall be deemed to have familiarized itself with the knowledge of the Data Centre's Server Room, /ICCC and its surroundings and information available in connection therewith and to have satisfied itself the form and nature thereof including, the data contained in the Bidding Documents, the physical and climatic conditions, the quantities and nature of the Works and materials necessary for the completion of the Works, the means of access, etc. and in general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting its obligations and responsibilities therewith under the Agreement and its ability to perform it. However, if during pre-installation survey/during delivery or installation, MSI detects physical conditions and/or obstructions affecting the Work, MSI shall take all measures to overcome them.

23. Project Plan

23.1. Within 15 (fifteen) calendar days of Effective Date of the Agreement/issuance of letter of intent/ Letter of Award, MSI shall submit to the Authority for its approval a detailed Project Plan with details of the Project showing the sequence, procedure and method in which it proposes to carry out the Works. The Plan so submitted by MSI shall conform to the requirements and timelines specified in the Agreement. The Authority and MSI shall discuss and agree upon the work procedures to be followed for effective execution of the Works, which MSI intends to deploy and shall be clearly specified. The Project Plan shall include but not be limited to Project organization, communication structure, proposed staffing, roles and responsibilities, processes and tool sets to be used for quality assurance, security and confidentiality practices in accordance with Good Industry Practices and delivery schedule in accordance with the Agreement. Approval by the Authority's Representative of the Project Plan shall not relieve MSI of any of its duties or responsibilities under the Agreement.

23.2. If MSI's Work Plans necessitate a disruption/shutdown in Authority's operation, the Plan shall be mutually discussed and developed so as to keep such disruption/shutdown to the barest unavoidable minimum. Any time and cost arising due to failure of MSI to develop/adhere such a Work Plan shall be to its account.

24. Adherence to safety procedures, rules regulations and restriction

24.1. MSI's Team shall comply with the provision of all Applicable Laws including labour laws, rules, regulations and notifications issued there under from time to time. All safety and labour laws enforced by statutory Government Agencies and by Authority shall be applicable in the performance of this Agreement and MSI's Team shall abide by these Applicable Laws.

24.2. Access to the Data Centre's Server Room, ICCC shall be strictly restricted. No access to any person except the essential members of MSI's Team who are duly authorized by the Authority and are genuinely required for execution of the Works or for carrying out management/maintenance shall be allowed entry. Even if access is required to be provided to

such unauthorized personnel of MSI, the same shall be with prior approval of Authority's Representative and restricted to the pertaining equipment of the Authority on a need basis only. MSI shall maintain a log of all activities carried out by each of its team/ Key Personnel.

24.3. No staff of MSI, except the essential staff who have genuine work-related need, should be given access to the facilities. All such access should be logged in a loss free manner for permanent record with unique biometric identification of the staff to avoid misrepresentations or mistakes.

24.4. MSI shall take all measures necessary or proper to protect its Key Personnel, Work and facilities and shall observe all reasonable safety rules and instructions. MSI's Team shall adhere to all security requirement/regulations of the Authority during the execution of the Work. Authority's employees shall also be required to comply with safety procedures/policy.

24.5. MSI shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation related to the Works/Project and shall take all necessary emergency control steps to avoid such abnormal situations.

25. Statutory Requirements

25.1. During the tenure of the Agreement nothing shall be done by MSI or its team including Consortium Members in contravention of Applicable Laws or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep Authority indemnified in this regard.

26. Authority's Obligations

26.1. Authority or its nominated representative shall act as the nodal point for implementation of the Agreement and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to MSI.

26.2. Authority shall ensure that timely approvals are provided to MSI as and when required, which may include approval of Project Plans, implementation methodology, design documents, specifications, or any other document necessary in fulfilment of the Agreement.

26.3. The Authority's representative shall interface with MSI, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Agreement. Authority shall provide adequate cooperation in providing details, coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Authority is proper and necessary.

26.4. Authority may provide on MSI's request, particulars/information/or documentation that may be required by MSI for proper planning and execution of the Works and for providing Services covered under the Agreement and for which MSI may have to coordinate with respective vendors.

26.5. Authority shall provide to MSI only sitting space and basic infrastructure not including, stationery and other consumables at the Authority's office locations.

26.6. Readiness of the Project site: Authority hereby agrees to make the Project sites ready as per the agreed specifications, within the agreed timelines. Authority agrees that MSI shall not be in any manner liable for any delay arising out of Authority's failure to make the site ready within the stipulated period.

27. Payments

27.1. Authority shall make payments to MSI at the times and in the manner set out in the Payment schedule as specified under Payment Milestones in RFP Volume II subject to the penalties as mentioned under Article 59 and 60 of Section C- Service Levels of Volume III. Authority shall make all efforts to make payments to MSI within 30 (thirty) days of receipt of invoice(s) and all necessary supporting documents.

27.2. All payments agreed to be made by Authority to MSI in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to the Agreement and/or the Services.

27.3. No invoice for extra work/change order on account of change order shall be submitted by MSI unless the said extra work/change order has been authorized/approved by the Authority in writing in accordance with Change Control Note (as mentioned under Annexure I of this volume of the RFP)

27.4. In the event of Authority noticing at any time that any amount has been disbursed wrongly to MSI or any other amount is due from MSI to the Authority, the Authority may without prejudice to its rights recover such amounts by other means after notifying MSI or deduct/adjust such amount from any payment falling due to MSI. The details of such recovery, if any, shall be intimated to MSI. Similarly, MSI shall also be entitled to receive the payment of any undisputed amount under subsequent invoice for any amount that has been inadvertently omitted in previous invoice on the part of the Authority or MSI.

27.5. All payments to MSI shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under Applicable Laws. All costs, damages or expenses which Authority may have paid or incurred, for which under the provisions of the Agreement, MSI is liable, the same shall be deducted/set off by Authority from any payments/dues payable to MSI. All payments to MSI shall be made after making necessary deductions as per terms of the Agreement and recoveries towards facilities, if any, provided by the Authority to MSI on chargeable basis.

28. Intellectual Property Rights

28.1. Except for any ownership rights in any intellectual property that have been expressly granted to the MSI under the Agreement, the Authority shall exclusively retain all rights, title and interest

in and to any third-party licensed technology, including all worldwide technology and Intellectual Property Rights which has been used for the Project.

28.2. Preservation of notice: MSI shall not remove, efface or obscure any copyright notices or other proprietary notices or legends from any licensed technology or materials provided under the Agreement, and shall reproduce all such notices and legends when incorporating licensed technology or materials into any integrated products.

28.3. Authority shall exclusively own and have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of the Agreement, including but not limited to all processes, software, technology, processes, methodologies, process improvements, ideas, concepts, products, specifications, reports and other documents which have been newly created and developed by MSI or its Subcontractor solely during the performance of Services/execution of the Agreement (hereinafter "Developed Materials") and for the purposes of inter-alia use during the Project. MSI shall have no rights in such Developed Materials and undertakes to promptly disclose to the Authority all such Intellectual Property Rights/Developed Materials created during the performance of the Services/Works. MSI shall promptly assign, completely and in writing to Authority any such Developed Materials and shall execute all such agreements/documents and obtain all permits and approvals that may be necessary to perfect Authority's rights in the Developed Materials. It is a fundamental provision of the Agreement that MSI will not violate or breach any Intellectual Property Rights of the Authority. Should MSI use or provide unauthorized access to the Developed Materials or breach any of the confidentiality of these Developed Materials, the Authority shall have the right to terminate the Agreement forthwith and seek injunctive and other equitable reliefs.

28.4. Pre-existing work: All Intellectual Property Rights existing prior to the Effective Date of the Agreement shall belong to the Party that owned such rights immediately prior to the Effective Date. Subject to the foregoing, the Authority will also have rights to use and copy all Intellectual Property Rights, process, specifications, reports and other document, drawings, manuals etc. provided or used by the MSI / Consortium / Sub-Contractors as part of the Scope of Works under the Agreement for the purpose of the Agreement on non-exclusive, non-transferable, perpetual, royalty-free license to use basis.

28.5. Commercially off the Shelf (COTS): / third party products: All COTS products and related solutions and fixes provided pursuant to the Agreement shall be licensed according to the terms of the license agreement packaged with or otherwise applicable to such products. Such licenses shall be brought on behalf of and in the name of the Authority or mentioning the Authority as the end user of such licenses. MSI shall be responsible for arranging any licenses associated with products. Unless otherwise specifically restricted by the licensing terms of the COTS products, all

Intellectual Property Rights in any development/enhancement/customization etc. done on the COTS products pursuant to the Agreement shall be owned by the Authority.

28.6. Further, the MSI shall be obliged to ensure that all Applicable Permits which are, inter-alia, necessary for use of the Deliverables, Goods, Services, applications works etc. provided/undertaken by the MSI / Consortium / Sub-Contractors under the Agreement shall be acquired in the name of the Authority and to use such permits till the term of such permits on behalf of the Authority solely for the purpose of execution of any of its obligations under the terms of the Agreement. However, even subsequent to the Term/expiry of the Agreement, such Approvals/Applicable Permits shall endure to the exclusive benefit of the Authority.

28.7. MSI shall not copy, reproduce, translate, adapt, vary, modify, disassemble, decompile or reverse engineer or otherwise deal with or cause to reduce the value of the Products except as expressly authorized by Authority in writing.

28.8. In the event MSI's Intellectual Property Rights are embedded in the Deliverables, MSI grants to Authority a non-exclusive, non-transferable, irrevocable, royalty free and perpetual license for the Authority's internal use of the same as part of the Deliverables in which they are embedded. Nothing contained in this Agreement shall be construed to grant the Authority any right to use or exploit such MSI's Intellectual Property Rights in its stand-alone form separate and apart from the Deliverables.

29. Taxes

29.1. MSI shall bear all personal taxes levied or imposed on its Personnel, or any other member of MSI's Team, etc. on account of payment received under the Agreement. MSI shall bear all corporate taxes, levied or imposed on MSI on account of payments received by it from the Authority for the Work done/Services provided under the Agreement.

29.2. MSI shall bear all outgoings, cess, taxes (including municipal taxes), levies, import duties, fees (including any license fees) rates and other user charges (including those applicable for existing utility connections and any other dues, assessments or outgoings payable in respect of implementation of the Project, (including new utility connections obtained by it, if any) or in respect of the materials stored therein which may be levied by any Government Authority as may be levied or imposed on MSI under or in relation to the Agreement and under the Applicable Laws including but not limited to Goods & Services Tax (GST) (including any IGST,CGST & SGST) and all Income Tax levied under Indian Income Tax Act – 1961 or any amendment thereof during the entire Agreement period and thereafter till such time the liability relates to MSI's obligation under the Agreement, i.e., on account of Goods supplied and Services rendered and payments received by it from the Authority under the Agreement. It shall be the responsibility of MSI to submit to the concerned Indian authorities the returns and all other connected documents required for this purpose. MSI shall also provide the Authority such information, as it may be required in regard to MSI's details of payment made by the Authority

under the Agreement for proper assessment of taxes and duties as may be imposed under Applicable Laws. The amount of tax withheld by the Authority shall at all times be in accordance with Indian Tax Law or any other Government Agency and the Authority shall promptly furnish to MSI original certificates for tax deduction at source and paid to the Tax authorities.

29.3. MSI agrees that it shall comply with the Indian Income Tax Act or any other Applicable Laws in force from time to time and pay Indian Income Tax or other applicable taxes and duties, as may be imposed/ levied on them by the Indian Income Tax Authorities/ Government Authorities, for the payments received by them for the Works performed under the Agreement.

29.4. MSI shall fully familiarize themselves about the taxes applicable to the Bidders under Applicable Laws on the amounts payable by the Authority to them under the Agreement. All such taxes must be included by Bidders in their financial proposal. (Bidder to find out applicable taxes for the components being proposed.)

29.5. Should MSI fail to submit returns/pay taxes in times as stipulated under applicable Indian/State Tax Laws, and consequently, any interest or penalty is imposed by the concerned authority on Authority/MSI, MSI shall bear the same. MSI shall indemnify Authority from and against any and all claims, liabilities, losses or damages arising out of the Agreement or in connection with such taxes, including interest and penalty levied/assessed by any such tax authority against the Authority/MSI.

29.6. The goods and services tax (GST) on Works (central or state) if levied on supplies made from indigenous vendors for the Works shall be borne by MSI within the Agreement Value.

29.7. The Authority shall if so, required by Applicable Laws in force, at the time of payment, deduct income tax payable by MSI at the rates in force, from the amount due to MSI and pay to the concerned tax authority directly.

30. Indemnity

30.1. The MSI hereby indemnifies and agrees and undertakes that from the Effective Date and thereafter during the Term and even after expiry of the Term, it shall keep indemnified and otherwise saved and harmless the Indemnified Parties from and against any and all third party claims for Liabilities, demands made against and/or loss caused and/or the damages suffered and/or cost, charges/expenses incurred or put to and/or penalty levied and/or any claim due to injury or death of any person and/or loss or damage caused or suffered to any property owned or belonging to Authority, their agents and employees or third party as a result of any acts, deeds or thing done or omitted to be done by MSI (or any personnel, agent, representative, or Sub-Contractors thereof) or on the failure of the MSI to perform any of its statutory duty and/or obligations or failure or negligence on the part of MSI to comply with any applicable Laws applicable to the MSI as an IT Service Provider or applicable Permits or as a consequence of any notice, show cause notice, action, suit or proceedings, given, initiated, filed or commenced by any

third party (including end users or Government Authority) or as a result of any failure or negligence or default of the MSI or the Sub-Contractors and/or their invitees as the case may be, in connection with or arising out of the Agreement or arising out of or in connection with MSI's use and occupation of the Site located thereon. Notwithstanding anything to the contrary contained herein, in no event shall any of the Indemnified Parties be liable to indemnify the MSI for any matter arising out of or in connection with the Agreement in respect of any indirect or consequential loss, including loss of profit, suffered by the MSI.

30.2. The indemnity provisions herein and under the Agreement shall survive expiry or earlier termination of the Agreement.

31. Notice and Contest of Claims/Demands

31.1. In the event that any Party hereto receives claims or demands from a third party in respect of which it is entitled to the benefit of an indemnity under Article 31 or in respect of which it is entitled to reimbursement (the "'Indemnified Party"), it shall notify the other Party responsible for indemnifying such claim hereunder (the "Indemnifying Party") within 15 (fifteen) days of receipt of the claim and/or shall not settle or pay the claim/ demand without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim, it may conduct the proceedings in the name of the Indemnified Party and at its (Indemnifying Party's) risk, costs and expense. The Indemnified Party shall provide all cooperation and assistance in contesting any claim and shall sign all such writings and documents as the Indemnifying Party may reasonably require.

32. Representations and Warranties

32.1. **Representations and Warranties of MSI:** The MSI hereby represents and warrants to Authority that as on the Effective Date (which representations and warranties shall be continuing representations and warranties and deemed to have been repeated on each day of the term of the Agreement):

a. It is duly organized and validly existing under the laws of India and that it has been in continuous existence since incorporation;

b. It has full power and authority to execute, deliver and perform its obligations under the Agreement and to carry out the Project;

c. It has taken all necessary corporate and other actions under Applicable Laws and its Memorandum and Articles of Association to authorize the execution, delivery and performance of its obligations under the Agreement;

d. It has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities, or any order, writ, injunction or decree of any court or any legally binding order of any governmental authority, which in

the aggregate have or may have Material Adverse Effect on its ability to perform its obligations and duties under the Agreement and undertake the Project in terms of the Agreement;

e. It has the technical and financial standing and capacity to undertake and complete the Project;

f. All the employees, officials, personnel, agents, contractors and/ or Sub-Contractors utilized/ proposed to be by the MSI for the purposes of the Project, possess/ shall possess the relevant technical and financial standing and capacity to undertake and complete the Project;

g. The obligations under the Agreement shall be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;

h. The information furnished in the Bid by the MSI (and as updated on before the date of the Agreement) is true and accurate in all respects;

i. The execution, delivery and performance of the Agreement, does not and will not conflict with, or result in the breach of, or constitute a default under, or affect performance required by any of the provisions of its Memorandum and Articles of Association or any Applicable Laws or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets are bound or affected;

j. There are no actions, suits, proceedings or investigations pending, or, to the best of the MSI's knowledge, threatened against it before any court or before any judicial, quasi-judicial or other authority, the outcome of which may result in the breach of or constitute a default of the MSI under the Agreement or which individually or in the aggregate may result in any Material Adverse Effect on its business, properties, assets or its condition, financial or otherwise, or in any impairment of its ability to perform its obligations under the Agreement;

33. Design Warranties

33.1. Without prejudice to the generality of the foregoing provisions of this Article 33, the MSI represents and warrants that all work performed by the MSI and Sub-Contractor shall be executed with due care and diligence, in conformity with the Agreement and free of defects and deficiencies, including that:

33.2. The design and engineering of the Project shall satisfy the minimum requirements set forth in the Agreement, and shall be free of defects and deficiencies. Such engineering and design shall be such that the Project shall function properly in accordance with the terms of the Agreement and the Specifications and shall meet all design, engineering, safety, and operability criteria as specified in the Agreement;

33.3. The Project shall be in accordance with the designs, drawings and Specifications prepared in accordance herewith and approved by Authority, in accordance with the terms hereof, and all

workmanship of the MSI and Sub-Contractors shall be in full conformity with the requirements of the Agreement and free of defects and deficiencies (including latent defects and deficiencies);

33.4. All plant, equipment and materials supplied under the Agreement shall be new, non-refurbished, unused and recently manufactured; shall not be nearing end of sale/End of support; and shall be supported by the MSI and respective OEM along with Service and spares support to ensure its efficient and effective operation for the entire duration of the Agreement. They shall be in full conformity with the Specifications and other requirements of the Agreement, shall be of specified quality and where quality is not specified then of suitable quality for the purposes and uses intended and shall be free of defects and deficiencies (including latent defects);

33.5. Without prejudice to the generality of the foregoing, the entire Project shall be designed, engineered, constructed, and otherwise implemented and developed so as to ensure that the Assets and the Project Utilities, meet the Design Life.

33.6. The MSI's obligation to design, engineer, procure and construct the Project correctly and in accordance with the Agreement and its warranties set forth above shall not be reduced or affected by Authority's approval or grant of NOC, in respect thereof, including for any designs, plans, phasing, drawings or specifications thereof.

33.7. All Goods supplied by the MSI under the Agreement shall be maintained through Annual Maintenance Contracts (AMC), with the original equipment manufacturer (OEM), outlining regular check-ups and routine work to regulate the performance and quality output. MSI shall enter into such AMCs for an efficient upkeep of the equipment and installations. MSI will indemnify the Authority that all the machines and equipment will remain functional during the contractual period.

33.8. Technical support for entire system shall be provided by MSI/ the respective OEMs for the period of Agreement. The technical support shall also include all upgrades, updates and patches to the software applications.

33.9. The MSI further warrants that the Goods supplied under the Agreement shall be free from all encumbrances and defects/faults arising from design, material, manufacture or workmanship (except insofar as the design or material is required by the Authority's specifications) or from any act or omission of the MSI, that may develop under normal use of the supplied Goods in the conditions prevailing at the respective Data Centre Sites/ city locations.

33.10. The Authority shall promptly notify the MSI in writing of any claims arising under this warranty.

33.11. Upon receipt of such notice, the MSI shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Authority may have against the MSI under the Agreement.

33.12. If the MSI, having been notified, fails to remedy the defect(s) within a reasonable period, the Authority may proceed to take such remedial action as may be necessary, at the MSI's risk and

expense and without prejudice to any other rights which the Authority may have against the MSI under the Agreement.

34. Representations & Warranties of Authority;

Authority hereby represents and warrants to the MSI that as on the Effective Date;

34.1. It is duly organized and validly existing under the laws of India and has been in continuous existence since its constitution;

34.2. It has full power and authority to execute, deliver and perform its obligations under the Agreement;

34.3. Authority has power and authority to grant the Lease Rights under and pursuant to this Development Agreement;

34.4. It has taken all necessary actions under Applicable Laws to authorize the execution, delivery and performance of the Agreement;

34.5. The obligations of Authority under the Agreement will be legally valid, binding and enforceable against Authority in accordance with the terms of the Agreement;

34.6. It has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Authority which may result in any Material Adverse Effect or impairment of Authority's ability to perform its obligations and duties under the Agreement;

34.7. To the best of Authority's knowledge and belief, there are no actions, suits, proceedings or investigations pending against it, before any court or Government Authority in relation to the Project, the outcome of which may result in the breach of or constitute a default of Authority under the Agreement, or result in impairment of Authority's ability to perform its obligations and duties under the Agreement.

35. Disclosure

35.1. In the event at any time after the date hereof, any event or circumstance comes to the attention of MSI that renders any of its abovementioned representations or warranties untrue, inaccurate or incorrect, then such Party shall immediately notify the Authority of the same. Such notification shall not have the effect of (a) remedying any breach of the representation or warranty that has been found to be untrue, inaccurate or incorrect; or (b) adversely affecting the rights of Authority or releasing any obligation of MSI under the Agreement.

36. Term and Extension of the Agreement

36.1. The Agreement Term/period shall commence from the date of signing of Agreement or issuance of letter of intent/letter of award, whichever is earlier, and shall remain valid for 60 (Sixty) months from the date of start of O&M of the final phase of implementation milestone as

defined in Section 2.4 of Part 1, Volume II, (hereinafter "Term"). MSI shall complete all Works stipulated under the Agreement within the time period specified under this Article.

36.2. If any delay occurs due to circumstances beyond control of MSI such as strikes, lockouts, fire, accident, defective materials, delay in obtaining Applicable Permits/Approvals or any cause whatsoever beyond the reasonable control of MSI, a reasonable extension of time/ Term, upon a request being made by MSI in writing at least three months in advance shall be granted by the Authority in writing.

36.3. Notwithstanding what has been stated under Article 34.2, the Authority shall reserve the sole right to grant any such extension to the Term above mentioned and shall notify in writing to MSI, at least 3 (three) months before the expiration of the Term hereof, whether it shall grant MSI an extension of the Term or not. The decision to grant or refuse the extension of the Term shall be at the Authority's sole discretion and such extension of the Agreement, if any, shall be as per terms agreed mutually between the Parties.

36.4. Where the Authority is of the view that no further extension of the Term should be granted to MSI, the Authority shall notify MSI of its decision at least 3 (three) months prior to the expiry of the Term. Upon receipt of such notice, MSI shall continue to perform all its obligations hereunder till the duration of the Term. During the notice period, the Authority shall either appoint an alternative agency/Replacement Service Provider/reappoint MSI for a short extension or create its own infrastructure to operate such Services as are provided under the Agreement.

36.5. In the event of any failure or delay by Authority to hand over the right of way to the Site or Approvals to the MSI, such failure or delay shall in no way affect or vitiate the Agreement or alter the character thereof or entitle the MSI to damages or compensation thereof, but in any such case, Authority may grant such extension or extensions of the Completion Date, as may be considered reasonable.

37. Dispute Resolution

37.1. In case, a dispute is referred to arbitration, the arbitration shall be under the Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof.

37.2. If during the subsistence of the Agreement or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, breach or any alleged breach of any provision of the Agreement or regarding any question, including as to whether the termination of the Agreement by one Party hereto has been legitimate/valid, the Parties hereto shall endeavour to settle such dispute amicably through joint discussion and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996. However, despite such efforts, if the dispute, differences or controversy still remains unresolved for a period of 30 days of its having been raised, then the same shall be referred to Arbitration.

37.3. The Arbitration proceedings shall be held in the following manner:

a. The Arbitration proceedings shall be held in UT Lakshadweep, India.
b. The Arbitration proceeding shall be governed by the Arbitration and Conciliation Act, 1996 and any re-enactment(s) and/or modification(s) thereof and of the Rules framed there under shall apply to arbitration proceedings.
c. The proceedings of Arbitration shall be in English language.
d. Any dispute, difference or question to be referred to arbitration shall be initially referred to a mutually acceptable sole arbitrator. In case the Parties are unable to agree upon the sole arbitrator, then each Party shall appoint one arbitrator each and the two arbitrators so appointed shall appoint the third arbitrator, who shall be the Presiding Arbitrator. The consortium of the three Arbitrators shall form the Arbitral Tribunal.
e. In case, a Party fails to appoint an arbitrator within 30 days from the receipt of the request to do so by the other Party or if the two Arbitrators so appointed fail to agree on the appointment of third Arbitrator within 30 days from the date of their appointment upon request of a party, the Chief Justice of the Kerala High Court or any person or institution designated by him shall appoint the Arbitrator/Presiding Arbitrator upon request of one of the Parties.
f. Any letter, notice or other communications dispatched to MSI relating to either arbitration proceeding or otherwise whether through the post or through a representative on the address last notified to the Authority by MSI shall be deemed to have been received by MSI although returned with the remarks, refused 'undelivered' where about not known or words to that effect or for any other reasons whatsoever
g. If the Arbitrator so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the Authority to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both Parties consent for the same; otherwise, he shall proceed de novo.
h. It is a term of the Agreement that the Party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
i. It is also a term of the Agreement that neither Party to the Agreement shall be entitled for any interest on the amount of the award.
j. The Arbitrator shall give reasoned award and the same shall be final, conclusive and binding on the Parties.
k. The fees of the arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the Parties.

38. Conflict of interest

38.1. MSI shall disclose to the Authority in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for MSI or MSI's Team) in the course of providing Goods and performing the Works/Services as soon as practical after it becomes aware of that conflict.

39. Publicity

39.1. MSI shall not make or permit to be made a public announcement or media release about any aspect of this Agreement unless the Authority first gives MSI its written consent.

40. Force Majeure

40.1. The MSI or Authority, as the case may be, shall be entitled to initially suspend the performance of its respective obligations under the Agreement to the extent that the MSI or Authority, as the case may be, is unable to render such performance due to a Force Majeure Event.

40.2. In the Agreement, no event or circumstance and/or no combination of events and circumstances shall be treated as a Force Majeure Event unless it satisfies all the following conditions

a. materially and adversely affects the performance of an obligation;
b. are beyond the reasonable control of the affected Party;
c. such Party could not have prevented or reasonably overcome with the exercise of Good Industry Practice or reasonable skill and care;
d. do not result from the negligence or misconduct of such Party or the failure of such Party to perform its obligations hereunder; and
e. which, by itself or consequently, has an effect described in Article "**Dispute Resolution Point 1**".

40.3. "**Force Majeure Event"** includes the following events and/ or circumstances to the extent that they or their consequences satisfy the requirements set forth in Article "**Dispute Resolution Point 2**":

a. war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy in each case involving or directly affecting the Project Land;
b. revolution, riot, insurrection or other civil commotion, act of terrorism or sabotage in each case within the Project Land or near vicinity;
c. nuclear explosion, radioactive or chemical contamination or ionizing radiation directly affecting the Project Land and/or the Assets, unless the source or cause of the explosion, contamination, radiation or hazardous thing is brought to or near the Project Land by the Developer or any Affiliate of the Developer or any Sub-Contractor of the Developer or any of their respective employees, servants or agents;
d. strikes, working to rule, go-slows and/or lockouts which are in each case widespread, nationwide or political and affects the Project Land;

e. any effect of the natural elements, including lighting, fire, earthquake, unprecedented rains, tidal wave, flood, storm, cyclone, typhoon or tornado, within the Project Land or near vicinity;

f. explosion (other than a nuclear explosion or an explosion resulting from an act of war) within the Project Land or near vicinity;

g. epidemic or plague within the Project Land or near vicinity; and

h. any event or circumstances of a nature analogous to any events set forth in Article Dispute Resolution Point 3 (a) to Dispute Resolution Point 3 (g) within the Site or near vicinity.

It is clarified that non-availability of any plant, equipment, materials or financial resources for any reason whatsoever shall not be deemed to be an event of Force Majeure.

40.4. Force Majeure shall not include any events caused due to acts/omissions of MSI resulting in a breach/contravention of any of the terms of the Agreement and/or MSI's Bid. It shall also not include any default on the part of MSI due to its negligence or failure to implement the stipulated/proposed precautions, as were required to be taken under the Agreement.

40.5. In such an event, the affected Party shall inform the other Party in writing within 5 (five) days of the occurrence of such event. Any failure or lapse on the part of MSI in performing any obligation as is necessary and proper, to negate the damage due to projected Force Majeure Events or to mitigate the damage that may be caused due to the above-mentioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute Force Majeure, as set out above.

40.6. In case of a Force Majeure Event, all Parties shall endeavour to agree on an alternate mode of performance in order to ensure the continuity of the Service/ Works and implementation of the obligations of a Party under the Agreement and to minimize any adverse consequences of Force Majeure.

40.7. If at any time, during the Term, the performance in whole or in part by either Party of any obligation under the Agreement is prevented or delayed by reason of any Force Majeure Event, and notice of the happening of any such event is given by the affected Party to the other Party in accordance with Article 38, neither Party shall by reason of such event, be entitled to terminate the Agreement nor shall either Party have any claim for damages against the other in respect of such non-performance or delay in performance and the Project (or the parts so affected) due to such Force Majeure Event and the Agreement shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of the Authority as to whether the Project have been so resumed or not shall be final and conclusive.

41. Delivery

41.1. MSI shall bear the cost for packing, transport, insurance, storage and delivery of all the Goods for implementation of the Project in (Kavaratti)" at all locations identified by the Authority in (Kavaratti).

41.2. The Goods under the Agreement shall conform to the standards mentioned in the RFP, and when no applicable standard is mentioned, to the authoritative standards, such standard shall be approved by Authority.

41.3. MSI shall only procure the hardware and software after approvals from a designated committee/Authority.

41.4. MSI's Key Personnel shall have the required experience and proper qualifications to perform the Services, and the Authority shall have the right to reject any such Personnel if found unfit by Authority to provide the Services. MSI shall also impart the appropriate training to its engineers and Personnel on the current and emerging technologies, concepts and configurations in order to provide the Services in a more efficient manner.

42. Insurance

42.1. The Goods supplied under the Agreement shall be comprehensively insured by MSI at its own cost, against any loss or damage, for the entire period of the Agreement. MSI shall submit to the Authority, documentary evidence issued by the insurance company, indicating that such insurance has been taken.

42.2. MSI shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the Goods and also the charges like transportation charges, GST etc. that may be applicable till the Goods are delivered at the respective sites of installation shall also be solely borne by MSI.

42.3. MSI shall take out and maintain at its own cost, on terms and conditions approved by the Authority, all necessary insurance against the risks, and for the coverages, as specified below:

a. at the Authority's request, shall provide evidence to the Authority showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid; and

b. Employer's liability and workers' compensation insurance in respect of the Personnel of the MSI, in accordance with the relevant provisions of the Applicable Laws including personal accident and death in respect of its Personnel or any other insurance as may be appropriate and the proof of such insurances shall be provided to Authority, when so requested. Notwithstanding the above, the Key Personnel of MSI shall be and shall remain the employees of MSI and MSI alone shall be responsible for the payment of all dues with respect to them or meeting any statutory obligations under the Applicable Laws with respect to such Personnel.

43. Transfer of Ownership

43.1. All Commercially off the Shelf (COTS) products/ Open-Source Solutions and related solutions and fixes provided pursuant to this Agreement shall be licensed according to the terms of the license agreement packaged with or otherwise applicable to such products. Such licenses shall be brought on behalf of and in the name of Authority or mentioning Authority as the end user of such

licenses. MSI shall be responsible for arranging any licenses associated with products. "Product" means any computer code, web-based services, or materials comprising commercially released, pre-release or beta products (whether licensed for a fee or no charge) and any derivatives of the foregoing which are made available to the Purchaser for license which is published by product owner or its affiliates, or a third party. "Fixes" means product fixes that are either released generally (such as commercial product service packs) or that are provided to you when performing services (such as workarounds, patches, bug fixes, beta fixes and beta builds) and any derivatives of the foregoing. Unless otherwise specifically restricted by the Licensing Terms of the COTS products/ Open-Source Solutions, all intellectual property rights in any development/ enhancement/ customization etc. done on the COTS products/ Open-Source Solutions pursuant to this Agreement shall be owned by Authority. Further, the MSI shall be obliged to ensure that all approvals, registrations, licenses, permits and rights which are, inter-alia, necessary for use of the Deliverables, goods, services, applications, services etc. provided by the MSI / Consortium / subcontractors under this Agreement shall be acquired in the name of the Authority and MSI shall have the non-exclusive, limited right to use such licenses till the Term on behalf of the Authority solely for the purpose of execution of any of its obligations under the terms of this Agreement. However, subsequent to the term of this Agreement, such approvals etc. shall endure to the exclusive benefit of the Authority.

43.2. Forthwith upon expiry or earlier termination of the Agreement and at any other time on demand by the Authority, MSI shall deliver to the Authority all Documents provided by or originating from the Authority and all Documents produced by or from or for MSI in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. MSI shall not, without the prior written consent of the Authority store, copy, distribute or retain any such Documents.

44. Exit Management Plan

44.1. An Exit Management plan shall be furnished by MSI in writing to the Authority within 90 (ninety) days from the date of signing of the Agreement, which shall deal with at least the following aspects of exit management in relation to the Agreement as a whole and in relation to the Project implementation, and Service Level monitoring:

a. a detailed program of the transfer process that could be used in conjunction with a Replacement Service Provider including details of the means to be used to ensure continuing provision of the Services throughout the transfer process or until the cessation of the Services and of the management structure to be used during the transfer;

b. plans for provision of contingent support to Project and Replacement Service Provider for a reasonable period after transfer;

c. Exit Management Plan in case of normal termination of Agreement period;

d. Exit Management Plan in case of any eventuality due to which Project is terminated before the Agreement period; and

e. Exit Management Plan in case of termination of MSI.

44.2. Exit Management Plan at the minimum shall adhere to the following:

a. 3 (Three) months of the support to Replacement Service Provider post termination of the Agreement.

b. All reasonable assistance necessary to ensure that an orderly transfer is achieved with minimal disruption, to Replacement Service Provider, of the Services, functions and operations that were provided prior to termination of Agreement/exit of MSI from Project, complete handover of the planning documents, bill of materials, functional requirements specification, technical specifications of all equipment, change requests if any, sources codes, wherever applicable, reports, documents and other relevant items to the Replacement Service Provider/Authority; and

c. Certificate of acceptance from authorized representative of Replacement Service Provider issued to MSI on successful completion of handover and knowledge transfer.

44.3. In the event of termination or expiry of the Agreement, Project implementation, or Service Level monitoring, both MSI and Authority shall comply with the exit management plan.

44.4. During the exit management period, MSI shall use its best efforts to deliver the Works/Services.

B. PART B – SPECIAL CONDITIONS OF AGREEMENT

45. Performance Security

To guarantee its performance under the Agreement, the MSI shall provide to Authority in its favour a Performance Bank Guarantee (PBG) which is unconditional, unequivocal and irrevocable for an amount equivalent to 5% of the CAPEX amount at the commencement of Project in the format prescribed in RFP, issued by any of the nationalized banks only. The Performance Bank Guarantee shall be kept valid up to a period of 6 (six) months after UAT and Go-live of the final phase of complete system.

To guarantee its performance under the O&M phase, the MSI shall provide to Authority in its favour a Performance Bank Guarantee (PBG) which is unconditional, unequivocal and irrevocable for an amount equivalent to 5% of the OPEX amount at the commencement of O&M of the final phase of the Project in the format prescribed in RFP issued by any of the nationalized banks only. The PBG for the CAPEX amount will be released upon submission of PBG for the OPEX amount. The Performance Bank Guarantee (PBG) for the OPEX amount shall be kept valid up to a period of 6 (six) months after the termination or expiry of the Agreement.

The Performance Bank Guarantee shall be encashed by the Authority in the event of MSI's failure to complete obligations or breach by MSI of any of the terms and conditions of the Agreement.

46. Liquidated Damages

46.1. If MSI fails to supply, install or maintain any or all of the Goods or fails to complete the Works or fails to provide the Services as per the Agreement, within the time period(s) specified in the RFP Vol II, the Authority without prejudice to its other rights and remedies under the Agreement, deduct from the Agreement value, as liquidated damage per week of 0.3% of 1.5 times the value of Performance Guarantee per till such time the default continues.

46.2. The deduction shall not in any case exceed 10 % of 1.5 times the value of Performance Guarantee and upon reaching such limit, the Authority shall, in its sole discretion, be entitled to terminate the Agreement. The Authority may without prejudice to its right to effect recovery by any other method, deduct the amount of liquidated damages from any payments due to MSI in its hands (which includes the Authority's right to claim such amount against MSI's Bank Guarantee) or which may become due to MSI at a prospective date. Any such recovery or liquidated damages shall not in any way relieve MSI from any of its obligations to complete the Work or from any other obligations and liabilities under the Agreement.

46.3. Delay not attributable to MSI shall be considered for exclusion for the purpose of computing liquidated damages.

46.4. LD Shall be applicable for undelivered/Unexecuted portion only.

47. Limitation of Liability:

47.1. Notwithstanding anything to the contrary in this Agreement, the liability of one Party towards the other Party for any damages or compensation of any nature whatsoever under this Agreement, shall not exceed Total Project Cost. For avoidance of doubt, the limitation hereunder shall not apply to any or all liabilities in respect of third parties. The Parties agree that the MFI's liability will be uncapped in case of any liabilities arising due to:

a. any amount payable as indemnity to the Authority due to its acts or omissions
b. or fraud, gross negligence and wilful misconduct;
c. breach of any Applicable Laws or any Applicable Permits;
d. any claims or loss on account of Intellectual Property rights violation by the MFI;
e. any personal bodily injury or death of any person caused by, arising out of or in connection with its performance of this Agreement; or
f. any loss of or physical damage to property of the Authority or any third party caused by, arising out of or in connection with the performance of this Agreement.

47.2. The provisions of this Article 45 shall survive Termination.

48. Ownership and Retention of Documents

48.1. The Authority shall own the Document(s), prepared by or for MSI arising out of or in connection with the Agreement.

48.2. Forthwith upon expiry or earlier termination of this Agreement and at any other time on demand by the Authority, MSI shall deliver to the Authority all Documents provided by or originating from the Authority and all Documents produced by or for MSI in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. MSI shall not, without the prior written consent of the Authority store, copy, distribute or retain any such Documents.

49. Information Security

49.1. MSI shall not carry any written/printed document, layout diagrams, compact disk, hard disk, storage tapes, other storage devices or any other goods/material proprietary to Authority into/out of any Project Location without written permission from the Authority.

49.2. MSI shall not destroy any unwanted documents, defective tapes/media present at any location on their own. All such documents, tapes/media shall be handed over to the Authority.

49.3. All documentation and media at any location whether at the Project Location or otherwise, shall be properly identified, labelled and numbered by MSI. MSI shall keep track of all such items and provide a summary report of these items to the Authority whenever asked for.

49.4. Access to Authority's data and systems, internet facility by MSI at any location shall be in accordance with the written permission by the Authority. The Authority shall allow MSI to use its facilities in a limited manner subject to availability. It is the responsibility of MSI to prepare and equip itself in order to meet the requirements of providing the Services.

49.5. MSI must acknowledge that Authority's business data and other Authority proprietary information or materials, whether developed by Authority or being used by Authority pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to Authority; and MSI along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than reasonable care used by MSI to protect its own proprietary information. MSI recognizes that the goodwill of Authority depends, among other things, upon MSI keeping such proprietary information confidential and that unauthorized disclosure of the same by MSI or its team could damage the goodwill of Authority, and shall be considered as a material breach of the Agreement terms and conditions by MSI. MSI may come into possession of such proprietary information, even though MSI does not take any direct part in or furnish the Services performed for the creation of said proprietary information and it shall limit access of such proprietary information there to only such employees with a need to such access to perform the Services. MSI and or its Key Personnel shall use such information only for the purpose of performing the said Services.

49.6. MSI shall, upon termination of the Agreement for any reason, or upon demand by Authority, whichever is earlier, return any and all information provided to MSI by Authority, which would

include any Confidential information or any proprietary information including any copies or reproductions, both hardcopy and electronic of such information.

49.7. By virtue of the Agreement, MSI team may have access to information of the Authority and/or a third party which would include any Confidential Information or any proprietary information of such parties and will use such information only with prior approval of the Authority on a need only basis and to the extent required for performing the Services.

50. Records of Agreement documents

50.1. MSI shall at all-time make and keep sufficient copies of the process manuals, operating procedures, specifications, Agreement documents and any other documentation as may be required to fulfil the obligations under the Agreement.

50.2. MSI shall keep at the DC Site /ICCC/Authority office, at least 3 (three) copies of each and every specification and copy of the Agreement, in excess of its own requirement and those copies shall be available at all times for use by the Authority's representative and by any other person authorized by the Authority's representative.

51. Security and Safety

51.1. MSI shall comply with the directions issued from time to time by the Authority and the standards related to the security and safety, in so far as it applies to the provision of the Services.

51.2. MSI shall upon reasonable request by the Authority, or its nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

52. Confidentiality

52.1. MSI shall not, either during the Term or after expiration of the Agreement, disclose any proprietary or Confidential Information relating to the Services/Agreement and/or Authority's business/operations, information, application/software, hardware, business data, architecture schematics, designs, storage media and other information/documents without the prior written consent of the Authority.

52.2. The Authority reserves the right to adopt legal proceedings, civil or criminal, against MSI in relation to a breach of obligation by MSI under this Article.

52.3. MSI shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidentiality agreement with the Authority to the satisfaction of the Authority.

52.4. MSI shall notify the Authority promptly if it is aware of any unauthorized disclosure of the Confidential Information otherwise than as permitted by the Agreement or with the authority of the Authority.

52.5. MSI shall be liable to fully recompense the Authority for any loss of revenue arising from breach of confidentiality.

53. Events of Default

53.1. Events of Default by MSI:

a. In the event that the any of the following events of default shall have occurred, the MSI shall be deemed to be in default of the Agreement ("Event of Default"), save and except to the extent that the same is attributable to a Force Majeure Event, which, if not remedied within the Cure Period upon receipt of Notice of Intention to Terminate from Authority, shall provide Authority the right to terminate this Agreement. The defaults referred to above shall mean the following default of obligations of the MSI under the Agreement:

i. The MSI becomes bankrupt or insolvent;

ii. The MSI is under liquidation.

iii. The MSI assigns the Agreement or any part thereof otherwise than as permitted under the Agreement or by Authority;

iv. The MSI abandons the Agreement;

v. The MSI persistently disregards the instructions of the Authority, or contravenes any provision of the Agreement.

vi. The MSI does or permits to do any act, matter, deed or thing in violation of Applicable Law and/or Applicable Permits;

vii. The MSI fails to maintain insurance (s) as required under the Agreement;

viii. The MSI uses or permits or causes the use of the Site for purposes other than those specified in the Agreement;

ix. The MSI fails to complete the Project within the time specified in the Agreement or within such extensions as granted by the Authority in terms of the Agreement;

b. MSI/MSI's Teams failure to confirm/adhere to any of the key performance indicators as laid down in the Key Performance Measures/Service Levels, or if MSI has fallen short of matching such standards/benchmarks/targets as the Authority may have designated with respect to the System or any Goods, task or service, necessary for the execution of the Scope of Work and performance of Services under this Agreement. The above-mentioned failure on the part of MSI may be in terms of failure to adhere to performance, quality, timelines, specifications, requirements or any other criteria as defined by the Authority;

c. MSI's failure to remedy a defect or failure to perform its obligations in accordance with the Service Specifications as per this RFP or any other specifications issued by the Authority, despite being served with a default notice which laid down the specific deviance on the part of MSI/MSI's Team to comply with any stipulations or standards as laid down by the Authority;

d. MSI/MSI's Teams failure to demonstrate or sustain any representation or warranty made by it in the Agreement, with respect to any of the terms of the Bid, the RFP and the Agreement.

53.2. **Events of Default by Authority**: Each of the following events or circumstances, to the extent not caused by a Force Majeure Event, shall be considered, as Event of Default by Authority which, if not remedied within the Cure Period upon receipt of Notice of Intention to Terminate, shall provide the MSI with the right to terminate the Agreement:

a. Authority fails to provide to the MSI the right of way to the Site in spite of nine months of extension in terms of Article "**Design Warranties point 5"**.

b. Authority breaches any obligation which has a Material Adverse Effect on the MSI's ability to perform its obligations under the Agreement.

c. Provided however that the MSI shall have a right to terminate the Agreement on grounds of Event of Default by Authority only within one year from the Effective Date.

53.3. Where there has been an occurrence of such defaults inter alia as stated above, the non-defaulting Party shall issue a notice of default to the defaulting Party, setting out specific defaults/deviances/omissions/non-compliances/non-performances and providing a notice of Cure Period to enable the defaulting Party to rectify such default committed.

53.4. Where despite the issuance of a default notice to defaulting Party, it fails to remedy the default within the 30 days period provided to the satisfaction of the non-defaulting Party, then the non-defaulting Party may proceed to issue a Notice of Intention to Terminate the Agreement forthwith.

54. Termination

54.1. Without prejudice to any other rights or remedies which the non-defaulting Party may have under the Agreement or under the Applicable Laws, upon the occurrence of either an Event of Default MSI or Authority, the defaulting Party shall be liable for the breach caused and consequences thereof and the non-defaulting Party shall have the right to issue a Notice of Intention to Terminate. Upon the issuance of a Notice of Intention to Terminate, the defaulting Party shall have the right to rectify or cure the breach within the Cure Period. If the breach is not rectified by the defaulting Party within the Cure Period, the non-defaulting Party shall have the right to terminate the Agreement by issuance of a Termination Notice. Notwithstanding anything contained in the Agreement, the MSI cannot exercise the right to issue Notice of Intention to Terminate after expiry of one year from the Effective Date.

54.2. **Termination by Authority**

The Authority may, terminate the Agreement in whole or in under the following circumstances:

a. Where the Authority is of the opinion that there has been such Event of Default on the part of MSI/MSI's Team which would make it proper and necessary to terminate the Agreement and may include failure on the part of MSI to adhere to any part of its obligations under its Bid, the RFP or under the Agreement.

b. Where it comes to the Authority's attention that MSI (or MSI's Team) is in a position of actual conflict of interest with the interests of the Authority, in relation to any of terms of MSI's Bid, the RFP or the Agreement.

c. Where MSI's ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against MSI, any failure by MSI to pay any of its dues to its creditors, the institution of any winding up proceedings against MSI or the happening of any such events that are averse to the commercial viability of MSI. In the event of the happening of any events of the above nature, the Authority shall reserve the right to take any steps as are necessary, to ensure the effective transition of the sites, pilot site to a successor agency, and to ensure business continuity.

d. Termination for Insolvency: The Authority may at any time terminate the Agreement by giving written notice to MSI, without compensation to MSI, if MSI becomes bankrupt or otherwise insolvent, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the Authority.

54.3. **Termination by MSI**

a. MSI may, subject to written approval by the Authority, terminate the Agreement before the expiry of the Term by giving the Authority a prior and written notice at least 3 (three) months in advance indicating its intention to terminate the Agreement.

b. In case of Deliverables/ milestone which is approved by the Authority and payment is undisputed, the MSI may terminate the Agreement in case of non-payment after 90 (ninety) days of serving the invoice to the Authority.

55. Consequence of Termination

55.1. In the event of termination of this Agreement, Authority shall pay a Termination Payment to MSI as follows after recovering the outstanding dues if any, toward the Authority, any claims for losses/damages suffered by Authority due to any action by the MSI or its Sub Contractors/ Sub-Lessees:

55.2. In the event of Termination before the Appointed Date, no payment shall be paid by the Authority to MSI till the date of Termination.

55.3. In the event of Termination after the Appointed Date, the Authority shall pay to MSI, an amount for goods delivered and services and accepted by the Authority and rendered satisfactorily as per the Payment Schedule, till the date of Termination.

55.4. In the event of termination, the Authority shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Project which MSI shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow and provide all such assistance to the Authority and/or the successor agency/service provider,

Replacement Service Provider as may be required, to take over the obligations of MSI in relation to the execution/continued execution of the requirements of the Agreement.

55.5. Without prejudice to any other rights, the Authority may retain such amounts from the payment due and payable by the Authority to MSI as may be required to offset any losses caused to the Authority as a result of any acts of omissions or commission by MSI. In case of any loss or damage due to default or inability on the part of MSI in performing any of its obligations with regard to executing the Schedule of Requirements under the Agreement, MSI shall compensate the Authority for any such loss, damages or other costs, incurred by the Authority.

55.6. In case the Agreement is terminated due to Event of Default by MSI, Authority shall have the right to invoke the Performance Guarantee.

55.7. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Agreement that are expressly or by implication intended to come into or continue in force on or after such termination.

55.8. Upon termination or after expiration of Agreement, MSI shall forthwith return to the Authority, all papers, material and other properties held by/provided to MSI during the Term of the Agreement, including all Confidential Information and proprietary information provided to MSI for its use during the Project.

56. Miscellaneous

56.1. Under this Agreement, the relationship between the Parties is that of independent contractors and no other relationship is intended, including a partnership, franchise, joint venture, agency, employee/employer, fiduciary, master/servant relationship, or other special relationship. Neither Party shall act in a manner, which expresses or implies a relationship other than that of independent contractors, nor bind the other Party. MSI and the Sub-contractor shall take care of all liabilities, statutory or otherwise, in relation to persons employed by it or otherwise and the Authority shall not be responsible for the same in any manner whatsoever.

56.2. MSI or any of its Affiliates shall not directly or indirectly, solicit for employment or engagement any employees of the Authority. The provisions of this Article shall be applicable during the Term of the Agreement and shall survive the termination of the Agreement for a period of 2 years from the date of termination. In addition, MSI shall not proceed to conduct operations/business similar to the Authority with any employee and/or consultant of the Authority who has knowledge of the Confidential Information, without the prior written consent of the Authority.

56.3. It is also agreed between the Parties that the Authority is under no obligation, whatsoever, to procure Services/execute Works from MSI alone. By executing the Agreement, the Authority does not commit/guarantee any minimum number of payments due to MSI for the Services/Works performed by MSI and holds the right to increase or decrease the Scope of Work provided under

the Agreement and in these cases, the Parties shall mutually agree upon any amendment to the charges which are payable to MSI for the Works/Services performed.

56.4. The Authority reserves the right to propose amendment or modification, of the terms of the Agreement or any part of it by giving MSI a notice in writing. No variation, amendment, modification or addition to the Agreement shall be effective or binding on either of the Parties unless set forth in writing and executed by them through their authorized representatives.

56.5. The Agreement shall be governed by and construed in accordance with the laws of India. The Parties agree to accept the non-exclusive jurisdiction of the competent courts of UT.

56.6. The Agreement sets forth the entire agreement and understanding between the Parties as to the subject matter therein and shall supersede and override all previous communications, negotiations, commitments, agreements, and understandings, either oral or written, between the Parties with respect to the subject matter of the Agreement.

56.7. **Notice**

a. Unless otherwise provided herein, all notices or other communications to be given pursuant to the Agreement shall be made in writing, in English and by letter/email (save as otherwise stated) and shall be deemed to be duly given or made, in the case of personal delivery of the letter, when delivered; in the case of email, when sent, or, in the case of a letter, 3 (three) Business Days after being deposited in the post (by registered post, with acknowledgment due), postage prepaid, to such Party at its address or facsimile number specified herein or at such other address or facsimile number as such party may hereafter specify for such purposes to the other by notice in writing.

b. A notice or other communication received on a day other than a Business Day, or after business hours in the place of receipt, shall be deemed to be given on the next following Business Day in such place.

c. The address or email address for serving notices can be changed by any Party by properly serving notices on the other Parties informing them of the changes of address.

d. In the event that a Party refuses delivery or acceptance of a notice, request or other communication, under the Agreement, it shall be deemed that the notice was given upon proof of the refused delivery, provided the same was sent in the manner specified in the Agreement.

e. No failure by either party to enforce any rights hereunder shall be construed as a waiver of such right(s).

f. If any provision of the Agreement is held to be inoperative or unenforceable as applied in any particular case because it conflicts with any other provision hereof or any statute, ordinance, rule of law or public policy, or for any other reason, such holding shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case, or of rendering any other provision herein contained inoperative or unenforceable to

any extent whatsoever. The invalidity of any one or more phrases, sentences or Clauses contained in the Agreement shall not affect the remaining portions of the Contractor any part hereof, and they shall otherwise remain in full force and effect.

g. Neither MSI nor its employees or its Subcontractor shall have the right, power, or authority to create any Agreement or obligation, express or implied, on behalf or, in the name of or binding on Authority.

h. The rights and obligations under the Agreement are personal to MSI and shall not be assigned by it, to any third party, without the express prior written authorization of the Authority.

57. Change Control Note (CCN)

57.1. This applies to and describes the procedure to be followed in the event of any proposed change to Agreement, site Implementation, and Service levels. Such change shall include, changes in the scope of services provided by MSI and changes to the terms of payment.

57.2. Change requests in respect of the Agreement, the site implementation, or the Service levels shall emanate from the Parties' representative who shall be responsible for obtaining approval for the change and who shall act as its sponsor throughout the Change Control Process and shall complete Part A of the CCN (Annex I of this Vol III). CCNs shall be presented to the other Party's representative who shall acknowledge receipt by signature of the authorized representative of the Authority.

57.3. MSI and the Authority while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services including ancillary and concomitant services required. The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.

57.4. MSI shall assess the CCN and complete Part B of the CCN. In completing Part B of the CCN MSI shall provide as a minimum:

a. a description of the change;

b. a list of Deliverables required for implementing the change;

c. a timetable for implementation;

d. an estimate of any proposed change; or any relevant acceptance criteria;

e. an assessment of the value of the proposed change;

f. Material evidence to prove that the proposed change is not already covered within the scope of the RFP, Agreement and Service Levels.

57.5. Prior to submission of the completed CCN to the Authority or its nominated agencies, MSI shall undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, MSI shall consider the materiality of the proposed change in the context of the Agreement, the sites, Service levels affected by the change and the total effect that may arise from implementation of the change.

57.6. Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process provided MSI meets the obligations as set in the CCN. In the event MSI is unable to meet the obligations as defined in the CCN then the cost of getting it done by third party shall be borne by MSI. Change requests and CCNs shall be reported monthly to each Party's representative who shall prioritize and review progress.

C. PART C – SERVICE LEVELS

58. Purpose of Service Levels

58.1. The purpose is to define/measure the levels of the Service provided by MSI to the Authority for the duration of the Agreement. The benefits of this are:

a. Implement a process to define Service level parameters or permissible threshold within which MSI would be required to perform the Services, and failure of performing the Services by MSI within the said acceptable parameters would be considered as a deficiency in Services;

b. help the Authority control the levels and performance of MSI's Services; and

c. alert MSI to improve its Services and/or remove deficiencies in Services in case the Service Levels agreed between the Authority and MSI are breached by MSI

59. Service Level Agreements & Targets

59.1. The MSI agrees and acknowledges that the works and services in relation to the Project are to be performed in strict compliance with the requirements of the Agreement. In the event of the failure of the MSI to duly perform the said works and services in accordance with the aforesaid requirements, the MSI agrees and acknowledges that it shall be required to pay the corresponding extent of liquidated damages as specified in respect thereto in terms of the Schedules, which amounts, shall be deemed to not be by way of penalty, and shall represent a genuine pre-estimate of the loss and damage occurring to Authority, on account of the relevant non-compliance and/ or failure of the MSI.

59.2. Provided however that, on or prior to the Appointed Date, the MSI shall provide a report to Authority setting out the specific provisions of the scope of the service level standards that it would not be able to comply with, and request for a waiver or relaxation thereto. Authority may, but shall not be obliged to, grant such a waiver or relaxation to the MSI. It is clarified that:

a. Such waiver or relaxation granted by Authority shall only apply for such time period as may be prescribed by Authority, and upon the expiry of such time period, the obligation of the MSI to comply with the requirements of service level standards shall stand reinstated in its entirety; and

b. Any such waiver or relaxation shall not extend to any period beyond the Completion Date.

59.3. The MSI shall, provide to Authority, a monthly report, within 5 days of the expiry of each month, or at such intervals as specified in the Agreement, setting out the extent of its compliance with the aforesaid service level standards, and the remedial action undertaken by the MSI in this regard.

59.4. This section is agreed to by Authority and MSI as the key performance indicator for the Project. This may be reviewed and revised according to the procedures detailed in Article 65 (Service Level Change Control).

59.5. The following section reflects the measurements to be used to track and report system's performance on a regular basis. The targets shown in the following tables are for the period of Contact.

59.6. The procedures in Article 35 shall be used if there is a dispute between Authority and MSI on what the permanent targets should be.

60. Maintenance Manual

60.1. Without prejudice to the other obligations of the MSI, the MSI agrees and acknowledges that it shall be required to undertake the Operations and Maintenance of the Project, in accordance with certain pre-identified work schedules.

60.2. Towards the aforesaid, the MSI shall within 45 days from the Effective Date (and thereafter, on or prior to the 30 days before the commencement of each succeeding Financial Year there from), prepare, and submit for the approval of Authority, a repair, operation and maintenance manual (the "Maintenance Manual"), for all aspects of the Operations and Maintenance Project. The Maintenance Manual shall be consistent with the requirements of service level standards as laid down in the Agreement, unless a waiver or relaxation is sought and granted by Authority in accordance with Article 57.2 above (whereupon such requirements shall be appropriately deemed to be modified for the relevant approved period). Such Maintenance Manual shall inter alia, provide for the following:

a. The mode and manner of carrying out of the O&M of the Project, including specifically the proposed measures of the MSI for ensuring compliance requirements of the service level standards;
b. The manner of scheduling and deployment of manpower and resources;
c. Arrangements and procedures for carrying out urgent repairs;
d. Criteria and process to be adopted for deciding maintenance needs;
e. A cleaning schedule, for cleaning of Project assets and utilities; and
f. An inspection schedule for inspection and examination of the condition, state of repair and operational efficiency of various components of the Project thereat.

60.3. The aforesaid Maintenance Manual shall, upon being approved by Authority (and subject to the comments of Authority thereon), be binding on the MSI, and the O&M of the Project shall be undertaken in accordance with the said approved Maintenance Manual. Provided that approved

Maintenance Manual (and the approval thereof by Authority), shall not relieve the MSI of its obligation to duly undertake the O&M of the Project as per Applicable Laws and Good Industry Practices, and the other provisions of the Agreement.

61. General Principles of Service Level Agreements

The Service Level Agreements have been logically segregated in the following two categories:

61.1. Liquidated Damages

The liquidated damages shall come into effect once the notification of Award has been issued by the Purchaser. It would be mainly applicable on the implementation phase of the project.

61.2. Service Level Agreements (SLA)

The MSI has to comply with service level standards and requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this O&M period i.e., for a period mentioned in the project timeline of volume II of the RFP. The MSI has to supply appropriate software/hardware/automated tools as may be required to monitor and submit reports of all the SLAs mentioned in this section.

SLA would be applicable in operations and maintenance phase of the project. The penalties shall be applicable on Operations & Maintenance cost of the project calculated quarterly. SLA would be applicable on:

- Network Backbone
- DC/DR
- ICCC application
- Surveillance System

For purposes of the SLA, the definitions and terms as specified in the Document along with the following terms shall have the meanings set forth below:

Sl. No.	SLA Terms	Descriptions
1.	Network Backbone	'Network Backbone' refers to Internet Protocol (IP) based routing infrastructure at which, successful bidder has installed network devices for city Wide Area Network.
2.	Uptime	'Uptime' refers to network backbone availability across various segments of City-wide area network i.e. between field locations and ICCC. "%Uptime" means ratio of 'up time' (in minutes) in a month to Total time (in minutes) in the month multiplied by 100.

<table>
<tr><th>Sl. No.</th><th>SLA Terms</th><th>Descriptions</th></tr>
<tr><td>3.</td><td>Latency</td><td>‘Latency’ refers to the average time required for round-trip packet transfers between Selected Junctions/locations on the selected portions of the network Backbone during a calendar month.</td></tr>
<tr><td>4.</td><td>Packet Loss</td><td>‘Packet Loss’ refers to the average percentage of IP packets transmitted between Selected Junctions/locations during a calendar month that are not successfully delivered.</td></tr>
<tr><td>5.</td><td>Planned Network Outage</td><td>‘Planned Network Outage’ refers to unavailability of network services due to infrastructure maintenance activities such as configuration changes, up gradation or changes to any supporting infrastructure. Details related to such planned outage shall be approved by the KSCL or authorized authority and shall be notified to all the concerned stakeholder in advance (at least five working days). It is desirable that such
outage shall be taken on Sundays or other Government holidays to the extent possible.</td></tr>
<tr><td>6.</td><td>Unplanned Network Outage</td><td>‘Unplanned Network Outage’ refers to an instance in which no traffic can pass in or out through which users are connects to the network Backbone</td></tr>
<tr><td>7.</td><td>Incidence Resolution (Network)</td><td>The network outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services. Resolution of incidence as per below priority Levels:
L1 Level Severity: Impacting DC or Command &Control Center.
L2 Level Severity: Impacting one or Junctions/ Endpoints/ Offices
L3 Level Severity: Impacting one or more end devices/utilities
<table>
<tr><th>#</th><th>Severity</th><th>Initial Response Time</th><th>Issue Resolution Time</th></tr>
<tr><td>1.</td><td>Level 1</td><td>30 Minutes</td><td>2 Hours</td></tr>
<tr><td>2.</td><td>Level 2</td><td>90 Minutes</td><td>12 Hours</td></tr>
</table></td></tr>
</table>

Sl. No.	SLA Terms	Descriptions			
		3.	Level 3	240 Minutes	24 Hours
8.	Incidence Resolution (DC)	• Priority Level 1 Incident - Within 2 hr. • Priority Level 2 Incident - Within 12 hr. • Priority Level 3 Incident - Within 24 hr. **Note:** Incidents will be logged in the Helpdesk and the O&M Agency will have to resolve the incident and provide necessary updates through the Help Desk Portal and co-ordinate with the stakeholders. Root Cause should be identified for all incidents; if root cause is not identified then additional penalties will be levied.			
9.	Request Resolution (DC)	• Priority Level 1 Incident - Within 2 hr. • Priority Level 2 Incident - Within 24 hr. • Priority Level 3 Incident - Within 36 hr. **Note:** Requests (like password reset, firewall port opening, hardening, etc.) will be logged in the Helpdesk and the successful bidder will have to resolve the request and provide necessary updates through the Help Desk Portal and co-ordinate with the stakeholders			

62. Measurement of SLA

62.1. The Service Level parameters defined in this Article shall be monitored on a periodic basis, as per the individual parameter requirements. MSI shall be responsible for providing appropriate web based online SLA measurement and monitoring tools for the same. MSI shall be expected to take immediate corrective action for any breach in SLA. In case issues are not rectified to the complete satisfaction of Authority, within a reasonable period of time defined in this Agreement, then the Authority shall have the right to take appropriate penalizing actions, or termination of the contract.

62.2. Service levels during Implementation phase

a. During the implementation phase, the performance measurement parameters include timely delivery of the Scope of Work and shall be as under:

Definition	Timely delivery of Deliverables would comprise entire bill of material and the application systems, and as per successful UAT of the same.
Service Level	All the Deliverables defined in the Agreement has to be submitted on-

Requirement	time on the date as mentioned in the Agreement with no delay.
Measurement of Service Level Parameter	To be measured in Number of weeks of delay from the timelines mentioned in the section "Project Timelines"
Penalty for non-achievement of SLA Requirement	Any delay in the delivery of the Project Deliverables (solely attributable to vendor) would attract a liquidated damage per week of 0.5% of Contract value of undelivered/ delayed Items (as per Price BID) per week and maximum of 5% of Contract Value of undelivered/ delayed Items (as per Price BID) or part thereof for delay in delivery. If the liquidated damage reaches 10% of the total Agreement value, Authority may invoke termination Article.

62.3. SLA during Operations and Maintenance phase

a. The performance measurement parameters for assessing performance under SLA during the O&M phase are laid down in Annexure IV. During the O&M phase, a maximum level of performance penalties is established and described in the section;

62.4. The payment to the MSI shall be on Quarterly basis however the penalty shall be calculated on monthly basis as per the SLAs stated in RFP of this Agreement.

Sl. No.	SLA	Target	Penalties
1.	Delay in Delivery of Hardware	As per Implementation Timelines	• 0.5% of Contract value of undelivered/ delayed Items (as per Price BID) per week and maximum of 5% of Contract Value of undelivered/ delayed Items (as per Price BID) or part thereof for delay in delivery • Delay beyond 90 days KSCL may terminate the contract and Forfeit the PBG.
2.	Delay in Implementation: Installation and Commissioning and FAT of hardware/ software at Central and Site Location	As per Implementation Timelines	• 0.5% of Contract value of delayed part (as per Price Bid) per week and maximum of 5% of Contract Value of delayed part or part thereof for delay in implementation • Delay Beyond 180 days KSCL

Sl. No.	SLA	Target	Penalties
			may terminate the contract and Forfeit the PBG)
3.	Availability/ Uptime of End Points like CCTV camera/ NVR/ LED Display panel/ etc.	99.00%	• 98.00% or Better= NIL • 97.50% to 97.99%=0.50% of QP • 96.00 to 97.49% = 1.00% of QP • less than 96% = 1.50% of QP
4.	Incident Resolution (DC)	As per SLA	• Level 1 Incident 0.25% of QP for every 2-hr. delay in resolution; • Level 2 Incident 0.25% of QP for every 12 Hr. delay in resolution. • Level 3 Incident 0.25% of QP for every 24 hrs. delay in resolution
5.	Request Resolution (DC)	As per SLA	• Level 1 Incident 0.25% of QP for every 2 hr. delay in resolution; • Level 2 Incident 0.25% of QP for every 24 Hr. delay in resolution; • Level 3 Incident 0.25% of QP for every 36 hrs. delay in resolution
6.	Uptime of all IT components &services under scope	99.5%	• 99.0 - 99.5 - 0.05% of QP; • 98.5 - 99.0 - 0.75% of QP • 98.0 – 98.5 - 0.75% of QP

Note:

1. Successful Bidder shall be paid Quarterly Payment (QP) as per the services provided to KSCL. The overall penalty would be generally capped at 10% of QP amount. If the cap of overall penalty is reached in two consecutive quarters, the penalty cap for the third quarter onwards, can be increased of the QP. In addition to the applicable penalty and the provisions pertaining to closure/ termination of contract, the SCADL shall be within its rights to undertake termination of contract.

63. Conditions for No Penalties

63.1. Penalties shall not be levied on the MSI in the following cases:

a. There is a Force Majeure event effecting the SLA which is beyond the control of the MSI. Force Majeure events shall be considered in line with the Article 38 mentioned in RFP.
b. The non-compliance to the SLA has been due to reasons beyond the control of the MSI.
c. Theft cases by default/vandalism would not be considered as "beyond the control of MSI". Hence, the MSI should be taking adequate anti-theft measures, spares strategy, Insurance as required to maintain the desired Required SLA.

64. Service Level Change Control

64.1. **General**

a. It is acknowledged that the Service levels may change as Authority's business needs evolve over the course of the Agreement period.
b. Any changes to the levels of service provided during the Term of the Agreement shall be requested, documented and negotiated in good faith by both Parties. Either Party can request a change.
c. Service Level Change Process: The Parties may amend Service Level by mutual agreement. Changes can be proposed by either Party. Unresolved issues shall also be addressed. MSI's representative shall maintain and distribute current copies of the Service Level document as directed by Authority. Additional copies of the current Service Levels shall be available at all times to authorized parties.
d. Version Control/Release Management: All negotiated changes shall require changing the version control number. As appropriate, minor changes may be accumulated for periodic release or for release when a critical threshold of change has occurred.

12. Proposed Bill of Material

The Bidder should provide the proposed Bill of Material (BoM) here. Bidders are required to mention the details of the make/brand and model against each line item, wherever applicable and also provide datasheets of the Bill of Material. The bid can be considered non-responsive in the absence of any such details and the bids will be summarily rejected. Once the bidder provides this information in the submitted bid, the bidder cannot change it with any other component / equipment etc. of lower specifications / performance; it can only be upgraded at the time of actual deployment/installation after getting the change request approvals. The Bidder shall quote only one specific make and model from only one specific OEM, for each of the goods. Providing more than one option shall not be allowed.

The list of items mentioned hereunder is indicative. The Bidder can increase the line item/quantity, that may be required to fulfil the RFP and project requirements in totality. The BoM shall comply with the Functional Requirements and Technical Specifications given in the RFP. Proposed quantity should not be less than the Indicative quantity, in any case. All such changes must reflect in the Online Price Bid also.

Sl. No.	Solution Description	UoM	Qty
A. Command & Control Room Kavaratti			
1	Command & Control Centre software Platform	Lot	1
2	Video Management System	Lot	1
3	Videowall along with Controller and Software	Lot	1
4	UPS for ICCC	Lot	1
5	Dome Camera	No	8
6	Rack	Lot	4
7	PAC	No	2
8	Firewall	No	2
9	Core Router	No	2
10	Core Switch	No	2
11	ToR Switch	No	2
12	PoE Access Switch	No	2
13	HIPS	Lot	1
14	Enterprise Management System	Lot	1
15	Server (Including OS, Virtulization etc)	Lot	1
16	Storage	Lot	1
17	Workstation	No	6
18	PTZ Joystick	No	2
19	Public Address System	Lot	1

Sl. No.	Solution Description	UoM	Qty
20	Interior and furniture (Including DC, Access Control, Power and Network Cabling etc But not limited to)	Lot	1
21	Air Conditioning (3 Ton)	No	2
22	Air Conditioning (1.5 Ton)	No	2
23	Manpower	Lot	1
B. Agatti			
1	Dome Camera	No	106
2	Bullet Camera	No	158
3	PTZ Camera	No	35
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	89
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	57
11	Rack / JB	No	96
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	Power Cable 3 Core x 2.5 sq mm	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Cabling, Installation, Rack etc)	Lot	1
C. Amini			
1	Dome Camera	No	111
2	Bullet Camera	No	179
3	PTZ Camera	No	14
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	8
6	PoE Switch 8 Port	No	59
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4

Sl. No.	Solution Description	UoM	Qty
10	Poles	No	14
11	Rack / JB	No	67
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
D. Androth			
1	Dome Camera	No	163
2	Bullet Camera	No	161
3	PTZ Camera	No	21
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	58
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	12
11	Rack / JB	No	65
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
E. Bitra			
1	Dome Camera	No	19
2	Bullet Camera	No	35
3	PTZ Camera	No	9
4	Long Range PTZ Camera	No	1

Sl. No.	Solution Description	UoM	Qty
5	PoE Switch 8 Port	No	28
6	65" Screen	No	2
7	Workstation	No	2
8	Smart Pole	No	2
9	Poles	No	15
10	Rack / JB	No	28
11	CAT-5e/6 Cable sheathed	Mtr	15000
12	2x10 SWG Bare Copper	Mtr	1500
13	Fiber Cable	Mtr	1500
14	HDPE Pipe and other Accessories	Mtr	3000
15	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
16	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
F. Chetlat			
1	Dome Camera	No	87
2	Bullet Camera	No	173
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	4
6	PoE Switch 8 Port	No	66
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	20
11	Rack / JB	No	70
12	CAT-5e/6 Cable sheated	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1

Sl. No.	Solution Description	UoM	Qty
G. Kadmat			
1	Dome Camera	No	91
2	Bullet Camera	No	165
3	PTZ Camera	No	15
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	2
6	PoE Switch 8 Port	No	48
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	11
11	Rack / JB	No	50
12	CAT-5e/6 Cable sheated	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
H. Kalpeni			
1	Dome Camera	No	124
2	Bullet Camera	No	164
3	PTZ Camera	No	28
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	78
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	38
11	Rack / JB	No	83
12	CAT-5e/6 Cable sheated	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500

Sl. No.	Solution Description	UoM	Qty
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
I. Kavaratti			
1	Dome Camera	No	209
2	Bullet Camera	No	318
3	PTZ Camera	No	48
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	15
6	PoE Switch 8 Port	No	120
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	55
11	Rack / JB	No	135
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
J. Kiltan			
1	Dome Camera	No	78
2	Bullet Camera	No	91
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	35
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3

Sl. No.	Solution Description	UoM	Qty
10	Poles	No	14
11	Rack / JB	No	40
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
K. Minicoy			
1	Dome Camera	No	134
2	Bullet Camera	No	141
3	PTZ Camera	No	17
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	6
6	PoE Switch 8 Port	No	49
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	18
11	Rack / JB	No	55
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1

The given Bill of Material is indicative. Bidder to design the solution considering all line items of Bill of Material and meeting the functional requirements and technical requirement and keeping the SLA into consideration. Bidders should propose latest solution meeting the requirements of the RFP focusing on the outcome, future scalability, security, reliability and adherence to specified SLA under this RFP, in line with applicable standards & best practices adopted in the industry. The bidder is encouraged to design an Optimized solution which is technically superior, innovative, proven, better in terms of functionality and is cost effective.

Annexures

13. Annexure

Annexure 1 - Indicative Checklist for the Documents to be included

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
1.	Bid Cover Letter and Particulars of organizations		
2.	Power of attorney along with board resolution to the authorized Signatory of the Bid		
3.	E.M.D.		
4.	Bid Document fee		
5.	Particulars of the bidders		
6.	Copy of Certificate(s) of Incorporation		
7.	Certificate(s) from statutory auditor towards average annual Turnover of the entity/entities over the last three (3) financial years (2020-21, 2021-22 and 2022-23)		
8.	Certificate(s) from the statutory auditor towards net worth for the last three (3) financial years (2020-21, 2021-22 and 2022-23)		
9.	Certified copies of valid PAN documents		
10.	Copy of GST registration		
11.	Documents for meeting Technical Eligibility as required under Para 4.3		
12.	Self-declaration by the Bidder duly signed by the authorized signatory confirming they have not been blacklisted by any Central / State Government/ Union Territories/ PSUs in India as on the bid submission date.		
13.	Undertaking to open Office in Kavaratti		

Annexure 2 – Pre-Qualification Bid Cover Letter

(To be submitted on the letterhead of the Bidder)

Date: dd/mm/yyyy

To,

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Request for Proposal (RFP) for Selection of Master system Integrator for Implementation of Integrated Command and Control Centre (ICCC) in Lakshadweep UT.

Ref: RFP No _____ Dated _____

Sir/ Madam,

Having examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the RFP for the Selection of Master system Integrator for Implementation of Integrated Command and Control Centre (ICCC) in Lakshadweep UT.

We attach here to our responses to pre-qualification requirements, Technical and Price Bids as required by the RFP. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered Authority is true, accurate, verifiable, and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be disqualified from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP Document and also agree to abide by this RFP response for a period of 180 days from the date fixed for bid submission. We hereby declare that in case the contract is awarded to us, we shall submit the performance bank guarantee bond in the form prescribed in the RFP.

We agree that you are not bound to accept any RFP response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the bids and also all or any of the products/ services specified in the RFP response.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Yours faithfully,

Signature

Name:

Designation:

Place:

Date:

Address:

Annexure 3 – Particulars of the bidders

Sl. No.	Particular	Details	
1.	Name of the company		
2.	Title of the Project		
3.	Official address		
4.	Phone No. and Fax No.		
5.	Corporate Headquarters Address		
6.	Phone No. and Fax No.		
7.	Website Address		
8.	Details of Company's Registration (Please enclose copy of the company registration document)		
9.	Name of Registration Authority		
10.	Registration Number and Year of Registration		
11.	GST/CST/LST/VAT registration No. (as applicable)		
12.	Permanent Account Number (PAN)		
13.	Company's Turnover for last 3 years (Year wise) as on 31st March, 2023		
14.	Company's Net Worth for the last 3 years (Year wise) as on 31st March,2023		
Contact Details of officials for future correspondence regarding the bid process:			
15.	Name		
16.	Title		
17.	Company Address		
18.	Phone / Fax		
19.	Mobile		
20.	Email		
Financial Turnover:			
21.	Overall turnover (in INR Crore)	FY 2020-21	
		FY 2021-22	

		FY 2022-23	
Net Worth:			
22.	Overall Net Worth (in INR Crore)	FY 2020-21	
		FY 2021-22	
		FY 2022-23	

Yours faithfully,

Signature

Name:

Designation:

Place:

Date:

Address:

Annexure 4 - Format for Power of Attorney for signing the Bid

(On INR 100.00 Non judicial Stamp Paper and duly notarized)

KNOW ALL MEN BY THESE PRESENTS,

We _____ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr./ Ms. (name),_____ son/daughter/wife of _____ and presently residing at _____, who is presently employed with us and holding the position of _____, as our true and lawful attorney (hereinafter referred to as the "Attorney") 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 application for qualification and submission of our bid for the Project proposed by the _____ (the "Authority") including but not limited to signing and submission of all applications, bids and other documents and writings, participate in pre-applications and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, _____, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF_____.

For _____

(Signature, name, designation and address)

Witnesses:

1. (Notarized)
2.

Accepted

(Signature, Name, Title and Address of the Attorney)

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 executants (s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' 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.

- In case the bid is signed by an authorized Director / Partner or Proprietor of the Bidder, a certified copy of the appropriate board resolution / document conveying such authorization to Authority may be enclosed in lieu of the Power of Attorney.
- For documents executed and issued overseas, the document shall be legalised by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed. However, the Power of Attorney provided by Applicants from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostle certificate.

Annexure 5 - Declaration Regarding Blacklisting

(To be submitted on the letterhead of the bidder / OEM)

Date: dd/mm/yyyy

To,

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Self Declaration of not been blacklisted in response to the Request for Proposal for Selection of Master system Integrator for Implementation of Integrated Command and Control Center (ICCC) in Kavaratti City

Ref: RFP No. **<<.....>> dated << .....>>**

Dear Sir,

We confirm that our company or firm, _____,is currently not blacklisted in any manner whatsoever by any Central / State Government/Union Territories/PSUs in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

(Signature of the Bidder / OEM)

Printed Name

Designation

Seal

Date:

Business Address:

Annexure 6 – No Deviation Certificate

(To be provided on the Company letter head)

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Self Declaration for No Deviation in response to the Request for Proposal for Selection of Master system Integrator for Implementation of Integrated Command and Control Center (ICCC) in Kavaratti

Ref: RFP No. <<…..>> dated << …..>>

Dear Sir,

This is to certify that our offer is exactly in line with your tender enquiry/RFP (including amendments) no. _____ dated _____. This is to expressly certify that our offer contains no deviation either Technical (including but not limited to Scope of Work, Business Requirements Specification, Functional Requirements Specification, Hardware Specification and Technical Requirements Specification) or Commercial in either direct or indirect form.

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Business Address:

Annexure 7 – Total Responsibility Certificate

(To be provided on the Company letter head)

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Self Declaration for Total Responsibility in response to the Request for Proposal for Selection of Master system Integrator for Implementation of Integrated Command and Control Center (ICCC) in Kavaratti City

Ref: RFP No. <<…..>> dated << …..>>

Dear Sir,

This is to certify that we undertake the total responsibility for the defect free operation of the proposed solutions as per the requirement of the RFP for the duration mentioned in all the volumes of the RFP.

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Business Address:

Annexure 8 – Self-certificate for Project execution experience **(In Bidding Entity's Letterhead)**

This is to certify that [<<Name of the Bidding entity>>] has been awarded with [<<Name of the Project>>] as detailed under:

Particulars	Details (to be filled by the bidder)
Name of the Project	
Client's Name, Contact no. and Complete Address	
Contract Value for the bidder (in Indian Rupees)	
Current status of the project (Completed/Ongoing)	
Activities completed by bidding entity as on bid submission date (N.B Only relevant activities as sought in the Criteria to be included)	
Value of Work completed for which payment has been received from the client	
Date of Start	
Date of Completion	

Annexure 9 - General Instructions for the Technical Bid

Bidders have to submit a very structured and organized Technical Bid, which will be analyzed by the Technical/Evaluation Committee for compliances with regards to the requirements of the project. Since the Price Bid shall be opened for only those bidders who qualify the minimum criteria for technical bid evaluation, the quality and completeness of the information submitted by the Bidder will matter a lot while finalizing the technical scores.

Bidder is expected to divide its proposal in following five Sections / Documents:

A. Bidder's Competence to execute the project

This document should bring about the capability of the bidder to execute this project. Some of the required documents are as follows:

- Experience of Bidder in Executing Projects as mentioned in RFP in required Formats and supporting documents;
- Details of IT, Surveillance and related Manpower in the firm;
- Other parameters as required

B. Proposed Team for the Project

As specified in the Technical Bid Evaluation Framework, Authority will give high importance on the quality and competence of the technical manpower proposed for the project. Bidders are required to propose separate resources for different skill-sets (during Design, Project Implementation & Post-Implementation). Following documentation is expected in this section:

- Overall Project Team (for Design, Project Implementation & Maintenance phases)
- Escalation Chart for the entire Project Duration
- Summary Table giving Qualification, Experiences, Certifications, Relevance
- Detail of the proposed resources in the Format attached

C. Technical Solution Proposed for the Project

Broad areas to be covered in the Technical Solution documentation are given below:

1. Describe the proposed Technical Solution in a structured manner meeting various guiding principles and compliances. Following points should be captured in the same:
    a. Clear articulation of the design, technical solution and various components proposed in the bid including make/model of equipment with sizing of infrastructure (including diagrams and calculations wherever applicable) proposed.
        i. Justifications for selection of the proposed technology over other available options.
        ii. Extent of compliance to technical requirements specified in the scope of work
        iii. Technical Design and clear articulation of benefits to Authority and other associated project stakeholders w.r.t. various components of the solution offered vis-à-vis other options available.
        iv. Strength of the Bidder to provide services including examples or case-studies of similar solutions deployed for other clients.

v. Specific emphasis on fulfilling the requirement of data management, analytics and artificial intelligence as specified in the RFP
vi. Detailed Bill of Material for the solution proposed

b. The overall technical solution should be structured in following sub-sections, which are being evaluated by Technical Committee for technical scores:
i. Data Centre (DC)
ii. Integrated Command & Control Centre (ICCC)
iii. Network Connectivity
iv. City Surveillance System
v. Other urban services
vi. Variable Message Displays
vii. [<<add/modify the components as per Authority requirement>>]
viii. Integration of various components with ICCC

2. Provide detailed approach and methodology for Pre-Implementation, Implementation & Post-Implementation periods.
3. Clearly articulate the Strategy and Approach & Methodology for installation, Configuration & Operationalization of all the key components of the project
4. Approach & Methodology for Management of SLA specified in the RFP.
5. Insight on Implementation of various Best Practices.
6. Detailed Project Plan with timelines, resource allocation, milestones etc.

D. Compliance Table to the Technical requirement /Specifications.

This RFP has specified the benchmark / functional requirements for various components. Bidder is expected to give a comprehensive compliance sheet for the Product and services proposed by them.

All above mentioned documents shall have an index page with page numbers specified for all the key information / headers. (Not applicable for last document type).

IMPORTANT NOTE: The Bidders shall submit the Technical Solution Proposed and compliance to the min. specifications for the Project. The Bids submitted without these documents are liable to be rejected. The Technical/Evaluation Committee's decision shall be final and binding on all Format for submitting details on experience of Bidder.

Annexure 10 - Technical Bid Checklist

#	Checklist Item	Submitted (Y / N)	Documentary Proof (Page No.)
1.	Technical Bid Letter		
2.	Credential summary		
3.	Project Citations and Self-certifications, as applicable		
4.	Detailed proposed solution		
5.	Project plan and manpower plan		
6.	Proposed CVs		
7.	Compliance to Requirement (Technical / Functional Requirements)		
8.	Proposed Bill of Material		
9.	Manufacturers'/Producers' Authorization Form		
10.	Anti-Collusion certificate		

Annexure 11 – Technical Bid Covering Letter

(To be submitted on the letterhead of the Bidder)

Date: dd/mm/yyyy

To,

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Request for Proposal (RFP) for Selection of Master system Integrator for Implementation of Integrated Command and Control Centre (ICCC) in Kavaratti

Ref: RFP No :<No> Dated<DD/MM/YYYY>

Sir/ Madam,

I (in case of single bidder) or We, <<name of the undersigned Bidder>>, having read and examined in detail all the bidding documents in respect of "Request for Proposal (RFP) for Selection of Master system Integrator for Implementation of Integrated Command and Control Center (ICCC) in Kavaratti" do hereby propose to provide our services as specified in the bid submitted by us.

It is hereby confirmed that I / We are entitled to act on behalf of our company / corporation / firm / organization and empowered to sign this document as well as such other documents, which may be required in this connection.

We declare that all the services shall be performed strictly in accordance with the RFP documents.

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to Authority, is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its evaluation process. We also confirm that we shall not attract conflict of interest in principle.

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance bank guarantee in the form prescribed in RFP.

We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

We hereby declare that procurement guidelines as per Public Procurement (Preference to Make in India), Order 2017, has been strictly complied with.

We understand that our bid is binding on us and that you are not bound to accept a Bid you receive. This bid is valid for 120 days from the date of submission of the bid. We shall extend the validity of the bid if required by Authority.

Signature
Name:
Designation:
Place:
Date:
Address:

Annexure 12 – Curriculum Vitae (CV) of Team Members

1.	Name of the Staff				
2.	Current Designation in the organization				
3.	Proposed Role in the Project				
4.	Proposed Responsibilities in the Project				
5.	Date of Birth				
6.	Education (Degree / Diploma, College, University, Year of Passing)				
7.	Summary of Key Training and Certifications				
8.	Language Proficiency				
9.	Areas of Expertise and no. of years of experience in this area				
10.	Certifications and Training attended				
11.	Language Proficiency	**Language**	**Reading**	**Writing**	**Speaking**
12.	Employment Record (For the total relevant experience)	Employer	Position	From	To
13.	Total No. of Years of Work Experience				
14.	Total No. of Years of Experience for the Role				

	proposed	
Highlights of relevant assignments handled and significant accomplishments (Use following format for each project)		
15.	Name of assignment or project:	
	Year:	
	Location:	
	Client:	
	Main Project Features:	
	Positions held:	
	Activities performed:	

Annexure 13 - Manpower Plan

i. Till Go-Live

#	Role	Month wise time to be spent by each personnel (in days)								Onsite/ Online
		1	2	3	4	5	6	.....	Total	
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										

ii. After Go-Live (Operation & Maintenance period)

#	Manpower detailed breakup	Year wise time to be spent by each personnel (in days)								Onsite/ Online
		1	2	3	4	5	6	.....	Total	
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										

Annexure 14 - Format for Authorization Letters from OEMs

(To be submitted on the letterhead of the OEM)

No. _____ dated _____

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Subject: Authorization Letter to M/s. ---------- for the participation in the Bid for ….

Ref: RFP No :<No> Dated<DD/MM/YYYY>

Sir,

We _____, (name and address of the manufacturer) who are established and reputed manufacturers of _____ having factories at _____ (addresses of manufacturing / development locations) do hereby authorize M/s _____ (name and address of the Bidder) to bid, negotiate and conclude the contract with you against the above mentioned RFP for the equipment / software manufactured / developed by us.

The equipment / software to be provided are listed below:

……

…… We herewith certify that the above-mentioned equipment / software products will be supplied to M/s_____ [name of the bidder] as part of the subject project and we hereby undertake to support this equipment/ software for the duration of minimum 6 years from the date of submission of the bid. We also confirm that the offered system will not be end of life for min 18 months from the date of supply of the product.

Yours faithfully,

For and on behalf of M/s _____(Name of the manufacturer)

Yours faithfully,

Signature

Name of the authorized signatory:

Designation

Contact number

Address

Note:

1. This letter of authority should be on the letterhead of the OEM and should be signed by an authorized person having the power of attorney from the OEM.
2. OEMs need to give compliance along with cross references on functional & technical specifications mentioned in the RFP of their proposed products and solutions on the letterhead duly signed by an authorized person having the power of attorney from the OEM.

Annexure 15 – Anti-Collusion Certificate

(On Bidders Letter Head)

Date: dd/mm/yyyy

We hereby certify and confirm that in the preparation and submission of our Bid for Request for Proposal (RFP) for Selection of Master system Integrator (MSI) for Implementation of Integrated Command & Control Centre (ICCC) in [<<City Name>>] against the RFP No :<No> Dated <DD/MM/YYYY> issued by Authority, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing, which is or could be regarded as anti-competitive. We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or organization in connection with the bid.

Dated this.....day of ..... ,2023…

(Signature)
Printed Name
Designation
Seal
Date:
Place:
Business Address:

Annexure 16 - Format for EMD (Bank Guarantee)

(NEFT/RTGS/Net Banking or Unconditional irrevocable Bank guarantee of any nationalized / scheduled banks on INR 100/- Stamp Paper)

To,

<Name>

<Designation>

<Address>

<Phone Nos.>

<Fax Nos.>

<Email id>

Whereas [<<Name of the bidder>>] (hereinafter called 'the Master system Integrator') has submitted the bid for Submission of RFP [<<RFP Number>>] dated [<<Date>>] for [<<Name of the assignment>>] (hereinafter called "the Bid") to [<<Authority>>].

Know all Men by these presents that we [<<... >>] having our office at [<<Address>>] (hereinafter called "the Bank") are bound unto the [<<Authority>>] (hereinafter called "the Authority") in the sum of Indian Rupees [<<Amount in figures>>] (Rupees [<<Amount in words>>] only) for which payment well and truly to be made to the said Authority, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this [<<Date>>].

The conditions of this obligation are:

1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Authority during the period of validity of bid
    a. Withdraws his participation from the bid during the period of validity of bid document; or
    b. Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the Authority up to the above amount upon receipt of its first written demand, without the Authority having to substantiate its demand, provided that in its demand the Authority will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to [<<insert date>>] and including [<<extra time over and above mandated in the RFP>>] from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

i. Our liability under this Bank Guarantee shall not exceed Indian Rupees [<<Amount in figures>>] (Rupees [<<Amount in words>>] only)

ii. This Bank Guarantee shall be valid up to [<<insert date>>])

iii. It is a condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before [<<insert date>>]) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

Annexure 17 - Performance Bank Guarantee

[On Appropriate Stamp Paper]

Ref: _____ Date _____

Bank Guarantee No. _____

<Name>

<Designation>

<Address>

<Phone Nos.>

<Fax Nos.>

<Email id>

Whereas, [<<name of the supplier and address>>] (hereinafter called "the Master system Integrator") has undertaken, in pursuance of contract no. [<<Insert Contract No.>>] dated. [<<Date>>] to provide Implementation services for [<<name of the assignment>>] to Smart City SPV (hereinafter called "the Authority")

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, [<<Name of Bank>>] a banking company incorporated and having its head/registered office at [<<Address of Registered Office>>] and having one of its office at [<<Address of Local Office>>] have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of Indian Rupees [<<Insert Value>>] (Rupees [<<Insert Value in Words>>] only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Indian Rupees [<<Insert Value>>] (Rupees [<<Insert Value in Words>>] only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Master system Integrator shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until [<<Insert Date>>])

Notwithstanding anything contained herein:

i. Our liability under this bank guarantee shall not exceed Indian Rupees [<<Insert Value>>] (Rupees [<<Insert Value in Words>>] only).

ii. This bank guarantee shall be valid up to [<<Insert Expiry Date>>]

iii. It is a condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before [<<Insert Expiry Date>>] failing which our liability under the guarantee will automatically cease.

Date _____

Place _____ Signature_____

Witness _____ Printed name_____

(Bank's common seal)

Annexure 18 – Format of Agreement between Bidder and their Parent Company / Subsidiary / Sister Concern Company (As the case may be)

(On INR 100.00 Non judicial Stamp Paper and duly notarized)

This agreement made this ___ day of ____ month ____ year by and between M/s. _____ (Fill in the Bidder's full name, constitution and registered office address) hereinafter referred to as bidder on the first part and M/s. _____ (Fill in full name, constitution and registered office address of Parent Company/Subsidiary / Sister Concern Company, as the case may be) hereinafter referred to as "Parent Company/ Subsidiary Company/ Sister Concern Company (Delete whichever not applicable)" of the other part:

WHEREAS

Smart City SPV (hereinafter referred to as Authority) has invited offers vide their tender No. _____ for _____ and M/s. _____(Bidder) intends to bid against the said tender and desires to have technical support of M/s. _____[Parent Company/ Subsidiary Company/ Sister Concern Company-(Delete whichever not applicable)] and whereas Parent Company/ Subsidiary Company/ Sister Concern Company (Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the services as required by the bidder for successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed to by and between the parties as follows:

1. M/s._____ (Bidder) will submit an offer to Authority for the full scope of work as envisaged in the tender document as a main bidder and liaise with Authority directly for any clarifications etc. in this context.
2. M/s. _____ (Parent Company/ Subsidiary Company/ Sister Concern Company (Delete whichever not applicable) undertakes to provide technical support and expertise, expert manpower and procurement assistance and project management to support the bidder to discharge its obligations as per the Scope of work of the tender / Contract for which offer has been made by the Parent Company/Subsidiary Company/Sister Concern Company (Delete whichever not applicable) and accepted by the bidder.
3. This agreement will remain valid till validity of bidder's offer to Authority including extension if any and till satisfactory performance of the contract in the event the contract is awarded by Authority to the bidder.
4. It is further agreed that for the performance of work during contract period bidder and Parent Company/Subsidiary Company/Sister Concern Company (Delete whichever not applicable) shall be jointly and severely responsible to Authority for satisfactory execution of the contract.
5. However, the bidder shall have the overall responsibility of satisfactory execution of the contract awarded by Authority.

For and on behalf of _____ (Bidder)	For and on behalf of _____ (Parent/subsidiary/sister concern company)
Signature :	Signature :
Name :	Name :
Designation :	Designation :
Witness 1:	**Witness 1:**
Signature :	Signature :
Full Name :	Full Name :
Address :	Address :
Witness 2:	**Witness 2:**
Signature :	Signature :
Full Name :	Full Name :
Address :	Address :

Notes:

INSTRUCTIONS FOR FURNISHING PARENT/SUBSIDIARY/SISTER CONCERN COMPANY GUARANTEE

1. Guarantee should be executed on stamp paper of requisite value and notarized.
2. The official(s) executing the guarantee should affix full signature (s) on each page.
3. Resolution passed by Board of Directors of the guarantor company authorizing the signatory (ies) to execute the guarantee, duly certified by the Company Secretary should be furnished along with the Guarantee.
4. Following certificate issued by Company Secretary of the guarantor company should also be enclosed along with the Guarantee.

"Obligation contained in the deed of guarantee No._____ furnished against tender No. _____ are enforceable against the guarantor company and the same do not, in any way, contravene any law of the country of which the guarantor company is the subject"

Annexure 19 – Declaration on Procurement from a Bidder / OEM of a Country which Shares Land Border with India

(on Company Letter-head)

(To be Issued by Bidder)

To

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Reference: RFP no: _____ for selection of ……., 2023 dated _____

Sub: Declaration on Procurement from a Bidder / OEM of a Country which Shares Land Border with India.

Dear Sir,

We have gone through F.No.6/18/2019 – PPD dated 23rd July 2020 (& its amendments) issued by Department of Public Procurement, Ministry of Finance, Govt. of India and certify I/We also represent that company is not a subsidiary/ affiliate/ attached office of any border Companies as may be banned by Government of India for doing business in India as per revision of GFR Rules.

I/We hereby agree to provide copy of and/or produce original of all such documents as may be necessarily required to be submitted for evidence in this regard.

I/We hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered.

Signature
Name:
Designation:
Place:
Date:
Address:

Annexure 20 - Make in India Certificate

(on Bidders Letter-head)

To

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Reference: RFP no: _____ for selection of ……., 2023 dated _____

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 and its amendments, we hereby certify that we M/s _____ are local supplier meeting the requirement of minimum local content i.e., _____% against said Tender No…….. dated…….. We qualify as a _____ (Class-I or Class II) local supplier.

We also certify that we have used mechanism to calculate the local content as per information given by DPIIT at https://dpiit.gov.in/sites/default/files/RTI%20FAQ.pdf.

Signature
Name:
Designation:
Place:
Date:
Address:

Annexure 21 – Pre bid Query Format

Date: dd/mm/yyyy

Name of Work				
Ref No.				
Bidder Name				
Person Name				
Designation				
Contact No.				
Email ID.				
Sl. No.	**Page No.**	**Section**	**RFP Clause**	**Query**
1.				
2.				
3.				
4.				
5.				

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Business Address:

Note: To be submitted in excel as well.

Volume 2

Annexure 22 - Change Control Note

Change Control Note	CCN Number:
Part A: Initiation	
Title	
Originator	
Sponsor	
Date of Initiation	
Details of Proposed Change	
(To include reason for change and appropriate details/specifications. Identify any attachments as A1, A2, and A3 etc.)	
Authorized by Authority	Date
Name	
Signature	
Received by the MSI	Date
Name	
Signature	
Change	
Change Control Note	**CCN Number:**
Part B: Evaluation	
(Identify any attachments as B1, B2, and B3 etc.) Changes to Services, payment terms, payment profile, documentation, training, service levels and component working arrangements and any other contractual issue.	
Brief Description of Solution:	
Deliverables:	
Timetable:	
Charges for Implementation:	
Other Relevant Information: (Including value-added and acceptance criteria)	
Authorized by Authority	Date
Name	
Signature	
Change Control Note	**CCN Number:**
Part C: Authority to Proceed	
Implementation of this CCN as submitted in Part A, in accordance with Part B is: (tick as appropriate)	

Approved	
Rejected	
Requires Further Information (as follows, or as Attachment 1 etc.)	
For Authority and its nominated agencies	For MSI
Signature	Signature
Name	Name
Title	Title
Date	Date

Annexure 23 - FORM OF AGREEMENT

This Agreement (hereinafter "Framework Agreement") made on this _____day of _____, 20XX BETWEEN ********** {Kavaratti Smart City Limited} (hereinafter referred to as the "Authority", which expression shall include its successors and assigns) of the One Part;

AND

_____ (hereinafter referred to as the "MSI" which expression shall include its successors and assigns) of the Other Part.

AND WHEREAS, the Authority invited bids for the [selection of Master System Integrator (MSI) for implementation of Integrated Command & Control Centre (ICCC) in Kavaratti.

AND WHEREAS, pursuant to the bid submitted by the MSI, vide _____ (here in after referred to as the "Bid or Offer") for the execution of Works, the Authority by its Letter of Acceptance dated _____ accepted the offer submitted by the MSI for the execution and completion of such Works as specified in the RFP documents and on the conditions in accordance with the documents listed in para 2 below.

AND WHEREAS, the MSI by a deed of undertaking dated _____ has agreed to abide by all the terms of the Bid, including but not limited to the amount quoted for the execution of Agreement, as stated in the Bid, and also to comply with such terms and conditions as may be required from time to time.

AND WHEREAS, pursuant to the Bid submitted by the MSI vide _____ (hereinafter referred to as the "the Offer"), the Authority has by its Letter of Acceptance no. _____dated _____ accepted the Offer submitted by the MSI for the execution and completion of such Works and the remedying of any defects therein, on terms and conditions of the Framework Agreement;

AND WHEREAS, the MSI has agreed to undertake such Works and has furnished Performance Security in form of a Performance Bank Guarantee pursuant to Article 46 of the Agreement.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Framework Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Agreement hereinafter referred to;
2. The following documents shall be deemed to form and be read and constructed as part of this Framework Agreement viz. (a) Complete Request for Proposal (RFP) documents being Volumes I, II and III of the RFP and Corrigendum and addendum, (b) MSI's Offer, (c) Letter of Acceptance or Letter of Award OR Letter of Intent issued by the Authority, (d) the acceptance of Letter of Award from MSI, (e) Notice to Proceed with the Work, and (f) Any other document listed in the Agreement Data.

3. The foregoing documents shall be constructed as complementary and mutually explanatory one with another. Should any ambiguities or discrepancy be noted then the order of precedence of these documents shall subject to the condition of particular application be as follows:
    a. Complete Request for Proposal (RFP) documents being Volumes I, II and III of the RFP and Corrigendum and addendum, (b) Framework Agreement, (c) MSI's Offer, (d) Letter of Acceptance or Letter of Award or Letter of Intent issued by the Authority, (e) the acceptance of Letter of Award from MSI, (f) Notice to Proceed with the Work, and (g) Any other document listed in the Agreement Data.
4. In consideration of the payments to be made by the Authority to the MSI as hereinafter mentioned, the MSI hereby covenants with the Authority to execute and complete the Works and remedy any defects therein in conformity in all respect with the provisions of the Agreement.
5. the Authority hereby covenants to pay the MSI in consideration of the execution and completion of the Works and the remedying of defects therein the Agreement price or such other sum as may become payable under the provisions of the Agreement at the times and in the manner prescribed by the Agreement.

IN WITNESS WHEREOF, the Parties here to have caused this Framework Agreement to be executed on the day and year first before written.

For and on behalf of Kavaratti Smart City Limited By …… Signature …… Print Name …… Title Witness …….. Print Name …… Print Address	For and on behalf of MSI (Company Name) By …… Signature …… Print Name …… Title Witness …….. Print Name …… Print Address

Annexure 24: Non-Disclosure Agreement

This Non-Disclosure Agreement ("Agreement") is made and entered into ___ day of ……., 20XX by and between

……having its office at _____ (hereinafter referred to as "Authority"')

And

……., having its office at _____ (hereinafter referred to as: Master System Integrator" and/or "MSI")

"Authority" and "MSI" shall be individually referred to as Party and collectively as Parties to this Agreement.

Whereas, the Parties have entered into an Agreement bearing reference number _____ dated _____ for _____provision of _____ (hereinafter referred to as 'Agreement'); and

Whereas, during the execution of the Agreement, PARTIES may disclose to each other certain information which is confidential and proprietary in nature and as such they wish to protect such information from unauthorized disclosure and use;

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements contained herein and, in the Agreement, the Parties agree as follows:

1. **Definitions.** As used herein:
    a. The term "Confidential Information" shall include, without limitation, all information and materials, furnished by a Party ("Discloser") to another Party (Recipient) in connection with Government/corporate/citizen/users/persons/customers data, products and/or services, including information transmitted in writing, orally, visually, (e.g. video terminal display) or on magnetic or optical media, and including all proprietary information, customer & prospect lists, trade secrets, trade names or proposed trade names, methods and procedures of operation, commercial or marketing plans, licensed document know-how, ideas, concepts, designs, drawings, flow charts, diagrams, quality manuals, checklists, guidelines, processes, formulae, source code materials, specifications, programs, software packages, codes and other intellectual property relating to such Party's data, computer database, products and/or services. Confidential Information shall also include results of any tests, sample surveys, analytics, data mining exercises or usages etc. carried out by Discloser in connection with the Recipients' or any government department's / Corporate information including citizen/users/persons/customers personal or sensitive personal information as defined under any law for the time being in force.

b. The term, "MSI" shall include the directors, officers, employees, agents, consultants, contractors and representatives of MSI including its affiliates, subsidiary companies and permitted assigns and successors.

2. **Protection of Confidential Information**. With respect to any Confidential Information disclosed by the Discloser to the Recipient or to which any Party has access, both the Parties agree that it shall:
    a. Use the Confidential Information only for accomplishment of the Services to be performed under the Agreement and in accordance with the terms and conditions contained herein;
    b. Maintain the Confidential Information in strict confidence and take all reasonable steps to enforce the confidentiality obligations imposed hereunder, but in no event take less than reasonable care than it takes to protect the confidentiality of its own proprietary and confidential information and that of its clients;
    c. Not make or retain copy of any Confidential Information except as necessary, under prior written permission from other Party in connection with the Services to be performed under the Agreement, and ensure that any such copy is immediately returned to the other Party even without express demand from such Party to do so;
    d. Not disclose or in any way assist or permit the disclosure of any Confidential Information to any person or entity without the express written consent of discloser except as provided in Article 6 below; and
    e. Return to Discloser, or destroy, at Discloser's direction, any and all Confidential Information disclosed in a printed form or other permanent record, or in any other tangible form (including without limitation, all copies, notes, extracts, analyses, studies, summaries, records and reproductions thereof) immediately upon the earlier to occur of:
        i. expiration or termination of the Agreement, or
        ii. on request of Discloser.
    f. Not discuss with any member of public, media, press or any other person about the nature of arrangement entered between the Parties or the nature of services to be provided by the MSI to the Authority.
3. **Onus**. Recipient shall have the burden of proving that any disclosure or use inconsistent with the terms and conditions hereof falls within any of the exceptions provided in Article 4 below.
4. **Exceptions**. The obligations of confidentiality as mentioned in this Agreement shall not apply to any information:
    a. Which has become generally available to the public without breach of this Agreement by Recipient; or
    b. Which at the time of disclosure to Recipient was known to Recipient free of confidentiality restriction as evidenced by documentation in Recipient's possession;

Or

c. Which either Party agrees in writing is free of such confidentiality restrictions.

5. **Remedies.** The Parties acknowledge and agree that
    a. any actual or threatened unauthorized disclosure or use of the Confidential Information by Recipient would be a breach of this Agreement and may cause immediate and irreparable harm to Discloser;
    b. Damages from such unauthorized disclosure or use may be impossible to measure accurately and injury sustained by Authority may be impossible to calculate and remedy fully. Recipient acknowledges that in the event of such a breach or threatened breach of any provision of this Agreement, Discloser shall be entitled to specific performance by Recipient of Recipient's obligations contained in this Agreement. Recipient shall indemnify, save, hold harmless and defend Discloser promptly upon demand and at its expense, at any given point in time from and against any and all suits, proceedings, actions, demands, losses, claims, damages, liabilities, costs (including reasonable attorney's fees and disbursements) and expenses (collectively "Losses") to which Discloser may become subject to, in so far as such Losses arise out of, in any way relate to, or result from breach of obligations under this Agreement by Recipient . Such Party shall also be entitled, without the requirement of posting a bond or other security, to seek preliminary and final injunctive relief, as well as any and all other applicable remedies at law or equity, including the recovery of damages.
6. **Need to Know**. The Parties shall restrict disclosure of Confidential Information to its employees and/or consultants who have a need to know such information for accomplishment of Services under the Agreement provided such employees and/or consultants have agreed to abide by the terms and conditions of this Agreement and agree that they shall not disclose such Confidential Information to any affiliates, subsidiaries, associates and/or third party without prior written approval of Discloser.
7. **Intellectual Property Rights Protection**. No license to Recipient, under any trademark, patent, copyright, design right, mask work protection right, or any other intellectual property right is either granted or implied by the conveying of Confidential Information to Recipient by the Discloser.
8. **No Conflict**. The Parties represent and warrant that the performance of their obligations hereunder does not and shall not conflict with any other agreement or obligation of the respective Parties to which they are a party or by which the respective Parties are bound.
9. **Authority**. The Parties represent and warrant that they have all necessary authority and power to enter into this Agreement and perform their obligations hereunder.
10. **Governing Law**. This Agreement shall be interpreted in accordance with and governed by the substantive and procedural laws of India and the Parties hereby consent to submit to the exclusive jurisdiction of Courts and/or Forums situated at ********, INDIA only.

11. **Entire Agreement**. This Agreement constitutes the entire understanding and agreement of the Parties, and supersedes all previous or contemporaneous agreement or communications, both oral and written, representations and under standings among the Parties with respect to the subject matter hereof.
12. **Amendments**. No amendment, modification and/or discharge of this Agreement shall be valid or binding on the Parties unless made in writing and signed on behalf of each of the Parties by their respective duly authorized officers or representatives.
13. **Binding Agreement.** This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns.
14. **Severability.** It is the intent of the Parties that in case any one or more of the provisions contained in this Agreement shall be held to be invalid or unenforceable in any respect, such provision shall be modified to the extent necessary to render it, as modified, valid and enforceable under Applicable Laws, and such invalidity or unenforceability shall not affect the other provisions of this Agreement.
15. **Waiver**. If either Party should waive any breach of any provision of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision hereof.
16. **Survival.** The Parties agree that all of their obligations undertaken herein with respect to Confidential Information received pursuant to this Agreement and obligations of indemnity shall survive for a period of 10 years after any expiration or termination of this Agreement.
17. **Non-solicitation**. During the term of this Agreement and thereafter for a further period of two (2) years post termination/expiry of Term of the Agreement in case the Parties execute the Agreement, the Parties shall not solicit or attempt to solicit each other's employees and/or consultants, for the purpose of hiring/contracting with such employees and/or consultants. In addition, MSI shall not proceed to conduct operations/business similar to the Authority with any employee and/or consultant of the Authority who has knowledge of the Confidential Information, without the prior written consent of the Authority. This section will survive irrespective of the fact whether there exists a commercial relationship between MSI and Authority.
18. **Term.** This Agreement shall come into force on the date first written above and, subject to aforesaid Article 16, shall remain valid up to two (2) years from the expiry or termination of the Agreement.

IN WITNESS HEREOF, and intending to be legally bound, the Parties have executed this Agreement to make it effective from the date and year first written above.

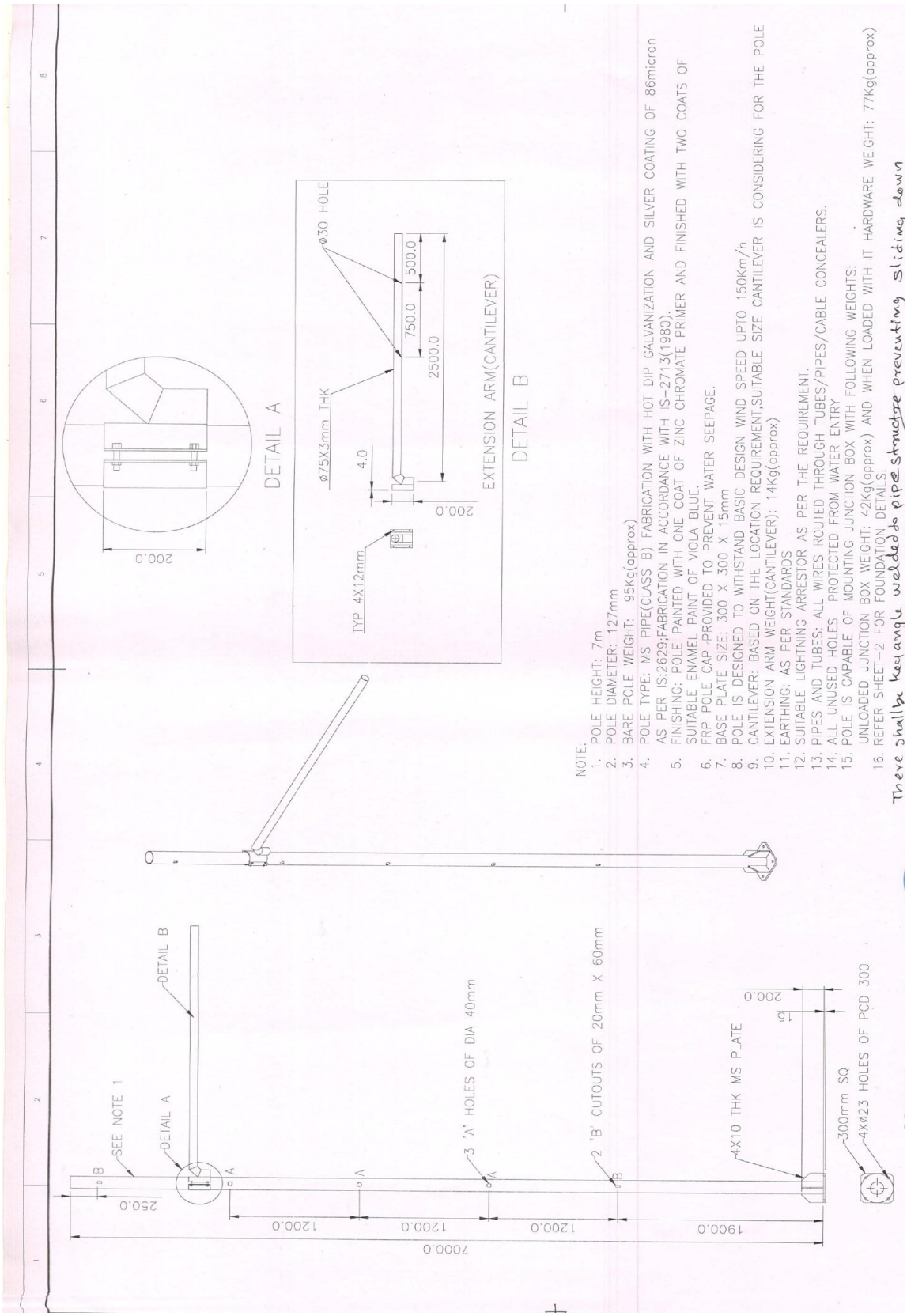
For Authority Name: Title:	For: Master System Integrator (MSI) Name: Title:

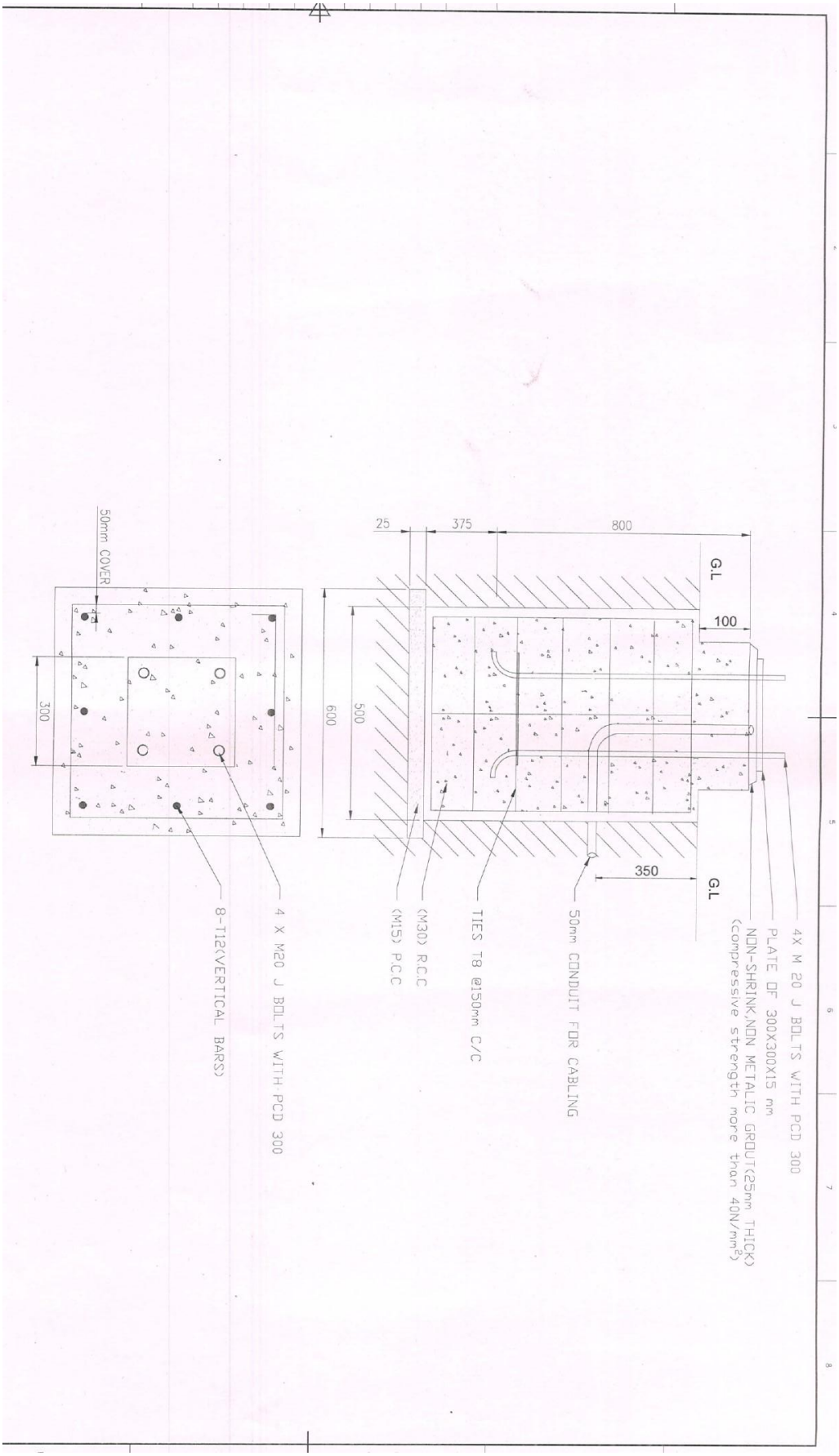
WITNESSES:

1.

2.

Drawing of Pole





Signature Not Verified
Digitally signed by ARUN JADHAV
Date: 2024.06.12 17:01:45 IST
Location: Union Territory of Lakshadweep-LD

04896-263361
Email:-smartkavaratti@gmail.com

KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.34/Smart City/2024/245 Dated: 13.07.2024

Corrigendum-2

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 34/Smart City/2024/195 dated 12.06.2024.

1. Key Bid Parameters

Page No. 6 and 7

Existing

Sl. No.	Event Description	Particulars
5	Last Date for download of RFP on website	Date and Time 15 .07.2024 at 15:00 Hours
14	Date & Time for opening of Technical Bid	15 .07.2024 16:15 hours IST

Modified

Sl. No.	Event Description	Particulars
5	Last Date for download of RFP on website	Date and Time 25 .07.2024 at 15:00 Hours
14	Date & Time for opening of Technical Bid	25 .07.2024 16:15 hours IST

-SD-

CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED

04896-263361
Email:-smartkavaratti@gmail.com

KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.34/Smart City/2024 **Dated: 15.07.2024**

Corrigendum-3

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 34/Smart City/2024/195 dated 12.06.2024.

RFP Section: Notice Inviting Tender

Existing

The selection shall be based on Quality cum Cost Selection (QCBS) basis.(Page 3 of RFP document)

Revised

The selection shall be based on Quality cum Least Cost System

RFP Section: 3.5. Pre-Qualification Criteria

Existing

#	Eligibility Criteria	Supporting documents required
PQ4	**Financial Turnover** Average annual Gross turnover of last three (3) financial years (FY 2021-2022, FY 2022-2023, FY 2023-2024) should be at least Rs:17.6 Crore.	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover • Chartered Accountant to share Financial Turnover and Net Worth
PQ5	**Net Worth** Bidder should have a positive net worth in each of last three (3) financial (FY 2021-2022, FY 2022-2023, FY 2023-2024)	• Certificate from the CA Auditor clearly stating the net worth • Chartered Accountant to share Financial Turnover and Net Worth

Revised

#	Eligibility Criteria	Supporting documents required
PQ4	**Financial Turnover** Average annual Gross turnover of last three (3) financial years (FY 2020-2021, FY 2021-2022, FY 2022-2023) should be at least Rs:17.6 Crore.	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover • Chartered Accountant to share Financial Turnover and Net Worth
PQ5	**Net Worth** Bidder should have a positive net worth in each of last three (3) financial (FY 2020-2021, FY 2021-2022, FY 2022-2023) Note: The net worth of the Bidder firm should not be negative and also should have not eroded by more than 30% (thirty percent) in the last three years, ending.	• Certificate from the CA Auditor clearly stating the net worth • Chartered Accountant to share Financial Turnover and Net Worth

RFP Section: 3.6.1. Technical Bid Evaluation Criteria

Existing

#	Particulars	Max Marks	Documents Required Supporting
TQ1.A	**Financial Turnover** Average annual Gross turnover of last three (3) financial years FY 2021-2022, FY 2022-2023, FY 2023-2024 Above Rs: 30 Cr = 15 marks a. Rs 23 Cr to Rs <30 Cr = 10 marks b. Rs 17 Cr to Rs <22 Cr = 7 marks	15	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover • Chartered Accountant to share Financial Turnover and Net Worth
TQ2.A	**Technical Capability (ICCC)/ CCTV Command Center**	15	• Copy of work order • Completion certificate/Go-live

	The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which Bids are invited. a. Project experience above Rs: 47 Cr = 15 marks b. Project experience Rs 31 Cr to Rs <47 Cr = 10 marks c. Project experience Rs 24 Cr to Rs <30 Cr = 7 marks		Certificate(s) from the client or Certification by CA for Ongoing Projects
TQ4.A	A. Technical Leader cum Program Manager: 10 Marks a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks b. 7 Years of Minimum Work Experience • Min 7 Years: 2 Marks • 10 Years or more: 4 Marks c. CCNA/ CCNP/ Linux / MCSE/ RHCE / Equivalent Certification: 4 Marks B. Technical Leader cum Program Manager: 10 Marks a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks b. 7 Years of Minimum Work Experience • Min 7 Years: 2 Marks • 10 Years or more: 4 Marks • PMP/ Prince 2 / Equivalent Certification : 4 Marks	20	a. Candidate CV b. Relevant Valid Certification Copy

Revised

#	Particulars	Max Marks	Documents Required Supporting
TQ1.A	**Financial Turnover** Average annual Gross turnover of last three (3) financial years FY 2020-2021, FY 2021-2022, FY 2022-2023	15	• Copy of the audited Balance Sheet and Profit & Loss Statement of the company • Certificate from the CA auditor clearly stating the total turnover

	a. Above Rs: 30 Cr = 15 marks b. Rs 23 Cr to Rs <30 Cr = 10 marks c. Rs 17 Cr to Rs <22 Cr = 7 marks		• Chartered Accountant to share Financial Turnover and Net Worth
TQ2.A	**Technical Capability (ICCC)/ CCTV Command Center** The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which Bids are invited. a. Project experience above Rs: 47 Cr = 15 marks b. Project experience Rs 31 Cr to Rs <47 Cr = 10 marks c. Project experience Rs 24 Cr to Rs <30 Cr = 7 marks **Note:** Similar works means the bidder should complete establishment of Integrated Command Control Centre (ICCC)/ CCTV Command Center in any of Smart City/Central Government/State Govt/ PSU, in India.	15	• Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects
TQ4.A	**A.** Technical Leader cum Program Manager: 10 Marks a. Min Educational Qualification: BE / B. Tech or equivalent in CS/IT/EC/ET: 2 Marks b. 7 Years of Minimum Work Experience in similar nature projects • Min 7 Years: 2 Marks • 10 Years or more: 4 Marks c. PMP/ Prince 2/ Equivalent Certification: 4 Marks **B.** Technical Expert (Network / System): 5 Marks a. Min Educational Qualification: BE / B. Tech/Diploma with additional 3 years of experience or equivalent in CS/IT/EC/ET: 1 Marks b. 3 Years of Minimum Work Experience as server / network admin • Min 3 Years: 1 Marks	20	a. Candidate CV b. Relevant Valid Certification Copy

	• 6 Years or more: 2 Marks c. CCNA/ CCNP/ Linux / MCSE/ RHCE / Equivalent Certification: 2 Marks **C.** Technical Expert (ICCC / Surveillance): 5 Marks a. Min Educational Qualification: Diploma/ BE / B. Tech/ Graduate IT or equivalent in CS/IT/EC/ET: 2 Marks b. 3 Years of Minimum Work Experience in CCTV/ ICCC / Command Center • Min 3 Years: 2 Marks • 6 Years or more: 3 Marks **Note:** i. CS – Computer Science ii. IT – Information Technology iii. EC – Electronics and Communication iv. ET – Electronics and Telecommunication		

RFP Section: 10.1. Video Management System

Existing

Sl. No.	Minimum Specifications
8.	Binding IP Address Authentication In order to prevent the operator from logging in illegally, the IP address of the computer is bound. The operator can only log in from the designated computer; or else he or she may not be able to enter the system normally.

Revised

Sl. No.	Minimum Specifications
8.	Binding IP Address Authentication/ 2FA In order to prevent the operator from logging in illegally, The system shall provide any of either mechanism mentioned below: 1. the IP address of the computer is bound. The operator can only log in from the designated computer; or else he or she may not be able to enter the system normally. OR 2. 2-factor authentication: The VMS software should have increasing the security of the system by requiring the user to have a second authentication step besides only the user name and the password to prevent hacker to login and audit logs are specified to special person not to the user group.

RFP Section: 10.3. Video wall

Existing

Sl. No.	Parameters	Specification Descriptions
31.	Operating System	Windows 10 64-bit IoT Enterprise or higher, Professional grade windows-10 Professional

Revised

Sl. No.	Parameters	Specification Descriptions
31.	Operating System	Windows 10 /11 64-bit IoT Enterprise or higher, Professional grade windows-10/11 Professional

RFP Section: 10.4. UPS for ICCC

Existing

Sl. No.	Minimum Specifications	
48.	Electromagnetic Compatibility	IEC/EN62040-1-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008

Revised

Sl. No.	Minimum Specifications	
48.	Electromagnetic Compatibility	IEC/EN62040-1-2, IEC/EN61000-3-11, IEC/EN61000-3-12,

RFP Section: 10.7. Control Centre Furniture and Interior

Existing

- MSI need to leverage the space provide by KSCL. One Hall will be provided to the MSI for Operation Control Room. However, MSI shall design the layout and take the authority approval before implementing the project. It is MSI responsibility to do provision AC, Access Control, network, and Power cabling work inside the control room.
- Interior furnishing (civil work) of Hall identified for establishment of ICCC at Kavaratti is not in the scope of bidder. However, bidder shall carry out electrical and network cabling, power supply, Access control including DC required in the hall.
- Size of hall identified for establishment of ICCC at Kavaratti is 17.10 x 7.4 Mtr.

Sr. No.	Specification
1.	The purpose of this document is to define the specifications of control room interior and control desk.
1.1.	Scope of Work: The scope of the project includes designing; engineering, supply & installation of 24X7 mission critical control centre interiors. Being a project of national repute this state-of-the-art facility & all its components like ceiling, flooring, panelling, glass partitions, control desks, ceiling light & luminaire's electrical etc. must look integrated and therefore it shall be treated as a part of one single solution i.e., Control room interior solution.
1.2.	It is mandatory for the main bidder that the control room interior solution provider supplies all elements & executes all the activities at site like ceiling, flooring, control desks, panelling, partitions & illumination to avoid interface & quality related issues.
1.3.	The control desk solution shall conform to high standard of engineering as mentioned in the document; meeting the specified codes, standards and designs. It shall be capable of performing 24X7 operations under the specified environmental condition.

Revised

- KSCL will build up the Command & Control Room including interior, Furniture, Control Desk, cooling system (AC) etc. Electrical and network cabling for workstation, Videowall, switches etc shall be bidders responsibility. Datacenter build-up including PAC of required size is bidders responsibility. Bidder shall install the Access control system in Control Room including Datacenter.
- It is bidders responsibility to do minor repair works wrt civil etc. after completion of their scope of work i.e. cabling, datacenter, access control etc.
- Size of hall identified for establishment of ICCC at Kavaratti is 17.10 x 7.4 Mtr.

Sr. No.	Specification
1.	Clause Stands Deleted
1.1.	Clause Stands Deleted
1.2.	Clause Stands Deleted
1.3.	Clause Stands Deleted

RFP Section: 10.8. Rack

Existing

Sl. No.	Minimum Specifications
2.	Front Door Would Be Supplied with Transparent Toughened Glass And Rear Door Would Be SPCC Quality Cold Rolled Steel Metal With 1mm Thickness With Locking Provision In Front And Rear. And With Easy Removable Side Panels With Slam Latches

Revised

Sl. No.	Minimum Specifications
2.	Front Door Would Be Supplied with perforated type door And Rear Door Would Be SPCC Quality Cold Rolled Steel Metal With 1mm Thickness With Locking Provision In Front And Rear. And With Easy Removable Side Panels With Slam Latches

RFP Section: 10.18. Storage for ICCC

Existing

S. No.	Parameter	Minimum Specifications
18.	Storage Management	Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities: a. Common Dashboard for all managed arrays through a single management console. b. Data migration through same console for all supported heterogeneous arrays c. On-premise performance analysis, workload planning etc. through a single console. e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.

Revised

S. No.	Parameter	Minimum Specifications
18.	Storage Management	Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities: a. Common Dashboard for all managed arrays through a single management console. b. On-premise performance analysis, workload planning etc. through a single console. c. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.

RFP Section: 10.25. Poles / Cantilever / Gantry

Existing

Sl. No.	Minimum Specifications
1.	**Material:** GI Class 'B'
2.	Pole / Gantry shall suitable for coastal areas.
3.	**Paint:** Pole / Gantry painted with two coats of zinc chromate primer and two coats of Asian apostolate paint or otherwise as required by architect and in addition bituminous painting for the bottom 1.5 m portion of pole.

Revised

Sl. No.	Parameter	Minimum Specifications
1.	Pole type	Hot Dip Galvanized after Fabrication with Silver coating of 86 micron, GI Class 'B' IS 1239
2.	Height	6-8 Meters, as-per-requirements for different types of cameras & Site conditions
3.	Pole Diameter	Min. 10 cm diameter pole (MSI to choose larger diameter for higher height)
4.	Bottom base plate	Minimum base plate of size 300mmx300mmx15mm (or)

Sl. No.	Parameter	Minimum Specifications
		30cmx30cmx1.5cm
5.	Mounting facilities	To mount CCTV cameras, Switch, Junction Box, PA System etc.
6.	Pipes, Tubes	All wiring must be hidden, through tubes/pipes. No wires shall be visible from outside.
7.	Foundation	Casting of Civil Foundation with foundation bolts, to ensure vibration free erection (basic aim is to ensure that video feed quality is not impacted due to winds in different climatic conditions). Expected foundation depth of min. 100cms.
8.	Protection	Lightning arrester at select sites as per the requirements
9.	**Paint**	Pole / Gantry painted with two coats of zinc chromate primer and two coats of Asian apostolate paint or otherwise as required by architect and in addition bituminous painting for the bottom 1.5 m portion of pole.

Note: Bidder shall factor pole mount and wall mount accessories for i.e. cameras, public address system etc.

RFP Section: 6.9. Subcontracting

Existing

The Selected Bidder would not be allowed to subcontract work, except for the following:

i. Fiber optic network build, other cabling and fixtures work, and all civil work during implementation
ii. Facility Management Staff at ICCC
iii. Internet Service Provider/Network Service provider

Subcontracting shall be allowed only with prior written approval of Authority. However, even if the work is subcontracted, the sole responsibility of the work shall lie with the lead member. The lead member shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the subcontracting agreements (if any) between both the parties would be required to be submitted to the Authority.

Revised

The Selected Bidder would not be allowed to subcontract work, except for the following:

i. Fiber optic network build, other cabling and fixtures work, and all civil work during implementation
ii. Facility Management Staff at ICCC
iii. Internet Service Provider/Network Service provider
iv. OEM installation and associated services

Subcontracting shall be allowed only with prior written approval of Authority. However, even if the work is subcontracted, the sole responsibility of the work shall lie with the lead member. The lead member shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the subcontracting agreements (if any) between both the parties would be required to be submitted to the Authority.

RFP Section: Annexure 20 - Make in India Certificate

Existing

(on Bidders Letter-head)

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Reference: RFP no: _____ for selection of ……., 2024 dated _____

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 and its amendments, we hereby certify that we M/s _____ are local supplier meeting the requirement of minimum local content i.e., _____% against said Tender No……. dated……. We qualify as a _____ (Class-I or Class II) local supplier.

We also certify that we have used mechanism to calculate the local content as per information given by DPIIT at https://dpiit.gov.in/sites/default/files/RTI%20FAQ.pdf.

Signature

Name:

Designation:

Place:

Date:

Address:

Revised

To

Date: dd/mm/yyyy

To

The Chief Executive Officer (CEO),

Kavaratti Smart City Limited (KSCL),

Kavaratti, Lakshadweep -682555

Reference: RFP no: _____ for selection of ……., dated _____

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 and its amendments, we hereby certify that we M/s _____ are local supplier meeting the requirement of minimum local content i.e., _____% against said Tender No……. dated……. We qualify as a _____ (Class-I or Class II) local supplier.

We also certify that we have used mechanism to calculate the local content as per information given by DPIIT at https://dpiit.gov.in/sites/default/files/RTI%20FAQ.pdf.

Signature

Name:

Note: Certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

RFP Section: 12. Proposed Bill of Material

Existing

Sl. No.	Solution Description	UoM	Qty
A. Command & Control Room Kavaratti			
1	Command & Control Centre software Platform	Lot	1
2	Video Management System	Lot	1
3	Videowall along with Controller and Software	Lot	1
4	UPS for ICCC	Lot	1
5	Dome Camera	No	8
6	Rack	Lot	4
7	PAC	No	2
8	Firewall	No	2
9	Core Router	No	2
10	Core Switch	No	2
11	ToR Switch	No	2
12	PoE Access Switch	No	2
13	HIPS	Lot	1
14	Enterprise Management System	Lot	1
15	Server (Including OS, Virtualizationetc)	Lot	1
16	Storage	Lot	1
17	Workstation	No	6
18	PTZ Joystick	No	2
19	Public Address System	Lot	1
20	Interior and furniture (Including DC, Access Control, Power and Network Cabling etcBut not limited to)	Lot	1
21	Air Conditioning (3 Ton)	No	2
22	Air Conditioning (1.5 Ton)	No	2
23	Manpower	Lot	1
B. Agatti			

1	Dome Camera	No	106
2	Bullet Camera	No	158
3	PTZ Camera	No	35
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	89
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	57
11	Rack / JB	No	96
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	Power Cable 3 Core x 2.5 sq mm	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Cabling, Installation, Rack etc)	Lot	1
C. Amini			
1	Dome Camera	No	111
2	Bullet Camera	No	179
3	PTZ Camera	No	14
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	8
6	PoE Switch 8 Port	No	59
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4

10	Poles	No	14
11	Rack / JB	No	67
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
D. Androth			
1	Dome Camera	No	163
2	Bullet Camera	No	161
3	PTZ Camera	No	21
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	58
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	12
11	Rack / JB	No	65
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1

E. Bitra			
1	Dome Camera	No	19
2	Bullet Camera	No	35
3	PTZ Camera	No	9
4	Long Range PTZ Camera	No	1
5	PoE Switch 8 Port	No	28
6	65" Screen	No	2
7	Workstation	No	2
8	Smart Pole	No	2
9	Poles	No	15
10	Rack / JB	No	28
11	CAT-5e/6 Cable sheathed	Mtr	15000
12	2x10 SWG Bare Copper	Mtr	1500
13	Fiber Cable	Mtr	1500
14	HDPE Pipe and other Accessories	Mtr	3000
15	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
16	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
F. Chetlat			
1	Dome Camera	No	87
2	Bullet Camera	No	173
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	4
6	PoE Switch 8 Port	No	66
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3

10	Poles	No	20
11	Rack / JB	No	70
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
G. Kadmat			
1	Dome Camera	No	91
2	Bullet Camera	No	165
3	PTZ Camera	No	15
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	2
6	PoE Switch 8 Port	No	48
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	11
11	Rack / JB	No	50
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1

H. Kalpeni			
1	Dome Camera	No	124
	Bullet Camera	No	164
3	PTZ Camera	No	28
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	78
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	38
11	Rack / JB	No	83
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fibre Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
I. Kavaratti			
1	Dome Camera	No	209
2	Bullet Camera	No	318
3	PTZ Camera	No	48
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	15
6	PoE Switch 8 Port	No	120
7	65" Screen	No	2
8	Workstation	No	2

9	Smart Pole	No	5
10	Poles	No	55
11	Rack / JB	No	135
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
J. Kiltan			
1	Dome Camera	No	78
2	Bullet Camera	No	91
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	35
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	14
11	Rack / JB	No	40
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200

17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1
K. Minicoy			
1	Dome Camera	No	134
2	Bullet Camera	No	141
3	PTZ Camera	No	17
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	6
6	PoE Switch 8 Port	No	49
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	18
11	Rack / JB	No	55
12	CAT-5e/6 Cable sheathed	Mtr	15000
13	2x10 SWG Bare Copper	Mtr	1500
14	Fiber Cable	Mtr	1500
15	HDPE Pipe and other Accessories	Mtr	3000
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	200
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, JB, Earthing, Labour, Cabling, Installation, Rack etc)	Lot	1

Revised

Sl. No.	Solution Description	UoM	Qty
A. Command & Control Room Kavaratti			
1	Command & Control Centre software Platform	Lot	1
2	Video Management System	Lot	1

Sl. No.	Solution Description	UoM	Qty
3	Videowall along with Controller and Software	Lot	1
4	UPS for ICCC	Lot	1
5	Dome Camera	No	8
6	Rack	Lot	4
7	PAC	No	2
8	Firewall	No	2
9	Core Router	No	2
10	Core Switch	No	2
11	ToR Switch	No	2
12	PoE Access Switch	No	2
13	HIPS	Lot	1
14	Enterprise Management System	Lot	1
15	Server (Including OS, Virtulizationetc)	Lot	1
16	Storage	Lot	1
17	Workstation	No	6
18	PTZ Joystick	No	2
19	Public Address System	Nos	25
20	DataCenter Buildup for supplied Rack. Power and Network Cabling in control room and datacenter including power points for workstation, videowall etc.	Lot	1
21	Access Control System for Control room &DataCenter	Lot	1
22	Air Conditioning (1.5 Ton)	No	4
23	Manpower	Lot	1
B. Agatti			
1	Dome Camera	No	106
2	Bullet Camera	No	158
3	PTZ Camera	No	35
4	Long Range PTZ Camera	No	3

Sl. No.	Solution Description	UoM	Qty
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	75
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	40
11	Rack / JB	No	82
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or betterCable sheathed	Mtr	14000
15	Power Cable 3 Core x 2.5 sq mm	Mtr	1400
16	Fibre Cable	Mtr	1400
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
C. Amini			
1	Dome Camera	No	111
2	Bullet Camera	No	179
3	PTZ Camera	No	14
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	8
6	PoE Switch 8 Port	No	51
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	14

Sl. No.	Solution Description	UoM	Qty
11	Rack / JB	No	59
12	1 Kva UPS	No	45
13	2 Kva UPS	No	10
14	CAT 6 or betterCable sheathed	Mtr	14000
15	2x10 SWG Bare Copper	Mtr	1400
16	Fibre Cable	Mtr	1400
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
D. Androth			
1	Dome Camera	No	163
2	Bullet Camera	No	161
3	PTZ Camera	No	21
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	52
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	12
11	Rack / JB	No	59
12	1 Kva UPS	No	50
13	2 Kva UPS	No	7
14	CAT 6 or betterCable sheathed	Mtr	15000
15	2x10 SWG Bare Copper	Mtr	1500
16	Fibre Cable	Mtr	1500

Sl. No.	Solution Description	UoM	Qty
17	HDPE Pipe and other Accessories	Mtr	3000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	85
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
E. Bitra			
1	Dome Camera	No	19
2	Bullet Camera	No	35
3	PTZ Camera	No	9
4	Long Range PTZ Camera	No	1
5	PoE Switch 8 Port	No	25
6	65" Screen	No	2
7	Workstation	No	2
8	Smart Pole	No	2
9	Poles	No	15
10	Rack / JB	No	25
11	1 Kva UPS	No	15
12	CAT 6 or betterCable sheathed	Mtr	5000
13	2x10 SWG Bare Copper	Mtr	500
14	Fibre Cable	Mtr	500
15	HDPE Pipe and other Accessories	Mtr	700
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	40
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
F. Chetlat			
1	Dome Camera	No	87
2	Bullet Camera	No	173

Sl. No.	Solution Description	UoM	Qty
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	4
6	PoE Switch 8 Port	No	58
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	2
10	Poles	No	20
11	Rack / JB	No	55
12	1 Kva UPS	No	50
13	2 Kva UPS	No	5
14	CAT 6 or betterCable sheathed	Mtr	12000
15	2x10 SWG Bare Copper	Mtr	1200
16	Fibre Cable	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	2000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
G. Kadmat			
1	Dome Camera	No	91
2	Bullet Camera	No	165
3	PTZ Camera	No	15
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	2
6	PoE Switch 8 Port	No	40
7	65" Screen	No	2
8	Workstation	No	2

Sl. No.	Solution Description	UoM	Qty
9	Smart Pole	No	3
10	Poles	No	11
11	Rack / JB	No	42
12	1 Kva UPS	No	35
13	2 Kva UPS	No	7
14	CAT 6 or betterCable sheathed	Mtr	12000
15	2x10 SWG Bare Copper	Mtr	1200
16	Fibre Cable	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	1500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
H. Kalpeni			
1	Dome Camera	No	124
2	Bullet Camera	No	164
3	PTZ Camera	No	28
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	71
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	35
11	Rack / JB	No	76
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or betterCable sheathed	Mtr	13000

Sl. No.	Solution Description	UoM	Qty
15	2x10 SWG Bare Copper	Mtr	1300
16	Fibre Cable	Mtr	1300
17	HDPE Pipe and other Accessories	Mtr	2200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
I. Kavaratti			
1	Dome Camera	No	209
2	Bullet Camera	No	318
3	PTZ Camera	No	48
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	15
6	PoE Switch 8 Port	No	105
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	55
11	Rack / JB	No	120
12	1 Kva UPS	No	80
13	2 Kva UPS	No	20
14	CAT 6 or betterCable sheathed	Mtr	20000
15	2x10 SWG Bare Copper	Mtr	2000
16	Fibre Cable	Mtr	2000
17	HDPE Pipe and other Accessories	Mtr	3500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	150
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera	Lot	1

Sl. No.	Solution Description	UoM	Qty
	Mounting, Power and Network Cabling, Installation, etc)		
J. Kiltan			
1	Dome Camera	No	78
2	Bullet Camera	No	91
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	32
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	14
11	Rack / JB	No	37
12	1 Kva UPS	No	32
13	2 Kva UPS	No	5
14	CAT 6 or betterCable sheathed	Mtr	8000
15	2x10 SWG Bare Copper	Mtr	800
16	Fibre Cable	Mtr	900
17	HDPE Pipe and other Accessories	Mtr	1200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
K. Minicoy			
1	Dome Camera	No	134
2	Bullet Camera	No	141
3	PTZ Camera	No	17
4	Long Range PTZ Camera	No	4

Sl. No.	Solution Description	UoM	Qty
5	PoE Switch 24 Port	No	6
6	PoE Switch 8 Port	No	45
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	18
11	Rack / JB	No	51
12	1 Kva UPS	No	45
13	2 Kva UPS	No	5
14	CAT 6 or betterCable sheathed	Mtr	15000
15	2x10 SWG Bare Copper	Mtr	1500
16	Fibre Cable	Mtr	1500
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1

B. PART B – SPECIAL CONDITIONS OF AGREEMENT

RFP Section: 45. Performance Security

Existing

To guarantee its performance under the Agreement, the MSI shall provide to Authority in its favour a Performance Bank Guarantee (PBG) which is unconditional, unequivocal and irrevocable for an amount equivalent to 5% of the CAPEX amount at the commencement of Project in the format prescribed in RFP, issued by any of the nationalized banks only. The

Performance Bank Guarantee shall be kept valid up to a period of 6 (six) months after UAT and Go-live of the final phase of complete system.

To guarantee its performance under the O&M phase, the MSI shall provide to Authority in its favour a Performance Bank Guarantee (PBG) which is unconditional, unequivocal and irrevocable for an amount equivalent to 5% of the OPEX amount at the commencement of O&M of the final phase of the Project in the format prescribed in RFP issued by any of the nationalized banks only. The PBG for the CAPEX amount will be released upon submission of PBG for the OPEX amount. The Performance Bank Guarantee (PBG) for the OPEX amount shall be kept valid up to a period of 6 (six) months after the termination or expiry of the Agreement.

The Performance Bank Guarantee shall be encashed by the Authority in the event of MSI's failure to complete obligations or breach by MSI of any of the terms and conditions of the Agreement.

Revised

- **Successful bidder shall submit two performance Guarantees ie one towards CAPEX and second towards OPEX.**
- **Performance Bank Guarantee** (PBG) shall be 3% of the contract amount. Bidders shall submit 3% of the CAPEX contract amount towards CAPEX PBG, and 3% of the OPEX contract amount towards OPEX PBG, separately.
- CAPEX PBG shall be valid till Go-Live + 3 Months, and OPEX PBG shall be valid for entire contract duration + three months.
- Performance guarantee in respect of CAPEX shall be released after three months of completion of work (date of completion certificate). OPEX PG will be released after three months of completion of the Operation and Maintenance Period.

-SD-

CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED

04896-263361
Email:-smartkavaratti@gmail.com

KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.34/Smart City/2024 **Dated: 19.07.2024**

Corrigendum-4

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 34/Smart City/2024/195 dated 12.06.2024.

RFP Section: 12. Proposed Bill of Material

Existing

Sl. No.	Solution Description	UoM	Qty
A. Command & Control Room Kavaratti			
1	Command & Control Centre software Platform	Lot	1
2	Video Management System	Lot	1
3	Videowall along with Controller and Software	Lot	1
4	UPS for ICCC	Lot	1
5	Dome Camera	No	8
6	Rack	Lot	4
7	PAC	No	2
8	Firewall	No	2
9	Core Router	No	2
10	Core Switch	No	2
11	ToR Switch	No	2
12	PoE Access Switch	No	2
13	HIPS	Lot	1
14	Enterprise Management System	Lot	1
15	Server (Including OS, Virtulizationetc)	Lot	1
16	Storage	Lot	1
17	Workstation	No	6
18	PTZ Joystick	No	2

Sl. No.	Solution Description	UoM	Qty
19	Public Address System	Nos	25
20	DataCenter Buildup for supplied Rack. Power and Network Cabling in control room and datacenter including power points for workstation, videowall etc.	Lot	1
21	Access Control System for Control room &Data Center	Lot	1
22	Air Conditioning (1.5 Ton)	No	4
23	Manpower	Lot	1
B. Agatti			
1	Dome Camera	No	106
2	Bullet Camera	No	158
3	PTZ Camera	No	35
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	75
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	40
11	Rack / JB	No	82
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or better Cable sheathed	Mtr	14000
15	Power Cable 3 Core x 2.5 sq mm	Mtr	1400
16	Fibre Cable	Mtr	1400
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
C. Amini			
1	Dome Camera	No	111
2	Bullet Camera	No	179
3	PTZ Camera	No	14
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	8
6	PoE Switch 8 Port	No	51
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	14
11	Rack / JB	No	59
12	1 Kva UPS	No	45

Sl. No.	Solution Description	UoM	Qty
13	2 Kva UPS	No	10
14	CAT 6 or better Cable sheathed	Mtr	14000
15	2x10 SWG Bare Copper	Mtr	1400
16	Fibre Cable	Mtr	1400
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
D. Androth			
1	Dome Camera	No	163
2	Bullet Camera	No	161
3	PTZ Camera	No	21
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	52
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	12
11	Rack / JB	No	59
12	1 Kva UPS	No	50
13	2 Kva UPS	No	7
14	CAT 6 or better Cable sheathed	Mtr	15000
15	2x10 SWG Bare Copper	Mtr	1500
16	Fibre Cable	Mtr	1500
17	HDPE Pipe and other Accessories	Mtr	3000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	85
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
E. Bitra			
1	Dome Camera	No	19
2	Bullet Camera	No	35
3	PTZ Camera	No	9
4	Long Range PTZ Camera	No	1
5	PoE Switch 8 Port	No	25
6	65" Screen	No	2
7	Workstation	No	2
8	Smart Pole	No	2
9	Poles	No	15
10	Rack / JB	No	25

Sl. No.	Solution Description	UoM	Qty
11	1 Kva UPS	No	15
12	CAT 6 or better Cable sheathed	Mtr	5000
13	2x10 SWG Bare Copper	Mtr	500
14	Fibre Cable	Mtr	500
15	HDPE Pipe and other Accessories	Mtr	700
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	40
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
F. Chetlat			
1	Dome Camera	No	87
2	Bullet Camera	No	173
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	4
6	PoE Switch 8 Port	No	58
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	2
10	Poles	No	20
11	Rack / JB	No	55
12	1 Kva UPS	No	50
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	12000
15	2x10 SWG Bare Copper	Mtr	1200
16	Fibre Cable	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	2000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
G. Kadmat			
1	Dome Camera	No	91
2	Bullet Camera	No	165
3	PTZ Camera	No	15
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	2
6	PoE Switch 8 Port	No	40
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	11

Sl. No.	Solution Description	UoM	Qty
11	Rack / JB	No	42
12	1 Kva UPS	No	35
13	2 Kva UPS	No	7
14	CAT 6 or better Cable sheathed	Mtr	12000
15	2x10 SWG Bare Copper	Mtr	1200
16	Fibre Cable	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	1500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
H. Kalpeni			
1	Dome Camera	No	124
2	Bullet Camera	No	164
3	PTZ Camera	No	28
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	71
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	35
11	Rack / JB	No	76
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or better Cable sheathed	Mtr	13000
15	2x10 SWG Bare Copper	Mtr	1300
16	Fibre Cable	Mtr	1300
17	HDPE Pipe and other Accessories	Mtr	2200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
I. Kavaratti			
1	Dome Camera	No	209
2	Bullet Camera	No	318
3	PTZ Camera	No	48
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	15
6	PoE Switch 8 Port	No	105
7	65" Screen	No	2
8	Workstation	No	2

Sl. No.	Solution Description	UoM	Qty
9	Smart Pole	No	5
10	Poles	No	55
11	Rack / JB	No	120
12	1 Kva UPS	No	80
13	2 Kva UPS	No	20
14	CAT 6 or better Cable sheathed	Mtr	20000
15	2x10 SWG Bare Copper	Mtr	2000
16	Fibre Cable	Mtr	2000
17	HDPE Pipe and other Accessories	Mtr	3500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	150
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
J. Kiltan			
1	Dome Camera	No	78
2	Bullet Camera	No	91
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	32
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	14
11	Rack / JB	No	37
12	1 Kva UPS	No	32
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	8000
15	2x10 SWG Bare Copper	Mtr	800
16	Fibre Cable	Mtr	900
17	HDPE Pipe and other Accessories	Mtr	1200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
K. Minicoy			
1	Dome Camera	No	134
2	Bullet Camera	No	141
3	PTZ Camera	No	17
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	6
6	PoE Switch 8 Port	No	45

Sl. No.	Solution Description	UoM	Qty
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	18
11	Rack / JB	No	51
12	1 Kva UPS	No	45
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	15000
15	2x10 SWG Bare Copper	Mtr	1500
16	Fibre Cable	Mtr	1500
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1

Revised

Sl. No.	Solution Description	UoM	Qty
A. Command & Control Room Kavaratti			
1	Command & Control Centre software Platform	Lot	1
2	Video Management System	Lot	1
3	Video wall along with Controller and Software	Lot	1
4	UPS for ICCC	Lot	1
5	Dome Camera	No	8
6	Rack	Lot	4
7	PAC	No	2
8	Firewall	No	2
9	Core Router	No	2
10	Core Switch	No	2
11	ToR Switch	No	2
12	PoE Access Switch	No	2
13	HIPS	Lot	1
14	Enterprise Management System	Lot	1
15	Server (Including OS, Virtulizationetc)	Lot	1
16	Storage	Lot	1
17	Workstation	No	6
18	PTZ Joystick	No	2
19	Public Address System	Nos	25
20	Data Center Buildup for supplied Rack. Power and Network Cabling in control room and datacenter including power points for workstation, videowall etc.	Lot	1

Sl. No.	Solution Description	UoM	Qty
21	Access Control System for Control room &DataCenter	Lot	1
22	Air Conditioning (1.5 Ton)	No	4
23	Manpower	Lot	1
B. Agatti			
1	Dome Camera	No	106
2	Bullet Camera	No	158
3	PTZ Camera	No	35
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	75
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	40
11	Rack / JB	No	82
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or better Cable sheathed	Mtr	14000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1400
16	Fibre Cable(12 Core)	Mtr	1400
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc.)	Lot	1
C. Amini			
1	Dome Camera	No	111
2	Bullet Camera	No	179
3	PTZ Camera	No	14
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	8
6	PoE Switch 8 Port	No	51
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	14
11	Rack / JB	No	59
12	1 Kva UPS	No	45
13	2 Kva UPS	No	10
14	CAT 6 or better Cable sheathed	Mtr	14000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1400
16	Fibre Cable (12 Core)	Mtr	1400

Sl. No.	Solution Description	UoM	Qty
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	100
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
D. Androth			
1	Dome Camera	No	163
2	Bullet Camera	No	161
3	PTZ Camera	No	21
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	7
6	PoE Switch 8 Port	No	52
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	12
11	Rack / JB	No	59
12	1 Kva UPS	No	50
13	2 Kva UPS	No	7
14	CAT 6 or better Cable sheathed	Mtr	15000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1500
16	Fibre Cable (12 Core)	Mtr	1500
17	HDPE Pipe and other Accessories	Mtr	3000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	85
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
E. Bitra			
1	Dome Camera	No	19
2	Bullet Camera	No	35
3	PTZ Camera	No	9
4	Long Range PTZ Camera	No	1
5	PoE Switch 8 Port	No	25
6	65" Screen	No	2
7	Workstation	No	2
8	Smart Pole	No	2
9	Poles	No	15
10	Rack / JB	No	25
11	1 Kva UPS	No	15
12	CAT 6 or better Cable sheathed	Mtr	5000
13	Power Cable 3 Core x 2.5 sq mm armored	Mtr	500
14	Fibre Cable (12 Core)	Mtr	500

Sl. No.	Solution Description	UoM	Qty
15	HDPE Pipe and other Accessories	Mtr	700
16	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	40
17	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
F. Chetlat			
1	Dome Camera	No	87
2	Bullet Camera	No	173
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	4
6	PoE Switch 8 Port	No	58
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	2
10	Poles	No	20
11	Rack / JB	No	55
12	1 Kva UPS	No	50
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	12000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1200
16	Fibre Cable (12 Core)	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	2000
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
G. Kadmat			
1	Dome Camera	No	91
2	Bullet Camera	No	165
3	PTZ Camera	No	15
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	2
6	PoE Switch 8 Port	No	40
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	11
11	Rack / JB	No	42
12	1 Kva UPS	No	35
13	2 Kva UPS	No	7
14	CAT 6 or better Cable sheathed	Mtr	12000

Sl. No.	Solution Description	UoM	Qty
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1200
16	Fibre Cable (12 Core)	Mtr	1200
17	HDPE Pipe and other Accessories	Mtr	1500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
H. Kalpeni			
1	Dome Camera	No	124
2	Bullet Camera	No	164
3	PTZ Camera	No	28
4	Long Range PTZ Camera	No	3
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	71
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	4
10	Poles	No	35
11	Rack / JB	No	76
12	1 Kva UPS	No	65
13	2 Kva UPS	No	8
14	CAT 6 or better Cable sheathed	Mtr	13000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1300
16	Fibre Cable (12 Core)	Mtr	1300
17	HDPE Pipe and other Accessories	Mtr	2200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
I. Kavaratti			
1	Dome Camera	No	209
2	Bullet Camera	No	318
3	PTZ Camera	No	48
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	15
6	PoE Switch 8 Port	No	105
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	55
11	Rack / JB	No	120
12	1 Kva UPS	No	80

Sl. No.	Solution Description	UoM	Qty
13	2 Kva UPS	No	20
14	CAT 6 or better Cable sheathed	Mtr	20000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	2000
16	Fibre Cable (12 Core)	Mtr	2000
17	HDPE Pipe and other Accessories	Mtr	3500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	150
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
J. Kiltan			
1	Dome Camera	No	78
2	Bullet Camera	No	91
3	PTZ Camera	No	10
4	Long Range PTZ Camera	No	2
5	PoE Switch 24 Port	No	5
6	PoE Switch 8 Port	No	32
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	3
10	Poles	No	14
11	Rack / JB	No	37
12	1 Kva UPS	No	32
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	8000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	800
16	Fibre Cable (12 Core)	Mtr	900
17	HDPE Pipe and other Accessories	Mtr	1200
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1
K. Minicoy			
1	Dome Camera	No	134
2	Bullet Camera	No	141
3	PTZ Camera	No	17
4	Long Range PTZ Camera	No	4
5	PoE Switch 24 Port	No	6
6	PoE Switch 8 Port	No	45
7	65" Screen	No	2
8	Workstation	No	2
9	Smart Pole	No	5
10	Poles	No	18

Sl. No.	Solution Description	UoM	Qty
11	Rack / JB	No	51
12	1 Kva UPS	No	45
13	2 Kva UPS	No	5
14	CAT 6 or better Cable sheathed	Mtr	15000
15	Power Cable 3 Core x 2.5 sq mm armored	Mtr	1500
16	Fibre Cable (12 Core)	Mtr	1500
17	HDPE Pipe and other Accessories	Mtr	2500
18	Road Cutting and Restoration (200 x0.5 x 0.9 Mtr)	Cubic mtr	75
19	Other works (including but not limited to trench, filling, ducts, chambers, mounting structures, Earthing, Labour, Camera Mounting, Power and Network Cabling, Installation, etc)	Lot	1

-SD-

CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED

04896-263361
Email:-smartkavaratti@gmail.com

KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.34/Smart City/2024/ Dated: 04.07.2024

Addendum-1

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 34/Smart City/2024/195 dated 12.06.2024.

1. For Bank Guarantee, Bank Account details of KSCL are given below.

Name of Bank Account Holder	: KSCL Administrative and Other Expenses.
Bank Account Number	: 1100 4155 5004
Name of the Bank	: CANARA BANK, KAVARATTI
IFSC Code	: CNRB 0019950

Note:

The Bank Guarantee submitted as a part of Earnest Money shall be valid for the period of **180 days** from the last date of submission of technical bid.

-SD-

CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED

04896-263361
Email:-smartkavaratti@gmail.com

KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.34/Smart City/2024/ 249 **Dated:** 15**.07.2024**

Addendum-2

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 34/Smart City/2024/195 dated 12.06.2024.

New Clause / Specifications

1) 1/2 Kva UPS

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes/ No)
1.	Capacity	1/2 Kva	
2.	Topology	True Online	
INPUT			
3.	Input Facility	2-wire & Ground, (Phase & Neutral + Ground)	
4.	Input Voltage Range	180 ~ 260 VAC (On 100% Load)	
5.	Input Power Factor	≥0.99	
OUTPUT			
6.	Power Factor	0.9	
7.	Nominal Output Voltage	220/230VAC	
8.	Voltage regulation	± 1% static, ± 5% for Dynamic Load	
9.	Nominal Frequency	50Hz	
10.	Waveform	Sine wave	

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes/ No)
11.	Protection	Output Short Circuit Protection, Surge Protection Device	
12.	Maintenance/Manual Bypass	Automatic / Manual	
13.	Isolation Transformer	Inbuilt/external Isolation transformer shall be provided for full Isolation from Mains	
BATTERY & BATTERY BANK CHARGER			
14.	Battery Make	Bidder to specify	
15.	Number of Battery Banks	Bidder to specify	
CERTIFICATIONS			
16.	Certification	BIS Certificate, IEC/ EN	

-SD-

CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED

ePROCUREMENT SYSTEM UNION TERITORY OF LAKSHADWEEP

Lakshadweep Tenders

Published Corrigendum Details

Date : 02-Jul-2024 11:51 AM

Print

Organisation Chain :	Lakshadweep District||Kavaratti Smart City Limitted(KSCL)
Tender ID :	2024_UTL_2621_1
Tender Ref No :	F.No. 34/Smart City/2024/195
Tender Title :	Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O and M).
Corrigendum Type :	Date

Corrigendum:1

Corrigendum Title	Corrigendum Description	Published Date	Document Name	Doc Size(in KB)
Corrigendum 1 Date Extension	2024_UTL_2621_1	01-Jul-2024 03:20 PM	Corrigendum1dateextension.pdf	205.5

Critical Dates			
Publish Date	12-Jun-2024 05:30 PM	**Bid Opening Date**	15-Jul-2024 04:15 PM
Document Download/Sale Start Date	13-Jun-2024 03:00 PM	**Document Download/Sale End Date**	15-Jul-2024 03:00 PM
Clarification Start Date	NA	**Clarification End Date**	NA
Bid Submission Start Date	13-Jun-2024 03:00 PM	**Bid Submission End Date**	15-Jul-2024 03:00 PM
Pre Bid Meeting Date	19-Jun-2024 04:00 PM		

Details Before Corrigendum

Critical Dates			
Publish Date	12-Jun-2024 05:30 PM	**Bid Opening Date**	04-Jul-2024 04:15 PM
Document Download/Sale Start Date	13-Jun-2024 03:00 PM	**Document Download/Sale End Date**	04-Jul-2024 03:00 PM
Clarification Start Date	NA	**Clarification End Date**	NA
Bid Submission Start Date	13-Jun-2024 03:00 PM	**Bid Submission End Date**	04-Jul-2024 03:00 PM
Pre Bid Meeting Date	19-Jun-2024 04:00 PM		