



GOVERNMENT OF ANDHRA PRADESH

REQUEST FOR PROPOSAL (RFP)

FOR

Selection of Master System Integrator (MSI) for setting-up, operation and maintenance of “Integrated Command Control Center for Maternal and Child Health”

T. No. 16.7C/APMSIDC/2022-23, Dt. 23.01.2023

Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC), Department of Health, Medical & Family Welfare

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Disclaimer

Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC) on behalf of “Department of Health and Family welfare , Government of Andhra Pradesh” is procuring services related to Establishment, Operations and Maintenance of Integrated Command control Center for maternal and child health” The information contained in this Request for Proposal (RFP) document, or subsequently provided to bidders, whether verbally or in documentary form, by or on behalf of Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC), or any of their employees or advisors, is provided to bidders on the terms and conditions set out in this RFP document and any other terms and conditions subject to which such information is provided. This RFP document is not an agreement and is not an offer or invitation by APMSIDC, Department of Health, Medical & Family Welfare or its representatives to any other party.

The purpose of this RFP document is to provide interested parties with information to assist the formulation of their Proposal. This RFP document does not purport to contain all the information each Applicant may require. This RFP document may not be appropriate for all persons, and it is not possible for APMSIDC, their employees or advisors to consider the investment objectives, financial situation and particular needs of each entity/bidder who reads or uses this RFP document.

Certain bidders may have a better knowledge of the proposed Project than others. Each applicant should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and obtain independent advice from appropriate sources. APMSIDC, its employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP document. APMSIDC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

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List of abbreviation

Abbreviation	Description
AAA	Authentication, authorization, and accounting
ACD	Automatic Call Distributor
ANI	Automatic Number Identification
ANM	Auxiliary Nurse Midwifery
AP	Access Point
API	Application Programming Interface
APMSIDC	Andhra Pradesh Medical Services & Infrastructure Development Corporation
ASHA	Accredited Social Health Activist
AVLS	Automated Vehicle Locator System
BEC	Bid Evaluation Committee
BI	Business Interface
BMP	Bitmap
BOM	Bill of Material
BOQ	Bill of Quantity
BRS	Business Requirement Specification
BSI	British Standards Institution
CA	Chartered Accountant
CAD	Computer-Aided Design
CAPEX	Capital Expenditure
CB	Capacity Building
CCA	Controller of Certifying Authorities
CCC	Command and Control Centre
CCCC	Command Control and Communication Centre
CCTV	Closed Circuit Television
CD	Communicable Diseases
CDPD	Customer Database Provided Digits
CEP	Complex event processing
CLI	Command-Line Interface
CM	Chief Minister
CMM	Capability Maturity Model
COD	Commercial Operation Date
COP	Common Operating Platform
COTS	Commercial Off The Shelf
CRM	Customer relationship management
CSP	Communication Service Providers
CSR	Corporate Social Responsibility
CSV	Comma-separated Values
CTI	Computer Telephony Integration
CV	Curriculum Vitae
DBA	Database Administrator
DBMS	Database Management System
DC	Data Centre
DDP	Delivery Duty Paid
DIT	Directorate of Information Technology
DL	Data Lake
DLP	Defect Liability Period
DNIS	Dialled Number Identification Service
DNS	Domain Name Server

DOCX	Word Document
DR	Disaster Recovery
DRC	Disaster Recovery Centre
DRM	Disaster Recovery Management
DSC	Digital Signature Certificate
EDD	Expected Date of Delivery
EHR	Electronic Health Records
EMD	Earnest Money Deposit
EMS	Enterprise Management System
ERC	Endoscopic retrograde cholangiography
ERP	Enterprise Resource Planning
ESRI	Environmental Systems Research Institute, Inc.
FPC	Financing Farmer Producer Companies
FPS	frames per second
FRS	Functional Requirement Specifications
FY	Fiscal year
GCC	General Conditions of the Contract
GFC	Generic Flow Control
GIS	Geographic information system
GIS	Geographical Information System
GML	Geography Markup Language
GoAP	Government of Andhra Pradesh
GPS	Global Positioning System
GSM	Global Systems for Mobile Communications
GST	Goods and Services Tax
GST	Goods and Service Tax
GUI	Graphical User Interface
HBNC	Home Based Newborn Care
HIMS	Health Information and Management System
HO	Head Office
HR - PW	High risk pregnant women
HTML	Hypertext Markup Language
HTTPS	Hypertext Transfer Protocol Secure
ICCC	Integrated Command & Control Center
ICT	Information and Communications Technology
ICT	Information and Communication Technology
ID	Identification
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
INR	Indian Rupee
IOS	Idevice Operating System
IP	Internet Protocol
IPR	Intellectual property rights
ISDN	Integrated Services Digital Network
ISI	Indian Standards Institution
ISO	International Organization for Standardization
ISP	Internet Service Provider
IT	Information Technology
ITIL	Information Technology Infrastructure Library
IVR	Interactive Voice Response
IVRS	Interactive Voice Response System
JPEG	Joint Photographic Experts Group

JSON	JavaScript Object Notation
JV	Joint Venture
KPI	Key Performance Indicator
LDAP	Lightweight directory access protocol
LOA	Letters of Agreement
LOI/LOA	Letter of Intent/Letter of Award
MCR	Modern Control Room
MD NHM	Mission Director - National Health Mission
MIS	Management Information System
MMR	Maternal Mortality Ration
MO	Medical Officer
MoU	Memorandum of Understanding
MPLS	Multi-Protocol Label Switching
MS	Medical Superintendent
MSI	Master System Integrator
MSME	Micro, Small and Medium Enterprises
MTTR	Mean Time to Repair
NCD	Non-Communicable Disease
NDA	Non-Disclosure Agreement
NIC	National Informatics Centre
NOC	Network Operations Centre
NOSQL	Non Structured Query Language
NSP	Network Service Provider
O&M	Operation and Maintenance
OAUTH	Open Authorisation
OEM	original equipment manufacturer
OFC	Optical Fibre Cable
OID	original Issue Discount
OM	Order of Merit
OPEX	Operational Expenditure
OPEX	Operating Expenditure
OS	Operating Systems
PBG	Performance Bank Guarantee
PBX	Private Bank Exchange
PDF	Portable Document Format
PDU's	Power Distribution Units
PNC	Post Natal Care
PoC	Proof of Concept
PoP	Point of Presence
PRI	Primary Rate Interface
PSTN	public switched telephone network
PSU	Public Service Unit
PW	Pregnant Women
QCBS	Quality and cost-Based Selection
QR Code	Quick Response Code
RBAC	Role Based Access Control
RBMS	Restricted Boltzmann machines
RCH	Reproductive and Child Health
RDBMS	Relational Database Management System
RF	Radio Frequency
RFID	Radio Frequency Identification
RFP	Request for Proposal

SAML	Security Assertion Markup Language
SDK	Software Development Kit
SI	System Integrator
SLA	Service Level Agreement
SMPS	Switched Mode Power Supply
SMS	Short Message Service
SNMP	Simple Network Management Protocol
SOC	Service Operations Centre
SOP	Standard Operating Procedure
SPV	Special Purpose Vehicle
SRS	Software Requirements Specification
SSO	Single Sign-on
TAT	Turnaround Time
TCB	Trusted Computing Base
TIA	Tender Inviting Authority
TOTP	Time based one time password
TSV	Tab separated values
TV	Television
UDIN	Unique document identification number
UI	User Interface
VOIP	Voice over internet Protocol
XML	Extensible Markup Language

1 Introduction

The primary objective of this RFP is to solicit bids from interested and eligible bidders for setting up the Integrated Command control center (ICCC) for performing monitoring operations leveraging cutting edge technology to address healthcare requirement across the State, through a competitive bidding process. This RFP intends to bring out all the details that may be needed by potential bidders to understand the scope of work, project implementation approach, commercial terms and bidding process details.

The bidders are expected to examine all instructions, forms, terms, project requirements and other information in the RFP documents. Failure to furnish all information required by the RFP documents or submission of a bid not substantially responsive to the RFP documents in every respect will be at Agency's risk and may result in rejection of its Bid and forfeiture of Bid Security.

The APMSIDC shall be the final authority with respect to selection of a bidder through this RFP. APMSIDC reserves the right to reject any or all the bids without assigning any reason. APMSIDC further reserves the right to negotiate with the selected agency to enhance the value through this project and to create a more amicable environment for smooth execution of the project.

1.1 Background

Sustainable Development Goals (SDGs) are part of a transformative agenda. Like other states, SGDs have been adopted by the state of Andhra Pradesh as well with a core principle of universality: 'Leave No One Behind'. The 2030 agenda for sustainable development include 17 SDGs, of which SDG-3 aims to achieve Good Health & Well Being. Andhra Pradesh is taking several steps to realize the principle of Good Health & Well Being. Some of the key targets under SDG include reduction in maternal mortality ratio (MMR), neonatal mortality rate (NMR), under-5 mortality rate (U-5 mortality), adolescent (15-19 years) fertility rate, out of pocket expenditures on health (OOPs), institutional deliveries; and enhancement in life expectancy at birth, births attended by skilled health personnel, immunization among infants/children, universal health coverage (UHC), etc.

1.2 Rationale

Maternal Mortality rate is considered as the key indicator in judging the health performance of a particular society. As it is the basic and first step in LIFE CYCLE APPROACH being followed by the government, i.e. medical care and support from womb to tomb, it assumes pivotal importance in dealing with rest of the medical issues.

Andhra Pradesh has been a front runner in the country in health sector with unprecedented innovative programmes and initiatives like Family Physician, YSR Arogyasri health insurance scheme, Arogya Asara, Nadu-Nedu, population based NCD-DC screening, Consistent Rhythms, etc. and brought medical services closer to the people. The state has stretched its domain to digital services and received the awards at the Global Digital Health Summit-2022 concluded recently.

Taking a step forward in the digital innovations, Govt. of Andhra Pradesh, desires to implement a holistic approach which is capable of identifying and addressing maternal and health issues that have larger impact on the overall health and well-being in the society. In a quest to translate these initiatives into action, and improved mechanism of response, and to ensure that these services reach even the last beneficiary at the right time, the idea of Integrated Command & Control Center (ICCC) for Reproductive, Maternal & Child Health is being conceived.

1.3 Broad objectives

Overall objective of this initiative is to design, implement and operate an end-to-end digital solution for data/information collection followed with tracing, tagging, tracking of beneficiaries and to help them avail timely and appropriate round the clock medical advice and/or required medical/referral services even to the beneficiaries living in the remotest corner across the state. The digital solution should have mechanism for data collection, analysis and monitoring for anaemia, high risk pregnancies, teenage pregnancies, institutional deliveries, immunization/vaccination, beneficiaries' movement, referral pathways, grievance redressal, etc. to identify and improve the key components of reproductive, maternal and child including adolescents' reproductive health components.

- a. Integrated single source of information for all high-risk pregnant women.
- b. Establishing District and facility level cells
- c. Platform with ability to receive, intelligently process and disseminate information with stakeholders (District monitoring cell, Facility level monitoring cell, Beneficiaries, Field level staff, etc.)
- d. Regular dissemination of alerts to target pregnant women, field level staff.
- e. Ensuring Inbound and/or Outbound calls through ICC
- f. Ambulance Vehicle arrangement and tracking
- g. Grievance redressal

1.3.1 Specific objectives

- a) Design and Development of all Software Components of ICC.
- b) Detailed design including physical layout of ICC (with 3D Simulation).
- c) Recruitment and training of ICC personnel at State, District and Facility Level.
- d) To operate and maintain all components of ICC Systems.

2 Invitation for Bid

2.1 Bid Data Sheet

Sl. No.	Information	Details
1.	Tender inviting authority	Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC), Government of Andhra Pradesh
2.	Name of RFP	Hiring of Mater System Integrator (MSI) for setting up and operation of “Integrated Command Control Center for Maternal and Child Health”
3.	RFP reference number	T.No.16.7C/APMSIDC/2022-23, Dt. 23.01.2023
4.	Date and time of publishing of RFP on e-Procurement	09-02-2023 @ 08.00 P.M
5.	Venue and Date & Time of Pre-bid meeting	15-02-2023 @ 11.00 A.M
6.	Processing Fee	11,800/- in the form of DD in favour of the MD, APMSIDC, Mangalagiri
7.	Earnest Money Deposit	10,00,000/- (Online/BG/DD – in favour of The MD, APMSIDC, Mangalagiri)
8.	Last date, time (deadline) for receipt of proposals in response to this RFP notice through e-procurement portal, GoAP	23.02.2023 @ 03.00 P.M
9.	Date and time of submission of original copies of EMD (physical copy), tender document fee (physical copy)	23.02.2023 @ 03.00 P.M
10.	Date and time of opening of Technical Bids on e-Procurement platform	23.02.2023 @ 03.01 P.M
11.	Date and time and date of Technical Presentations by bidders	Will be intimated later
12.	Date and time of Opening of Financial Bid on e-Procurement platform	Will be intimated later
13.	Method of evaluation of bids	Quality and Cost based selection – 70:30 Technical qualification: Minimum marks – 70
14.	Timeline for setting up and fully functionalize ICC from the date of issue of LOA	1 Month
15.	Total Contract period	Three (03) years
16.	Bid validity period	180 Days

2.2 Checklist for the Bidders

Sl. No.	Bid Enclosures Format	Remark
1.	Letter of Proposal	
2.	Tender / Process fee	
3.	DD / Bank guarantee of EMD	
4.	Particulars of the bidder	
5.	PAN Card copy	
6.	GST Certification copy	
7.	Pre-qualification documents	
8.	Certificate of Incorporation of the bidder	
9.	Audited Financial Reports of Bidder	
10.	Joint Bidding Agreement	
11.	Blacklisting/Debarring Certificate of Bidder	
12.	Technical Qualification Document	
13.	Whether all forms and annexures are submitted as required in this RFP	
14.	Financial Proposal	

2.3 Procurement process

2.3.1 Inviting Bids through e-Procurement Portal

- APMSIDC invites online bids (Two bid system) through e-Procurement portal from eligible bidders for engaging an agency for setting up, operation and maintenance of “Integrated Command Control Center for Maternal and Child Health.”
- A complete set of bidding documents can be downloaded from <https://tender.apecprocurement.gov.in> as per the date and time provided in the bid data sheet.
- Eligible Bidders must submit their bids for the complete scope of work. Any bid submitted for incomplete scope shall be rejected.
- Issuance of Bidding Documents will not be construed to mean that such bidders are automatically considered qualified.
- All bids must be accompanied by Bid Security as given in the table below, failing which the bid will be rejected.
- All bids must be submitted on or before last date and time as mentioned in the bid data sheet, through e-Procurement portal only (online).
- Bids will be opened on the date and time as mentioned in the bid data sheet in presence of the bidders or their representative, who choose to attend on the specified date and time at the Office of APMSIDC.
- APMSIDC will not be responsible for any costs or expenses incurred by the bidders in connection with the preparation or delivery of bids.
- APMSIDC reserves the right to reject bids without assigning any reason whatsoever.
- In event of a date being declared as a closed holiday, the date for submissions of bids and opening of bids will be the following working day at the appointed time.

2.4 Reverse tendering process on e-procurement portal

- a) APMSIDC will schedule reverse tendering process on the e-Procurement portal. Qualified technical bidders will also be communicated through e-mail the date and time for the conduct of reverse tendering process.
- b) Online reverse tendering process
 - i) The online Reverse tendering process will be run on the total amount.
 - ii) Only the technically qualified bidders will be permitted to participate in the reverse tendering.
 - iii) The 'opening price' i.e. start price for Reverse tendering will be the lowest (L1) price quoted by the Bidders amongst all technically qualified bidders.
 - iv) Bidders can modify the total price, based on the minimum bid decrement or the multiples thereof, to displace a standing lowest bid and become "L1", and this will continue as an iterative process. The total price, will be used to determine the total cost of the bid.
 - v) For the purpose of Reverse tendering, the minimum bid decrement value on 0.5% of L1 value or as specified by TIA.
 - vi) Reverse tendering duration: The duration of the reverse tendering is 3 Hours. All bidders are required to submit their online bids during this period.
 - vii) In case, if any bidder decides to lower the price in the last fifteen (15) minutes of the reverse tendering duration, then the duration of the reverse tender will be extended for additional 15 minutes (Bid Received time + 15 minutes) to enable other bidders to participate further. Such extensions will continue as long as there is no bid received in the last 15 minutes.
 - viii) After the completion of reverse tendering, the system will calculate the total price of the bid.

2.4.1 Instruction to Bidders

The intending Bidders must read the terms and conditions carefully and should only submit its Bid if she/he considers herself/ himself eligible and is in possession of all the documents required.

- a. Applicants need to refer Conditions of Contract for 'definitions and abbreviations.
- b. The applicant is required to examine carefully all the contents of the RFP Document including instructions, conditions, forms, terms, specifications and take them fully into account before submitting the Bid. Failure to comply with the requirement(s) of RFP Document will be at the Bidder's own risk & responsibility.
- c. Applicants / Bidders shall be required to arrange all resources, including Digital Signature Certificates and Internet Connections at their own cost, for participating in online tenders.
- d. Corrigendum / addendum, if any, issued to the RFP / bid document, which form part of the tender document, shall be published in the Official website and e-tender website and bidders

are advised to check the websites regularly for the updates related to the tender before submitting the offer. The authority assumes no responsibility what so ever in case of delay in bid submission by the bidders.

- e. Bid and all other related documents are to be submitted in English. Supporting documents should be translated in English and submitted online.
- f. All costs for site visits, obtaining information/ data and preparation/ meetings, etc. in relation with Bid submission shall be borne by the applicants.
- g. All requisite documents as detailed in RFP are to be submitted by the bidder(s)/ applicant(s). Incompleteness of the documents as required may lead to the rejection of applicants bid.
- h. AP Government reserves the right to verify all the credentials and inspect their executed works/ assignments etc. to satisfy themselves about their performance and capability to execute the assignment satisfactorily, if found any failure on submitted details, AP Government holds the right to invoke performance security or Bid security wherever applicable.
- i. AP Government reserves the right to not to choose any applicant, relinquish the Bid process or reissue Bid with or without modification as it chooses. AP Government is not bound to furnish any explanation as to its decision to any of the participants.
- j. Bid is to be submitted online in two cover system consisting of Technical Proposal and Financial proposal as detailed in RFP General
- k. 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.
- l. 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 assignment by the Authority based on this RFP.
- m. 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.
- n. Bids shall be received by the Authority on the e-Procurement portal in before the time and date specified in the schedule of the tender notice. The Authority may, at its discretion, extend this deadline for submission of offers by issuing corrigendum and uploading the same on e-Procurement portal.

2.4.2 Consortium

- a. The Bidder for participation in the Selection Process, may be a single entity or a group of entities (the "Consortium"), coming together to execute the project. The term 'Bidder' used herein would apply to both a single Entity and a Consortium.
- b. Sole Bidder: The Sole Bidder must be a System Integrator company which has the capabilities to deliver the entire scope as mentioned in the RFP. The Sole Bidder cannot bid as a part of any other consortium bid under this RFP.
- c. Consortium of Firms Bids can be submitted by a consortium of firms. A consortium should not consist of more than three parties (including the Lead Bidder). One of the Firms would be designated as a "Lead Bidder". The Lead Bidder would have the sole responsibility of ensuring the delivery of products and services mentioned in all volumes of this RFP. The Lead Bidder would also be responsible for ensuring the successful execution of integrated solution

including meeting the SLAs.

- d. The list of Consortium Members needs to be declared in the bid which cannot be changed by the bidder later. Any change in the consortium partner will need to be approved by Authority. The Lead Bidder will be responsible for:
- i. The management of all Consortium Members who are part of the bid, and
 - ii. The Design, supply, delivery and installation of all products and services submitted in their bid and as part of the contract.
 - iii. No Member at any given point of time may assign or delegate its rights, duties or obligations under the Agreement/Contract except with prior written consent of AUTHORITY.
 - iv. No bidder applying individually, or as a member of a Consortium, as the case may be, can be member of another consortia bidding for the project.
 - v. In the event the Bidder is a Consortium, it shall, comply with the following additional requirements:
 - (a) Number of members in a consortium shall not exceed 3 (three) including the Lead Member
 - (b) The Members of the Consortium shall nominate one member as the Lead Member
 - (c) The Members of the Consortium shall be responsible for successful implementation of the project throughout the terms of the contract.
 - (d) The Lead Member shall be authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to this RFP. The Lead Bidder shall be authorized to incur liabilities and receive instructions for and on behalf of all consortium members. Entire execution of the Contract, including payment, shall be done exclusively by/with the Lead Bidder
 - (e) Any of the Lead Bidders cannot be a Consortium Member with another bidder in a separate bid
 - (f) Internal arrangement between the Consortium Members is left to the bidders. It is the responsibility of the lead Bidder to ensure that all the other Consortium Members in the bid are compliant to all the clauses as mentioned in the bid, failing which bid can be disqualified
 - (g) The Members of the Consortium shall submit a declaration inter alia consisting of the following:
 - Undertaking that each of the members of the Consortium shall have an independent, definite and separate scope of work which was allocated as per each member's field of expertise
 - Commit to the profit and loss sharing ratio of each member
 - Commit to the scope of work, rights, obligations and liabilities to be held by each member; specifically commit that the Lead Member shall be answerable on behalf of other members for the performance of obligations under this Agreement,
 - Provide a brief description of the roles and responsibilities of individual members; and clearly define the proposed administrative arrangements (organization chart) for the management and execution.
 - Include a statement to the effect that all the members of the Consortium shall

be jointly and severally liable for all obligations in relation to the Agreement/Contract until the completion of the project in accordance with the Agreement/Contract;

- e. Any change of a Consortium Member other than the Lead Member can be done only under extreme circumstances such as non-performance of the Consortium member, insolvency or bankruptcy of the Consortium member, which shall be done only with the prior written approval of AUTHORITY. Provided that in the event of any such approved change of Consortium member, the new member (company) replacing outgoing Consortium member shall have same or higher financial, technical and legal qualifications as the outgoing member, and to the satisfaction of Government of Andhra Pradesh. In the event AUTHORITY does not grant approval for the change of the Consortium member other than the Lead Member or suitably qualified replacement member (companies) are not available/ found, the exit of such Consortium member shall constitute a breach of the Contract.
- f. All members of the consortium are required to follow the highest level of work ethics, if any member of the consortium has a Conflict of Interest or indulges in Prohibited Practices; the whole Consortium is liable to be disqualified. Further, in the event any entity has been barred by the Central Government, any State Government, a statutory authority or a public-sector undertaking, as the case may be, from participating in any project or bid, and the bar subsists as on the date of Last Date of Submission, it would not be eligible to submit a Proposal either by itself or as part of a Consortium. Lead member should have minimum 51% share in Consortium. Consortium agreement to be submitted.

2.4.3 Sub-contracting

Sub-Contracting is not allowed for this RFP

2.4.4 Completeness of Bid

The Bid should be complete in all respects. Failure to furnish all information required by the RFP document or submission of a proposal not substantially responsive to the RFP document in every respect will be at the Bidder's risk and may result in rejection of its Bid and forfeiture of the EMD.

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.

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

- Include all documentation specified in this RFP, in the bid
- Follow the format of this RFP while developing the bid and respond to each element in the order as set out in this RFP
- Comply with all requirements as set out within this RFP

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, shall submit them to Authority in writing in order that such doubt may be removed or clarifications are provided.

2.4.5 Proposal Preparation Cost

The bidder shall submit the bid at its cost and expense. AUTHORITY shall not be held responsible for any cost incurred by the bidder. Submission of a bid does not entitle the bidder to claim any cost and rights over AUTHORITY and AUTHORITY shall be at liberty to cancel any or all bids without giving any notice. All materials submitted by the bidder shall be the absolute property of AUTHORITY and no copyright etc. shall be entertained by AUTHORITY.

2.4.6 Pre-bid meeting & queries

- a. AUTHORITY will host a Pre-Bid meeting. The representatives, limited to 4, of the interested organizations may attend the pre-bid conference at their own cost. The purpose of the conference is to provide bidders with information regarding the RFP and the proposed solution requirements in reference to the RFP. Pre-Bid meeting will also provide each bidder with an opportunity to seek clarifications regarding any aspect of the RFP and the project
- b. All Bidders shall e-mail their queries in the form and manner as prescribed. The response to the queries will be published on e-Tendering Portal. No telephonic / queries will be entertained thereafter. This response of AUTHORITY shall become integral part of RFP document. AUTHORITY shall not make any warranty as to the accuracy and completeness of responses.
- c. AUTHORITY shall endeavour to respond to the questions raised or clarifications sought by the Bidders. However, AUTHORITY reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this clause shall be taken or read as compelling or requiring AUTHORITY to respond to any question or to provide any clarification.
- d. AUTHORITY may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by AUTHORITY shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by AUTHORITY or its employees or representatives shall not in any way or manner be binding on AUTHORITY

2.4.7 Amendment of RFP document

All the Corrigendum / Addendum made in the document would be published on the e-Tendering Portal in and shall be part of RFP. The Bidders are advised to visit the e-tendering portal on regular basis to check for necessary updates. AUTHORITY also reserves the right to amend the dates mentioned in this RFP.

2.4.8 Supplementary information to the RFP

If AUTHORITY deems it appropriate to revise any part of this RFP or to issue additional data to clarify an interpretation of provisions of this RFP, it may issue supplements to this RFP. Any such corrigendum shall be deemed to be incorporated by this reference into this RFP.

2.4.9 Authority's right to terminate the process

AUTHORITY may terminate the RFP process at any time and without assigning any reason. AUTHORITY reserves the right to amend/edit/add/delete any clause of this RFP Document. This will be informed to all and will become part of the RFP and information for the same would be published on the e-Tendering portal

2.4.10 Site visit and verification of information

- a. The Bidders are encouraged to visit and examine the site or sites and obtain for itself, at its own responsibility and risk, all information that may be necessary for submission of the bid

and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.

- b. AUTHORITY will arrange for the Bidder and any of its personnel or agents to gain access to the relevant site or sites, provided that the Bidder gives AUTHORITY adequate notice of not less than 5 (Five) days prior to such proposed visit.
- c. No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.

2.4.11 Key requirements of the bid

2.4.11.1 Processing Fee

RFP can be downloaded at free of cost from the website. The Processing fee shall be non-refundable. Without the payment of processing fee, the bids will be taken as incomplete and non-responsive and shall not be considered.

2.4.11.2 Earnest money deposit (EMD)

- a. In terms of this RFP, Scanned copy of EMD should be submitted on e-procurement system and original hard copy should be submitted to APMSIDC, GoAP before stipulated date and time. No exemption for submitting the EMD will be given to any agency.
- b. The Bid submitted without EMD, mentioned above, will be summarily rejected
- c. The EMD may be forfeited:
 - i. If a Bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.
 - ii. In case of a successful bidders, if the Bidder fails to sign the contract in accordance with the terms and conditions.
 - iii. 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.
 - iv. 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.
 - v. If the bidder does not agree to correct arithmetic error
- d. The decision of AUTHORITY regarding forfeiture of the EMD shall be final and binding upon bidders.

2.4.11.3 Bid validity period

On completion of the validity period, unless the Bidder withdraws his bid in writing, it will be deemed to be valid until such time that the Bidder formally (in writing) withdraws his bid – not to be deemed.

2.4.11.4 Bid price

Commercial Bid / Financial proposal shall be submitted online through portal.

Bidders shall give the required details of all applicable taxes, duties, other levies and charges etc. in respect of direct transaction between Authority and the Bidder. Bidders shall quote for the entire scope of contract on a "overall responsibility" basis such that the total bid price covers Bidder's all obligations mentioned in or to be reasonably inferred from the bidding documents in respect of providing the product/services. Prices quoted by the Bidder shall remain firm during the entire contract period and not subject to variation on any account. A bid submitted with an adjustable price quotation shall be treated as non- responsive and rejected.

2.4.11.5 Deviation and exclusion

Bids / Proposals shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP.

2.4.11.6 Total responsibility

Bidder should issue a statement undertaking total responsibility for the defect free operation of the proposed solution.

2.4.11.7 Disqualification

The bid is liable to be disqualified in the following cases or in case bidder fails to meet the bidding requirements as indicated in this RFP:

- a. During validity of the bid, or its extended period, if any, the bidder increases its quoted prices
- b. The bidder's bid is conditional and has deviations from the terms and conditions of RFP
- c. Bid is received in incomplete form
- d. Bid is not accompanied by all the requisite documents
- e. Information submitted in technical bid is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any
- f. Financial bid is enclosed with the same document as technical bid.
- g. Bidder tries to influence the bid evaluation process by unlawful/corrupt/fraudulent means at any point of time during the bid process.
- h. In case any one party submits multiple bids or if common interests are found in two or more bidders, the bidders are likely to be disqualified, unless additional bids/bidders are withdrawn upon notice immediately.
- i. If any of the Lead Bidder is also partner in any other bid, then all the affected bids shall be disqualified

2.4.12 Bid submission instructions

2.4.12.1 Bid submission format

The entire Bid shall be submitted strictly as per the format specified. Bids with any deviation from the prescribed format are liable for rejection.

2.4.12.2 Evaluation of Technical Proposal

Prior to evaluation of Bid, the authority will determine whether each Proposal is responsive to the requirements of the RFP. The authority may, in its sole discretion, reject any Proposal that is not responsive hereunder. A Proposal shall be considered responsive only if:

- a. It is received by the Proposal Due Date including any extension thereof
- b. It is accompanied by the "Bid Security" as specified and "Fee of Bid submission"
- c. Applicants has submitted all Documents in specified format as mentioned in the RFP
- d. It is not non-responsive in terms hereof.

The evaluation of the Technical Proposals will be carried out in the following manner:

Evaluation of Pre-Qualification Proposals:

- a. Authority shall open the tender submitted online and check for payment of Document Fee and Earnest Money Deposit (EMD) and then the Technical Proposal including Pre-Qualification Proposal will be opened. Technical proposal including Pre-qualification proposals will not be considered further if the mentioned requirements as per RFP are not fulfilled. Each of the Pre-

Qualification condition mentioned in Clause 2.3.14 of the RFP is MANDATORY. In case the Bidder does not meet any one of the conditions, the bidder will be disqualified.

- b. The Technical Proposal including Pre-Qualification proposal MUST contain all the documents in compliance
- c. Response to the Pre-Qualification Requirements shall be evaluated in accordance with the requirements specified in this RFP and in the manner prescribed in Clause 2.3.14 of the RFP.

Further Evaluation of Technical Proposals:

- a. Authority will review the technical bids of the short-listed bidders to determine whether the technical proposals are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at AUTHORITY's discretion.
- b. The bidders fulfilling the pre-qualification eligibility criteria listed under Clause 2.3.14 and having submitted technically responsive bids will be further required to showcase proposed products to Authority. The Goods proposed to be supplied by the Contractor and services to be delivered shall confirm to the technical specifications of the Tender Document. For shortlisting the technically qualified bidder, Bidders technical solutions proposed in the bid document will be evaluated as per the requirements and technical evaluation criteria as mentioned in Clause 2.3.15 of the RFP.
- c. Bidders shall make the technical presentation and showcase proposed products to Authority as per the agenda mentioned in Clause 2.3.15 of the RFP.
- d. Each Technical Proposal shall be assigned a technical score out of a maximum of 100 points. (Refer Clause 2.3.15. of the RFP). In order to qualify for the opening of financial proposal, the Bidder must get a minimum overall technical score of 70 (Seventy).
- e. The Bidders are required to submit all required documentation in support of the evaluation criteria specified (e.g. Detailed Project citations and copy of work order Completion Certificate, client contact information for verification, and all others components) as required for technical evaluation along with the Technical proposal.
- f. At any time during the Bid evaluation process, BEC may seek oral / written clarifications from the Bidders. The Committee may seek inputs from their professional and technical experts in the evaluation process.
- g. Authority reserves the right to do a reference check of the past experience stated by the Bidder. Any feedback received during the reference check shall be taken into account during the technical evaluation process.
- h. Each Technical Bid will be assigned a technical score out of a maximum of 1000 marks. Only the bidders who get an Overall Technical score of 70% or more for the criteria detailed in Technical Evaluation Framework as given in Clause 2.3.15 will qualify for financial / commercial evaluation stage. Failing to secure minimum % of Technical marks shall lead to technical rejection of the Bid.
- i. The Financial Proposals of Bidders who do not qualify technically shall be kept unopened in the eTendering system.
- j. AUTHORITY reserves the right to accept or reject any or all bids without giving any reasons thereof.
- k. AUTHORITY shall inform to the technically shortlisted Bidders about the date and venue of the opening of the financial proposals.

2.4.12.3 Evaluation of Financial Proposal

- a. All the technically qualified bidders will be notified to participate in Financial Proposal / Commercial Bid opening process.
- b. Financial Proposals for the technically qualified bidders will then be opened on the notified date and time and reviewed to determine whether the financial proposals are substantially

responsive. Bids that are not substantially responsive are liable to be disqualified at AUTHORITY's discretion.

- c. Financial Proposals / Commercial Bid that are not meeting the condition shall be liable for rejection.
- d. Errors:
 - i. If there is a discrepancy between the unit price and the line item total amount that is obtained after multiplying unit price with the quantity, the unit price shall prevail and the line item total amount shall be corrected, unless in the opinion of the Employer there is an obvious gross misplacement of the decimal point in the unit price, in which case the line item total amount as quoted shall govern and unit price shall be corrected.
 - ii. There is error in a total corresponding to addition or subtraction of subtotals, the Sub totals shall prevail and the total shall be corrected and
 - iii. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in such case the amount in figure shall prevail subject to (i) and (ii) above.
 - iv. Tenderers shall be requested to accept correction of arithmetical errors. Failure to accept the correction shall result in the rejection of the Tender and forfeiture of bid security
 - v. Tenderers should quote for all-inclusive rate including transportation, loading and Unloading, taxes, delivery charges etc
- e. The Normalized commercial score of the technically qualified bidders will be calculated, while considering the Total Cost of Bid (TCB) given by each of the Bidders in the Commercial Bid as follows:

$$\text{Normalized Commercial Score of a Bidder} = \{\text{Lowest TCB} / \text{Bidders TCB}\} \times 1000$$

(adjusted to 2 decimals)

- i. The bid price includes both CAPEX (Capital expenditure)-installation of software, hardware design and man power and OPEX (Operational Costs) – operation and maintenance of software and manpower for 3 years (which shall be extended for 2 more years on satisfaction of the authority).
- ii. The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.
- iii. Any conditional bid would be rejected.
- iv. Kindly note that the indicative/estimated quantity provided in the RFP would be used for evaluation purposes; however, the payment would be done on actual usage basis.

2.4.12.4 Final score calculation through QCBS

- a. The final score will be calculated through Quality and Cost selection method based with the following weightage: Technical: 70% Commercial: 30% Final Score = (0.70* Technical Score) + (0.30* Normalized Commercial Score)
- b. The bidder with the highest Final score shall be treated as the Successful bidder.
- c. In the event the Final scores are 'tied', the bidders whose score is tied securing the lowest (among all the tied bidders) financial score will be adjudicated as the Best Value Bidder for award of the Project. Decision of authority is final.

2.4.13 Pre-Qualification Eligibility Criteria

The proposal failing to meet all of the below pre-qualification eligibility criteria shall be disqualified and will not be considered for financial evaluation process.

Sl. No.	Basic Requirement	Specific Requirement	Documents/ Evidence Required	Applicability
PQ1	Legal Entity	<p>Lead Bidder</p> <p>The Sole Bidder or the Lead Member of consortium should be registered in India under Companies Act 1956/ 2013 (as amended) or in abroad</p> <p>Consortium Members</p> <p>The Members of consortium should be registered in India under Companies Act 1956/2013 (as amended) or in abroad</p>	<p>Copy of Certificate of Incorporation Registration under Companies Act,1956/2013 /2020Copy of Registration Certificates.</p> <p>For Global Players, Equivalent certificate in the country of incorporation</p> <p>Copy of purchase orders showing at least 5 years of operations ORCertified true copy of relevant extracts of balance sheet and profit loss statements for last 5 years demonstrating bidder have been inoperation for at least 5 years as ondate of submissionof the bid.</p>	Lead Bidder Consortium Members
PQ2	Annual Turnover	<p>The Sole Bidder or the JV (Joint Venture)/ consortium members altogether should have average annual Turnover of Rs. 50 Crore for last 3 audited financial years (2019-20,2020-21 and 2021-22) ending March 2022 from IT systems / IT System integration / IT services /ICT/ system integration services/ communication infrastructure / city surveillance / ICT based utility management / ICT based law enforcement/ Tran sport management / Telecom / Telecom Services / command & control center implementation / Network Operating Center (NOC) / Cloud services business in India or abroad.</p> <p>Also, in case of JV (Joint Venture) / consortium should satisfy the following:</p>	<p>Certificate from the Statutory Auditor (Chartered Accountant) / Company Secretary</p> <p>Year-wise details of turnover, balance sheet, financial statement.</p> <p>The said certificate also needs to be counter signed by authorized signatory of the bidder</p>	Lead Bidder / Consortium Members

Sl. No.	Basic Requirement	Specific Requirement	Documents/ Evidence Required	Applicability
		(i) Lead member of JV (Joint Venture) / consortium shall have minimum average annual Turnover of 51% of Rs. 50 Crore during last 3 audited financial years (2019-20, 2020-21 and 2021-22) ending March 2022.		
PQ3	Experience in development / implementation of Integrated Command Control Center	Sole Bidder or Lead Member or any member of its consortium should have experience in implementation and maintenance of any of the following projects: a. Command & Control Centre / Network Operations Centre (NOC) OR b. Surveillance command center OR c. Multi-layer GIS	<p><u>In Case of ongoing project:</u></p> <p>Case study + Copy of work order + Assignment Details as per the format provided.</p> <p><u>In Case of completed project:</u></p> <p>Case study + Copy of work order + Assignment Details as per the format provided + Completion Certificate</p> <p>In case of NDA, Company Secretary / Chartered Accountant Signed Certificate providing details of Scope of work and Value and stage of project.</p> <p>In case the experience shown is that of the bidder's parent / subsidiary company, then the following additional documents are required: i) Letter from the Company Secretary of the bidder certifying that the entity whose experience is shown is parent/ subsidiary Company ii) Shareholding pattern of the bidding entity as per audit reports.</p>	Lead Bidder and all Consortium Members
PQ4	Blacklisting	The Sole Bidder or Lead Member and all member of its consortium including its subsidiary/ group companies should not	<p>Undertaking by the authorized signatory as per the format</p> <p>Self-certificate on company's letter head</p>	Lead Bidder and all Consortium Members

Sl. No.	Basic Requirement	Specific Requirement	Documents/ Evidence Required	Applicability
		have been blacklisted by Central/ State Government/ PSU entity in India or similar agencies globally for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices as on date of submission of the proposal.	duly signed by company secretary.	
PQ5	Certifications	The Sole Bidder or the Lead Member of consortium should have a valid ISO 9001:2015 and ISO 27001:2013. Also, the Lead bidder (System Integrator) should be CMM level 5I/ISO 9001:2015 certified	Valid Copy(ies) of certificates	Sole Bidder / Lead Bidder
<p>Note:</p> <ol style="list-style-type: none"> 1. For International projects, original client certificate and other documents shall be duly verified by Indian embassy / High Commission. The same shall be submitted with the bid document. 2. For projects where fee has been received in any currency other than Indian Rupees, than the foreign currency conversion rate available on Reserve Bank of India's portal as on the date of publication of the tender document shall be used for conversion of amount in foreign currency to Indian Rupees equivalent. 3. Bidders are allowed to submit experience in terms of technical qualification of their holding company and/or subsidiary company only. Letter to be submitted from parent Company that, there will be unconditional support to the subsidiary for technology / software etc. However, the parent/ subsidiary company of the Bidder should on its own meet the technical experience as stipulated in this RFP and should not rely for meeting the technical experience criteria on its sister subsidiary/ co-subsidiary company or through any other arrangement like Technical Collaboration agreement. For the purpose of this clause, Holding company, in relation to one or more other companies, means a company of which such companies are subsidiary companies; and subsidiary company' in relation to any other company (that is to say the holding company), means a company in which the holding company— (a) controls the composition of the Board of Directors; or (b) exercises or controls more than one-half of the total share capital at its own 4. For the purpose of evaluation criteria, if the bidding company (the lead bidder in case of consortium) is 100% subsidiary of an international or Indian company then the lead bidder's parent company's or parent company's other subsidiary relevant experience can be considered as lead bidder's experience. 				

Sl. No.	Basic Requirement	Specific Requirement	Documents/ Evidence Required	Applicability
	5.	Projects executed for bidder's own or bidder's group of companies shall not be considered.		

Note: AUTHORITY reserves right to visit bidder's customer where such a similar project execution has taken place. The bidders need to submit appropriate supporting evidences to satisfy the criteria.

2.4.14 Technical Evaluation /Framework (supporting documents to be attached)

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	Total Marks
A	Bidder's organizational strength and experience	100
B	Proposed Solution, Approach & Methodology	150
C	Resources Planning, Key Personnel, Project Governance, Exit Management and Transition Management	200
D	Common Command Center Application Platform OEM and CSP Credentials	200
E	Technical Presentation and Live Demo	350
TOTAL		1000

Important: Qualification criteria for technical evaluation and progression to financial evaluation stage.

- Minimum 70% marks of the overall technical score total

Evaluation Committee (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. Technical bids of the Bidders qualifying in the Pre- Qualification criteria will be opened and will also be invited for doing the technical presentation.

Section A - Bidder's Organizational Strength and Experience (Total Marks -100):

Sl. No.	Criteria	Criteria details	Documentary evidence	Marks allotted
1	Bidder should have an average annual turnover of at least INR 50 Crores in the last 3 financial years (2019-20,2020-21 and 2021-22) ending March 2022	Annual Turnover from IT systems/ IT System integration / IT services / ICT / system integration services/ communication infrastructure /city surveillance / ICT based utility management/ICT based law enforcement/Transport management /Telecom / Telecom Services/command & control center implementation/Network Operating Center (NOC)/ Cloud services business In case of Consortium, aggregated turnover of the consortium may be Considered with 51% (minimum) of the lead	Certificate from the Statutory Auditor/Chartered Accountant with UDIN The said certificates also need to be counter signed by Company Secretary / authorized signatory of the bidder.	10

Sl. No.	Criteria	Criteria details	Documentary evidence	Marks allotted
		bidder and 49% (maximum) of the consortium partners <div> 50–75 Crore – 5 marks >75 Crore – 10 marks </div>		
2	Experience in Implementation and maintenance of large scale ICT based Utility Management System /Medical Services in India or Abroad	Lead Bidder or its consortium members having experience in Implementation & maintenance of large Utility Management System / Medical Services Project in last ten (10) financial years. Value of project should be at least of INR 5 crores. 3 citations=30 marks, 2 citation = 20 marks 1 citation=10 marks else 0 Marks	<u>In Case of ongoing project</u> Case study, Copy of work order, Assignment Details as per the format provided. <u>In Case of completed project</u> Case study, Copy of work order, Assignment Details as per the format provided.	30
3	Experience in Implementation & Maintenance of Application in hosted environment in India or abroad	Lead Bidder or its consortium members having experience in Implementation & maintenance of application in hosted environment in last ten (10) financial years. Value of project to be at least of INR 5 crores. 3 citations=30 marks, 2 citation = 20 marks 1 citation=10 marks else 0 Marks	Completion Certificate <u>In case of NDA,</u> Company Secretary/ Chartered Accountant Signed Certificate providing details of Scope of work and Value and Phase of project.	30
4	Experience in Implementation & Maintenance of Integrated Command Control Centre (ICCC)/Network Operating Center (NOC) and Artificial Intelligence based Identification and monitoring system	Lead Bidder or its consortium members having experience in Implementation & maintenance of Command & Control Centre Project in last ten (10) financial years. Value of project to be at least of INR 4 crores. 3 citations=30 marks, 2 citation = 20 marks 1 citation=10 marks else 0 Marks	<u>In case the experience shown is that of the bidder's parent / subsidiary company, then the following additional Documents are required:</u> i. Letter from the Company Secretary of the bidder certifying that the entity whose experience is shown is parent / subsidiary Company. ii. Shareholding pattern of the bidding entity as per audit reports Parent Company and subsidiary company shall be construed as	30

Sl. No.	Criteria	Criteria details	Documentary evidence	Marks allotted
			defined under company's act 2013.	
TOTAL MARKS				100

For parameter 2, 3, 4

- Bidders are allowed to submit experience in terms of technical qualification of their holding Company and/or subsidiary company only. For the purpose of this clause, holding company ' , in relation to one or more other companies, means a company of which such companies are subsidiary companies; and a subsidiary company in relation to any other company (that is to say the holding company), means a company in which the holding company— (a) controls the composition of the Board of Directors; or exercises or controls more than one- half of the total share capital at its own
- For the purpose of evaluation criteria, if the bidding company (the lead bidder in case of consortium) is 100% subsidiary of an international or Indian company then the lead bidder's parent company's or parent company's other subsidiary relevant experience can be considered as lead bidder's experience.
- For projects where fee has been received in any currency other than Indian Rupees, then the foreign currency conversion rate available on Reserve Bank of India's portal as on the date of publication of the tender document shall be used for conversion of amount in foreign currency to Indian Rupees equivalent Projects executed for bidder's own or bidder's group of companies shall not be considered.
- For the above criteria bidder means Lead Bidder or its consortium partners (in case of consortium)

Section B - Proposed Solution, Approach and Methodology (Marks 150)

Bidder has to provide answers of the below mentioned questions in form of write-up (maximum 3 A4 sheets per question except for question No. 10, for which max 50 sheets are permitted) as a part of Technical Proposal evaluation.

Sl. No.	Questions	Maximum Marks
1.	Explain Understanding of the project as per RFP	15
2.	Provide the proposed solution for High level Architecture of the solutionproposed for the complete project as per the RFP	15
3.	Provide the proposed solution for ICCC to meet the functionalities as given in RFP	15
4.	Provide the proposed solution for networking along with Network Architecture between City Command and Control Room and Artificial intelligence based advanced analytics to meet the functionalities as given in RFP	15
5.	Provide details pertaining to Adherence to functional and Technical SLAs	15
6.	What will be approach towards the scalability, Interoperability and modularity features considering the future expansion of the project? The response to this question shall be given considering growth of functionalities of ICCC as well as new applications or systems that may be envisaged / developed in the future.	15
7.	Identify major risks for the project and also propose suitable mitigation plan for each of these risks.	15
8.	How the proposed solution ensures the full proof security to the system from various threats including hacking attempts, internal threats, etc? Please explain in	15

Sl. No.	Questions	Maximum Marks
	detail approach towards the security of the overall solution from external and internal threats.	
9.	ICCC platform OEM roadmap for next 10 years	15
10.	Explain your detailed approach and methodology for executing this project	15
TOTAL MARKS		150

Section C - Resources planning, Key personnel, Project Governance, (Total Marks- 200):

Sl. No.	Criteria	Criteria Details	Marks allotted
1	Project Governance Framework	<p>Bidder is required to submit the Governance framework in line with this RFP for the state level, it must include the following:</p> <ul style="list-style-type: none"> • Training of the resources deployed across the state and district level • Resource Reporting mechanism • Format of the reports (to be submitted at the state level for the common components and project progress) • Frequency of the reporting • Structure of the review meeting with the Commissioner of Health and Family Welfare (CH&FW) or Any Officer appointed by the CH&FW for this purpose. <p>All the above mentioned line items are to be submitted along with technical proposal as Project Governance Mechanism.</p> <p>This should also be part of the technical presentation.</p> <p>It is expected that at the time of actual execution of this RFP, all the commitments given by bidder will be adhered.</p>	50
2	Exit Management	<p>Bidder is required to submit the Exit Management framework in line with this RFP, it must include the following:</p> <ul style="list-style-type: none"> • Activities part of the successful exit management • Process to be followed during exit management • Mechanism to be followed for handover of the assets, data and IPR (for only those components for which customization is done in this project) <p>All the above mentioned line items are to be submitted along with technical proposal as Project Exit Management Mechanism.</p> <p>This should also be part of the technical presentation.</p>	25
3	Transition Management	<p>Bidder is required to submit the Transition Management framework in line with this RFP, it must include the following:</p> <ul style="list-style-type: none"> • Activities part of the successful Transition management from Service Provider to another Service Provider • Process to be followed during Transition management • Mechanism to be followed for movement of the data and command center platform from one Service 	25

Sl. No.	Criteria	Criteria Details	Marks allotted
		<p>Provider to another in secure manner without losing any data or its formats</p> <p>All the above mentioned line items are to be submitted along with technical proposal as Transition Mechanism between Service Provider to another.</p> <p>This should also be part of the technical presentation.</p> <p>It is expected that at the time of actual execution of this RFP, all the commitments given by bidder will be adhered.</p>	
4	Personnel management	Bidder is required to submit – procedure of recruitment of the personnel, qualifications of the personnel deployed at the state level ICCC , training provided and training frequency of all state level, district level and facility level cells	100
TOTAL MARKS			200

Section D - Common Command Center Application Platform OEM and CSP Credentials (Marks 200)

Sl. No.	Criteria	Criteria Details	Marks Allotted
1	Common Command Center Application OEM Turnover	<p>Single legal entity or its holding company, having annual revenue in the last two financial years (2020-21 and 2021-22) either in India or Globally.</p> <ul style="list-style-type: none"> • More than INR 50 Crores- 20 Marks • INR 25-50 Crores- 10 Marks <p>Bidder to submit Certificate from the Statutory Auditor / Chartered Accountant. The said certificates also need to be counter signed by authorized signatory of the OEM.</p> <p>It is expected that at the time of actual execution of this RFP,all the commitments given by bidder will be adhered.</p>	50
2	Common Command Center Application Platform Experience and Capabilities	<p>Proposed platform for ICCC by bidder should have been deployed in India or abroad in last 5 years.</p> <p>The platform should be deployed with at least any 3unique and relevant use cases of the following like Environment Monitoring, Citizen Service Delivery, Mobile work-force management, KPI Monitoring & Executive Dashboards and law enforcement.</p> <ul style="list-style-type: none"> • 5 citations (with 2 hosted on cloud) = 50 marks, • 4 citations = 40 marks, • 3 citations = 30 marks, • 2 citation = 20 marks • else 0 Marks <p>Bidder to submit Case study + Copy of work order/Client certificate detailing Scope & value from platform OEM along with name of cities and details of use cases being handled.</p> <p>In Case of ongoing project Case study + Copy of work order + Assignment Details as per the format to be provided.</p> <p>In Case of completed project</p>	100

Sl. No.	Criteria	Criteria Details	Marks Allotted
		Case study + Copy of work order + Assignment Details as per the format provided + Completion Certificate In case of NDA, Company Secretary / Chartered Accountant Signed Certificate of OEM providing details of Scope of work and Value & phase of project. It is expected that at the time of actual execution of this RFP, all the commitments given by bidder will be adhered.	
3	Common Command Center Application Platform Experience and Capabilities	Proposed platform for City Control and Command Centre by bidder should have been: <ul style="list-style-type: none"> Platform based on artificial intelligence based Advanced analytics in India or abroad = 30 marks, Platform is artificial intelligence based advanced analytics ready = 15 marks else 0 Marks 	50
TOTAL MARKS			200

Section E - Technical Presentation and Live Demo (Marks 350)

Sl. No.	Criteria	Criteria Details	Marks Allotted
1	Presentation (60 Minutes for presentation + 10 minutes for Simulation + 20 minutes for (Q & A)	<p>Presentation will be evaluated on the quality of presentation and understanding of the requirements of the RFP. Following are the parameters for evaluation:</p> <ol style="list-style-type: none"> 1. Understanding of the project as per RFP 2. Governance Structure and team deployment plan 3. High level Architecture of the solution proposed for the complete project as per the RFP 4. Proposed solution for networking along with Network Architecture between City Control Room and ICCC Application 5. Proposed solution for Data Security and Cyber internal threats, etc. 6. Adherence to functional and Technical SLAs 7. Approach towards the scalability, Interoperability and modularity features considering the future expansion of the project 8. Major risks for the project & Mitigation plan for each of these risks 9. ICCC platform OEM support roadmap for next 10 years 10. Cloud Service Provider (CSP) strategy, Exit Management and transition Plan. 11. Other IT and non-IT infrastructure procurement and OEM selection and support plan. 12. Business continuity plan marks each for the criteria given above for the presentation (5*14 = 70 marks) <p>Apart from above points, in presentation bidder is required to showcase 3D simulation for functional ICCC showcasing all use cases as mentioned in this RFP. This simulation should show movement of data/ feeds, working of field devices, dashboards working in command center, incident management from command center. Finally, how the</p>	100

		whole scenario is helping Pregnant women. 30 marks for simulation. Please note that Bidder will be required to submit soft copy of both presentation and video to the authority.	
2	Live Demo / POC	Bidders will be required to do the Demo / POC. Bidder will be given minimum of 1 week to establish setup for infrastructure doing the Demo / POC.	250
Total			350

Note: The Presentation and POC has to be lead by proposed Program Manager for this project and all technology OEMs have to be present during the presentation and Live Demo / POC.

Note: AUTHORITY reserves right to visit bidder's customer where such a similar project execution has taken place.

2.5 Award of Contract

2.5.1 Award criteria

- The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services and should be stated in INR only. Omissions, if any, in costing of any item shall not entitle the Bidder to be compensated and the liability to fulfil its obligations as per the Terms of Reference within the total quoted price shall be that of the Bidder. The Bidder shall bear all taxes, duties, fees, levies and other charges imposed under the Applicable Law as applicable.

Proposals will be finally be ranked in accordance with their combined technical (St) and financial (Sf) scores as detailed in 3.6

$$S = St \times Tw + Sf \times Fw$$

Where S is the combined score, and Tw and Fw are weights assigned to Technical and Financial Proposal that will be 70:30.

- AUTHORITY reserves the right to further negotiate the prices quoted by the successful bidder.
- Bidder achieving the highest combined technical and financial score will be considered to be the successful bidder and will be issued the Letter of Acceptance (LoA).

2.5.2 Letter of acceptance (LOA)

Prior to the expiration of the period of bid validity, AUTHORITY will notify the successful bidder in writing or by fax or email, to be confirmed in writing by letter, that its bid has been accepted. LOA will constitute the formation of the contract. Upon the successful bidder's furnishing of Performance Bank Guarantee, AUTHORITY will promptly notify each unsuccessful bidder.

2.5.3 Signing of Contract

AUTHORITY shall notify the successful bidder that its bid has been accepted. The successful bidder shall enter into contract agreement with AUTHORITY within the time frame mentioned in the Letter of Acceptance issued to the successful bidder by AUTHORITY.

2.5.4 Failure to agree with the terms and conditions of the RFP/Contract

Failure of the successful bidder to agree with the Terms & Conditions of the RFP / Contract shall constitute sufficient grounds for the annulment of the award, in which event AUTHORITY may invite the next best bidder for negotiations or may call for fresh RFP.

2.5.5 AUTHORITY's right to accept any Bid and to reject any or All Bids

AUTHORITY reserves the right to accept or reject any Bid, and to annul the bidding process and reject any or all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for AUTHORITY's action.

Non-Exclusive: AUTHORITY reserves the rights to avail the similar services from other Service Providers/ others during the Contract period.

2.6 Performance Bank Guarantee

- a. Within fifteen (15) working days from the date of issuance of LOA, the Successful Bidder shall at his own expense submit unconditional and irrevocable Performance Bank Guarantee (PBG) an amount equivalent to 10% of contract value to AUTHORITY.
- b. The PBG shall be from a Scheduled Commercial Bank in the format prescribed. payable on demand, for the due performance and fulfilment of the contract by the bidder.
- c. All charges whatsoever such as premium; commission etc. with respect to the PBG shall be borne by the Successful Bidder.
- d. The PBG shall be valid till satisfactory completion of Post Implementation Support. The PBG may be discharged/returned by AUTHORITY upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the PBG. The PBG shall be valid up to the completion of the period of 'Go- Live' / Commercial Operation Date (COD) + 62 months for the project i.e. 60 days beyond completion of O & M period.
- e. In case the project is extended after the project schedule as mentioned in the RFP, the PBG shall be accordingly extended by the Successful Bidder till the extended period.
- f. In the event of the Bidder being unable to service the contract for whatever reason AUTHORITY would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of AUTHORITY under the contract in the matter, the proceeds of the PBG shall be payable to AUTHORITY as compensation for any loss resulting from the bidder's failure to complete its obligations under the Contract. AUTHORITY shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.
- g. AUTHORITY shall also be entitled to make recoveries from the bidder's bills, PBG, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.
- h. On satisfactory performance and completion of the order in all respects and duly certified to this effect by AUTHORITY, Contract Completion Certificate shall be issued and the PBG would be returned to the Successful Bidder.

2.7 Right to Vary Quantity

- a. At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased or decreased upto 20%. It shall be without any change in the unit prices or other terms and conditions of the Bid and the bidding documents.
- b. If 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, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding document.

- c. Repeat orders for extra items or additional quantities may be placed during the currency of Contract, 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.

2.8 Warranty & Maintenance

- a. Successful Bidder shall also provide complete maintenance support for all supplied products and connected components as outlined in this RFP for the entire duration of the contract.
- b. During the warranty period, the bidder shall warrant that the goods supplied under the contract are new, unused, of the most recent version/models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The bidder further warrants that the goods supplied under this contract shall have no defects arising from design, materials or workmanship.
- c. AUTHORITY or designated representatives of the bidder shall promptly notify Successful Bidder in writing of any claims arising under this warranty. Upon receipt of such notice, the Successful Bidder shall, within the warranty period and with all reasonable speed replace the defective products, without costs to AUTHORITY and within time specified and acceptable to AUTHORITY.
- d. If the Successful Bidder, having been notified, fails to remedy the defect(s) within the period specified in the contract, AUTHORITY may proceed to take such reasonable remedial action as may be necessary, at the Successful Bidder's risk and expense and without prejudice to any other rights, which AUTHORITY may have against the bidder under the contract.
- e. During the comprehensive warranty period, the Successful Bidder shall provide free of cost all product(s), and documentation updates, patches/fixes, and version upgrades within 14 days of their failure and should carry out delivery and make operational the same at no additional cost to AUTHORITY.
- f. Warranty for Services – The MSI warrants that all services under the Contract will be performed with promptness and diligence and will be executed in a workmanlike and professional manner, in accordance with the practices and high professional standards used in well-managed operations performing services similar to the services under the Contract. The MSI represents that it shall use adequate numbers of qualified individuals with suitable training, education, experience and skill to perform the Services hereunder.

The Successful Bidder hereby warrants AUTHORITY that:

- i. The supplied products / equipment / goods meeting all the requirements and the implemented integrated solution represents a complete integrated solution meeting all the requirements as outlined in the RFP and further amendments if any and provides the functionality and performance, as per the terms and conditions specified in the contract. The proposed products / equipment / goods and the proposed integrated solution shall achieve parameters delineated in the technical specification/requirement.
- ii. The Successful bidder shall be responsible for warranty & maintenance services from licensors of products.
- iii. The Successful bidder shall ensure the maintenance of the acceptance criterion/standards in respect of the products / equipment / goods and systems during the warranty and maintenance period.

2.9 Corrupt Practices

Bidders are expected not to indulge in any corrupt and fraudulent practice. They are expected to observe the highest standard of ethics during the procurement and execution of the Contracts. In pursuance of this policy, following definitions are relevant:

“Corrupt Practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in execution of the Contracts; and

“Fraudulent Practice” means misrepresentation of facts in order to influence a procurement process or the execution of the Contracts to the detriment of AUTHORITY, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non - competitive levels and to deprive AUTHORITY of the benefits of free and open competition.

If it is found that Bidder(s) had engaged in corrupt/ fraudulent practice in securing and executing the Contracts, AUTHORITY reserves the right:

- a. Not to award Contracts to such Bidder,
- b. To cancel the Contracts, if already awarded. In case of cancellation, authority shall be entitled to recover from the Bidder the amount of any loss arising from such cancellation in accordance with the provisions of the RFP Document. authority shall also have the right to forfeit the Bid Security/ Performance Security of such Bidder, and
- c. To ban the business dealing with the Bidder who engaged in such practices either indefinitely or for a specified period of time.

2.10 Local Conditions:

It will be imperative on each tenderer to fully acquaint him of all the local conditions and factors, which would have any effect on the performance of the contract and cost of the equipment. The Purchaser shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, or time schedule of delivery of machines, shall be entertained after the Purchaser accepts the offer.

3 Special conditions of contract

3.1 Scope of Work

This section summarizes the overall scope of work that needs to be executed by the selected Master System integrator (MSI). Scope of work mentioned in this section is indicative scope and MSI will be responsible for achieving the objectives and outcomes accommodating changes from time to time, envisioned to have an integrated digital solution for all the healthcare facilities and functions of the State of Andhra Pradesh. The proposed solution should have applications which are required to be developed, customized, implemented and integrated, MSI is expected not to limit scope to below mentioned applications only. Bidder may offer to implement additional applications (if required) to achieve proposed outcomes.

3.1.1 Design and Development of modules

Design and Development of all modules of ICCC Software features as mentioned below but only limited to:

- i. High risk pregnant women tracking
- ii. Referral tracking of Pregnant women
- iii. Anaemia monitoring
- iv. Tribal women institutional delivery monitoring and tracking
- v. Data analysis and Data quality management
- vi. Grievance redressal
- vii. Infant care- vaccination, services tracking etc.), vaccination and child health services.
- viii. Monitoring Family Physician Concept functioning
- ix. Epidemic monitoring – may be included by the client as and when required and be monitored

Selected bidders shall design and develop all the above modules in consultation with the authority.

3.1.1.1 Integrated Command Control Centre software Features:

An Integrated Command Control Centre is considered to be the core for managing day to day operations, respond to inconsistent conditions, and emergency incident response of various healthcare operations across state. It is the place where the overall operations of state health system like monitoring, controlling, and commanding are carried out. The ICCC should be able to provide all the data analytics to support the state to monitor and plan the health policies for the state. All IT applications to be integrated with the ICCC. The data analytics and dash boarding outcomes from advanced analytics should also be available at State ICCC. Expected outcomes of ICCC:

- a. Situation awareness of Health care system
- b. Seamless Referrals and Transfers through all levels of care
- c. Automated Standard operating procedures workflows across state health system
- d. Performance management across institutions Human resource, Devices and clinical outcomes
- e. Hub and Spoke level monitoring state and district level administrative functions
- f. Data Availability at all levels for transparent and effective decision making and governance
- g. Enhance citizens/beneficiaries' satisfaction
- h. Emergency response systems

3.1.1.2 ICCC Technical Specifications:

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Solution & Platform	Should have built-in fault tolerance, load balancing and high availability & should be certified by the OEM.
	Software (Application, Database and any other) should not be restricted by the license terms of the OEM to prevent future scaling up
	System should provide a comprehensive API (Application Program Interface) or SDK (Software Development's Kit) to allow interfacing and integration with existing systems, and future application which will be deployed on the field.
	The solution should be network and protocol agnostic and provide option to connect legacy system through API's with either read, write or both options. It should connect diverse on premise and/or cloud platform's and makes it easy to exchange data and services between them.
	The system shall allow seamless integration with all the department's existing and future initiatives
	The platform must have stream processing capability to analyze the incoming data in real-time
	The platform should be able to integrate with any type of platform being used for the health care services irrespective of the technology used.
	Integrated command control Center (ICCC) should be implemented and compliant to open standards based Commercial-off the-shelf (COTS) products India.
	The platform should be able to normalize the data coming from different sub-systems or other existing or to be integrated applications and enable use of these data seamlessly across different interfaces.
Display Functions	General Display Functionality – The Platform shall have the following general display functionality:
	View and handle multiple alarms at one time.
	View windows in a single monitor, across multiple monitors or video walls.
	Access, display and manage events / alarms and related health data and information from sub-system based on priority and authority level.
	View and manage detailed response procedures and tasks.
	Enable a single operator or multiple operators to monitor and control commands from connected sub systems, including all operational capabilities for detection, assessment, notification, entry control, and communications.
	Provide the rapid annunciation and display of alarms to facilitate evaluation and assessment.
	Enable different graphical user interface “panes” to be modified to provide a customized operator experience.
	Other functionalities/ features required by the client from time to time.
Navigation	The Platform shall have the following navigational display functionality:
	Allow user to select the elements directly from maps based on region of interest
	Allow user to navigate to a map or health care centers through the map interface and through a graphical zone view.
	Allow user to quickly navigate to an open alarm from alert pane and related map.
	Allow user to navigate to search by name and be directed to related graphical map.
	Provide the visual indication of the highest severity alarm to the next higher-level in.
	Other functionalities/ features required by the client from time to time.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Search and Trace Capabilities	Allow user to search and find State, districts, and areas names from a tab
	Allow user to search and find alert ID to quickly find alert and alert details.
	Allow user to search and trace all user activity related to a specific badge ID or username.
	Allow user to search and trace all user activity related to specific user name.
	Other functionalities/ features required by the client from time to time.
Complex Event Processing	Platform should have CEP functionality to predict high- level events likely to result from specific sets of low-level factors. CEP identifies and analyses cause-and-effect relationships among events in real time, allowing personnel to proactively take effective actions in response to specific scenarios. CEP methodology should provide proactive monitoring and operational intelligence by delivering real-time alerts and insight into pertinent information, enabling Enterprise managers to operate smarter, faster, more efficiently, and more competitively. Its real-time alerts should base on sets of conditions defined by SOP. CEP should have number of techniques, including: <ul style="list-style-type: none"> • Event-pattern detection • Event abstraction • Event filtering • Event aggregation and transformation • Modelling event hierarchies
	Other functionalities/ features required by the client from time to time.
Convergence of Multiple feeds /services	System needs to have provision for interfacing with various services and be able to monitor them. The solution should integrate existing deployed solution and also need to provide scalability option to implement new use cases.
	System should have capability to source data from various systems implemented (implemented as part of this project or other future projects) to create actionable information.
	Other functionalities/ features required by the client from time to time.
Standards for ICCC Application Software	The solution should adhere to the Industry standards for interoperability, data representation & exchange, aggregation, virtualization and flexibility.
	Compliant to IT Infrastructure Library (ITIL) standards for Standard Operations Plan & Resource Management.
	Compliant to Geo Spatial Standards like GML & KML etc.
ICCC Application Software Components	Web server to manage client requests to provide web-based, one- stop portals to event information, overall status, and details. The user interface (UI) to present customized information in various preconfigured views in common formats. All information to be displayed through easy-to-use dashboards.
	Application server to provide a set of services for accessing and visualizing data. Should be able to import data from disparate external sources, such as databases, and files (Both structured and un-structured) It should provide business monitoring service to monitor incoming data records to generate key performance indicators. It should also enable users to view key performance indicators, notifications, and reports, spatial- temporal data on a geospatial map, or view specific details that represent Health care services, High Risk Pregnant Women, Health Care Centers, Hospitals, Ambulances, Bike Ambulances, Blood Bank Centers or an area either on a location map, or in a list view. The application server should provide security services that ensure only authorized users and authorized groups can access data. Analytics functionality must be part of application server or a separate server.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	It must facilitate any extended functionalities like – epidemics management, other diseases monitoring like- Leprosy, respiratory illness etc.
Incident Management System	The system should provide Incident Management Services to facilitate the management of response and recovery operations.
	The platform must have capability to create event definitions that would raise from any domain without any coding efforts
	The platform must be able to create automation rules, and the events can be raised by these automation rules basis the streamed data
	Should support for sudden critical events and linkage to standard operating procedures automatically without human intervention.
	Should support for multiple incidents with both segregated and/or overlapping management and response teams.
	Should support Geospatial rendering of event and incident information using relevant GIS services and GIS Servers
	Should support plotting of area of impact using polynomial lines to divide the area into multiple districts on the GIS maps.
	Should support incorporation of resource database for mobilizing the resources for response.
	Should provide facility to capture critical information such as location, name, status, time of the incident and be modifiable in real time by multiple authors with role associated permissions (read, write). Incidents should be captured in standard format to facilitate incident correlation and reporting.
	The system should identify and track status of critical infrastructure / resources and provide a status overview of facilities and systems
	Should provide detailed reports and summary views to multiple users based on their roles.
	A Reference Section in the tool should be provided for posting, updating and disseminating plans, procedures, checklists and other related information.
	Provide User-defined forms as well as Standard Incident Command Forms for incident management.
	Other functionalities/ features required by the client from time to time shall be incorporated.
Integrated User Specific & Customizable Dashboard	Should provide integrated dashboard with an easy to navigate user interface for managing profiles, groups, message templates, communications, tracking receipts and compliance
	Collects major information from other integrated platforms.
	Multi-displays configurations
	Use of GIS tool which allows easy map editing for wide area monitoring (Compatible with Google map, Bing map, ESRI Arc GIS map, open GIS etc.).
	Should provide tools to assemble personalized dashboard views of information pertinent to incidents, emergencies & operations of command center
	Should provide real time and historical reports, event data & activity log. The reports can be exported to pdf or html formats.
	Should provide dashboard filtering capabilities that enable end-users to dynamically filter the data in their dashboard based upon criteria, such as region, dates, incident types, event titles and stakeholders involved, etc. and capability to drill down to the details
	Other functionalities/ features required by the client from time to time.
Device Status, Obstruction	Should provide icon-based user interface on the GIS map to report non-functional device.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Detection and Availability Notification	Should also provide a single tabular view to list all devices along with their availability status in real time.
	Should provide User Interface to publish messages to multiple devices at the sametime.
Event Correlation	ICCC Application Software should be able to view two or more events coming from different subsystems based on time, place, and custom attribute and provide notifications to the operators. The ICCC shall be able to get, capture, record incidents occurring in real time from all possible sources and to channelize the data and processed outcome to respective connected application (MSI / Departmental / Other Government - provided application both for current use like in video wall displays and in other historical analytics.) Such notifications will be triggered by the events captured in the downstream (south bound) applications that are integrated to the command center through APIs.
Standard Operating Procedures (SOPs)	The platform should provide for authoring and invoking un-limited number of configurable and customizable standard operating procedures through graphical, easy to use tooling interface.
	Users should be able to edit the SOP, including adding, editing, or deleting activities based on their respective roles (Role Based Access).
	Users should be able to also add comments to or stop the SOP (prior to completion).
	There should be provision for automatically logging the actions, changes, and commentary for the SOP and its activities, so that an electronic record is available for after-action review.
	SOP Tool should have capability to define the following activity types:
	Manual Activity - An activity that is done manually by the owner and provide details in the description field.
	Automation Activity - An activity that initiates and tracks a work flow and select a predefined work flow order from the list.
	If-Then-Else Activity - A conditional activity that allows branching based on specific criteria. Either enter or select values for Then and Else. Shall use inputs from related other devices to auto-configure responses and email responses to relevant stakeholders creating both time stamped event response and the actual communication sent out to the AP Health administrative hierarchy and to the field formations
	Platform must provide the Escalation capability if the SOP is not completed within the stipulated time that is set
	Platform must provide the capability to create Escalation levels so that escalation hierarchy can be established when the SOPs are not executed with the stipulated time
	Escalation rules must be district based and can be assigned to an SOP if escalation is required for that SOP
	Notification Activity - An activity that displays a notification window that contains an email template for the activity owner to complete, and then sends an email notification as per manual alternate responses to the situation, if not an automated standard response to the AP Health administrative hierarchy and the field formations
	SOP Activity - An activity that launches another standard operating procedure.
	Platform must provide an ability to create groups that consists of users from same or different departments and the groups can be used in tasks
	Platform must have the capability to create distribution rule where the region-based routing can be performed.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	Platform must have the capability to assign the distribution rules to user tasks and email tasks
	Other functionalities required by the client shall be included from time to time
Instant Messaging Additional Features	Provide ability for operators and emergency management community users to update evidences in the form of rich media and text for any of the incidents, and have the complete audit trail on status changes and evidence updates on the ongoing or completed incidents.
Multitenancy support	The Platform should account for below solution components, which can be extended to Multi-tenancy architecture
	Propose Hub and Spoke model to meet the criteria of centralized view and distributed view for individual 26 districts.
	Data need to aggregate to the hub after completion of district wise deployment. Hub and Spoke approach is required for distributed model.
	Hub should be Central View. Replication to show case the real time status of the dashboards to Central.
	One deployment at Central and distributed deployment for all districts and centralized Hub should have situational awareness of all the districts.
Actions Module	ICCC Application Software should provide for authoring and invoking unlimited number of configurable and customizable actions rules through graphical, easy to use tooling interface. Such actions will be defined for each downstream (south bound) applications through a requirements gathering and pre-configuration process with user departments.
	The users should be able to edit the action/rule plan, including adding, editing, or deleting the activities with role based access.
	The users should be able to also add comments to or stop the action plan as per role based authorizations and approvals.
	There should be provision for logging the actions so that an electronic record is available for after-action review.
	The tool should have capability to define the following activity types:
	Manual Activity - An activity that is done manually by the owner and provide details in the description field.
	Notification Activity - An activity that displays a notification window that sends out an auto email and SMS to concerned hierarchical stakeholders and may contain an email template for the activity owner to complete additional action items, and then sends further email notification and SMS.
Key Performance Indicator	ICCC Application Software should be able to facilitate measurement or criteria to assay the condition or performance of departmental processes & policies based on the real time responses that were enabled and the duration by which normalcy was restored, the stakeholders who were involved and acted upon in the event and the outcome recordings of the AP Health Admin hierarchy on closure of the event etc.
	Indicators that the status is acceptable, based on the parameters for that KPI, no action is required.
	Indicators that caution or monitoring is required, action may be required.
	Indicators that the status is critical and action is recommended.
	Other functionalities/ features required by the client from time to time
Reporting Requirements	ICCC Application Software should provide easy to use user interfaces for operators such as Click to Action, Charting, Hover and Pop Ups, KPIs, Event Filtering, Drilldown capability, Event Capture and User Specific Setup
	The solution should generate Customized reports based on the district, area or periodic or any other customer reports as per choice of the administrators

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Collaboration Tools	Should provide external linkage for users to collaborate in real-time using 3rd party instant messaging features.
	3rd party instant messaging should provide the ability to search/locate resources based on name, department, role, geography, skill etc. for rapidly assembling a team, across department, divisions and agency boundaries, during emergency.
	3rd party instant messaging should provide the capability to invite - Using information provided during the location of those individuals or roles, invite them to collaborate and to share valuable information.
	3rd party instant messaging should provide a single web based dashboard to send notifications to target audiences using multiple communication methods including voice- based notification on PSTN/Cellular, SMS, Voice mail, and E-mail.
	Other functionalities/ features required by the client from time to time shall be included
Authentication	User authentication information to authenticate individuals and/or assign roles as and when required and it should be configurable as per requirement without any additional module
What-if Analysis Tool	The solution should provide the capability to manage the emergencies and in-turn reducing risks, salvaging resources to minimize damages and recovering the assets that can speed up recovery.
	To take proactive decisions that help minimize risks and damages, the solution should provide Analytical and Simulation systems as part of the Decision Support System. The solution should help simulate what if scenarios. It should help visualize assets/resources at risk due to the pending/ongoing incident, should render impacted region on a GIS/2D map. The solution should help build the list of assets, their properties, location and their interdependence through an easy to use Graphical User Interface. When in What-If Analysis mode the solution should highlight not only the primary asset impacted but also highlight the linked assets which will be impacted. The user should be able to run the What-if Analysis mode for multiple types of emergency events such as High risk in pregnant women, Difficulty in breathing, Severe abdominal pain, etc.
Alert & Mass Notification Requirements	The system should provide the software component for the message broadcast and notification solution that allows authorized personal and/or business processes to send large number of messages to target audience (select-call or global or activation of pre-programmed list) using multiple communication methods including SMS, Voice large number of messages to target audience (select-call or global or activation of pre-programmed list) using multiple communication methods including SMS, Voice (PSTN/Cellular), Email and Social Media.
	Provide function for creating the alert content and disseminating to end users. Provision of alerting external broadcasting organizations like Radio, TV, Cellular, etc., as web-service. Provide Role based security model with Single-Sign-On to allow only authorized users to access and administer the alert and notification system.
	Other functionalities/ features required by the client from time to time shall be included
Security & Access Control	Provide comprehensive protection of web content and applications on back-end application servers, by performing authentication, credential creation and authorization.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Internet Security	Comprehensive policy-based security administration to provide all users specific access based on user's responsibilities. Maintenance of authorization policy in a central repository for administration purposes.
Access and Permission	Should support to enable assignment of permissions to groups, and administration of access control across multiple applications and resources. Secure, web-based administration tools to manage users, groups, permissions and policies remotely
User group	Provide policies using separate dimensions of authorization criteria like Traditional static Access Control Lists that describe the principals (users and groups) access to resource and the permissions each of these principals possess.
Provide multi-dimensional access control	Integrate SSO (Single sign on) to Web-based applications that can span multiple sites or domains with a range of SSO options.
	Platform must be capable to participate in a federated SSO using SAML 2.0 protocol
Flexible single sign-on (SSO)	Support LDAP, Open LDAP, AD, AAD and all other industry standard authentication mechanism
Situational Awareness COP (Common Operational Picture)	Should be able to combine data from various sources and present it as different view tailored to different operator's needs and comprise of a comprehensive view of the events as on a specific date and time which should include but not be limited to the following:
	Manual tasks assignment and their status
	Agencies involved
	Resources deployed
	Timeline view of the situation
	Other functionalities/ features required by the client from time to time shall be included
Timeline and Charting	Event information
	Resources information
	Agency type
	Tasks
	Criticality or priority
GIS Integration	Shall view the environment through geospatial or Dynamic computer-generated (JPEG, BMP, AutoCAD, etc.) reusable map.
	Should allow user to view system data and relative name from the displayed map
	Should allow all resources, objects on the map to be georeferenced such that they have a real world coordinate.
	Should visually differentiate alarm severities on map through different color and icon identifiers.
	Should immediately view alarm details and investigate the alarm from the map.
	Should allow map information "layers" to be displayed/hidden on items such as
	Resource Names
	Locations and Areas
	Resource tracks
	Allow user to zoom in/out on different regions of map
	Allow user to touch and drag to move around the map.
	Other functionalities/ features required by the client from time to time shall be included

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Alarm Display	Should have an ability to display alarm condition through visual display and audible tone
	Should have an ability to simultaneously handle multiple alarms from multiple workstations
	Should have an ability to automatically prioritize and display multiple alarms and status conditions according to predefined parameters such as alarm type, location, severity, etc.
	Should display the highest priority alarm and associated data in the queue as default, regardless of the arrival sequence
	Other functionalities/ features required by the client from time to time shall be included
Historical Alarm Handling	Should have an ability to view historical alarms details even after the alarm has been acknowledged or closed.
	Should have an ability to sort alarms according to date/time, severity, type and location
	Other functionalities/ features required by the client from time to time shall be included
Alarm Reporting	Should have an ability to generate a full incident report of the alarm being generated.
	Should have an ability to display report on monitor and print report
	Should have details of alarm including severity, time/date, description and location captured video image snapshots
	Response instructions
	Alarm activities (audit trail)
	Should have an ability to export alarm report in various formats including but not limited to pdf, jpeg, html, txt, and mht formats
	Should have an ability to generate an alarm incident package including the full incident report and exported data from the incident in a specific folder location
	Other functionalities/ features required by the client from time to time shall be included
Alarm Configurations	The solution should have the following ability to handle the workflow alarms through graphical user interface. Should have an ability to match keywords or text from the alarming subsystem's description to raise an alarm using criteria including exact match, exact NOT match, contains match, wildcard match and regularly expression match
Rule Engine & Optimization	Should have ability to respond to real-time data with intelligent & automated decisions
	Should provide an environment for designing, developing, and deploying business rule applications and event applications
	The ability to deal with change in operational systems is directly related to the decisions that operators are able to make
	Should have at-least two complementary decision management strategies: business rules and event rules.
	Should provide an integrated development environment to develop the Object Model (OM) which defines the elements and relationships
System Functionalities and Resiliency	System should support standard Authentication and Authorization for access.
	Architecture should provide appropriate resiliency for the system to ensure high availability and trouble free operations.
	The High Availability should be for all the components of ICCC and redundancy on the network connectivity.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	Ensure ways and means to define policies that make applications or objects respond to various external ecosystem.
	Provide Scheduler for future actions.
	Should have integrated collaboration tools to bring multiple stake holders and responders to respond an emergency or health care services event.
	Should provide different tier of user categorization, authentication, authorization, and services.
	Should provide role-based access view to applications.
	Should also be able to ingest other sub-systems like RCH, Anemia, Blood Bank, EHR, HIMS & etc via API
	OEM should be able to securely access the system remotely for updates / upgrades and maintenance for the given duration.
	The system should be able to be deployed across multiple sites disaster recovery purposes.
API Management	Access to the platform API(s) should be secured using API keys.
	APIs enabling contextual information and correlation across domains and verticals for multiple platforms and multiple systems, as and when needed in future.
	Should have ability to run Descriptive, Predictive, Prescriptive and cognitive analytics by using of scenario reconstruction ability.
Notifications, Alerts and Alarms	System should generate Notification, Alert and Alarm messages that should be visible within the Dashboard and the Field Responder Mobile App if required.
	All system messages (notifications, alerts and alarms) should always be visible from the Notifications view, which provides controls that operator can use to sort and filter the messages that it displays.
	Systems should deliver message to a set of users. The Notification service should support notification methods such as Email and SMS.
	Other functionalities/ features required by the client from time to time shall be included
Users and Roles	Platform should allow different roles to be created and assign those roles to different access control policies. Based on their roles and the permissions, they should be allowed to perform various tasks, such as adding new locations, new resources etc.
	Platform should allow single or multiple users to view and manage alarms in defined domains (areas/locations). User thus can be part of single or multiple domains.
	The platform shall be available with unlimited number of user license (perpetual) for viewing and access across multiple departments, administrators and operators, as and when required without any license restriction on concurrency of number of simultaneous users.
	Other functionalities/ features required by the client from time to time shall be included
Dashboard	Platform should have capability to provide access to real time data and historical data from various connected sub-systems for reporting and analytics. The Smart district dashboard shall also connect seamlessly to any state level dashboard view of identified and authorized other systems like CM Dashboard etc.
	System should provide trends in graphical representation from data sources over a period. Trends should allow to monitor and analyse the event details w.r.t. time and also device performance over time with the help of third party device monitoring tools.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	<p>Should provide dashboard filtering capabilities that enable end-users to dynamically filter the data in their dashboard based upon criteria, such as region, dates, product, brands, etc. and capability to drill down to the details.</p> <p>Platform must have capability to create grid-based widget system to create different visualization elements and compose it over dashboards</p> <p>Platform must be capable of providing different widgets like charts, data grids, KPI, map, video wall, timeline and word cloud</p> <p>Platform must allow multiple configuration options for each widget including but not limited to the Title, colors, style, widget specific configuration options like different types of charts for chart widget, different map settings for map widget etc.</p> <p>Platform must be able to save the widgets with the data prefilled so that it can be reused across the dashboards and these pre-filled application widgets must be categorized appropriately and accessed with ease according to the category</p> <p>Platform must provide the ability to share the dashboards with a single user or default role or derived role with the read and write permissions and additional ability to transfer ownership when to a single user</p> <p>Platform must provide the capability to select the favourite dashboards that can be accessed easily by Andhra Pradesh health department key stakeholders.</p> <p>Platform user must be able to perform slide show of the selected dashboards and can loop continuously with the appropriate loop interval set</p> <p>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</p> <p>Other functionalities/ features required by the client from time to time shall be included</p>
Reports	<ul style="list-style-type: none"> • System should have ability to generate reports and have provision to create user specific standard list of reports. • System should have ability to generate downtime reports on monthly basis. • Should provide historical reports, event data and activity logs. The reports can be exported to PDF or HTML formats. • Ability to display report on monitor / video wall and print report. • Ability to capture Operators response. • Ability to select information and fields to be included in report at time of report generation. • Ability to generate details of alarm including severity, time /date, description, and location. • Ability to associate Map of surrounding area associated with alarm. • Allow operator to transfer the incident report to Mobile Device/another operator's console. • Platform must be able to expose the dashboards to the public, so that the dashboards can be consumed without login into the platform • Public dashboards usage must be rate limited to avoid unscrupulous usage of the dashboard, and the rate limits can be controlled by the backend settings • Platform must have an ability to schedule reports from the existing dashboards that represents the snapshot of the underlying data in visual format in PDF format <p>Other functionalities/ features required by the client from time to time shall be included</p>

Parameter	Integrated command control Center (ICCC) Minimum Specifications
Mobile Access for Field User	The platform should provide Integrated Mobile Application for Android and iOS, for capturing real-time information from the field response team using Mobile Standard Operating Procedure.
	Field Responder should be able to acknowledge the incident and provide real time updates from the incident site using approved and authorized mobile Apps and mobile interfaces to be provided by the MSI
	Field Responder must allow users to see the task details assigned such as ticket id, SLA, and location of the event triggered based on pre-configured rules from the ICCC platform
	Field Responder app should support escalation hierarchy of the tasks or events that are not readdressed within the defined SLA as configured in the platform Field Responder app should integrate with existing Mobile application or vice versa
	Other functionalities/ features required by the client from time to time shall be included
System Operations	The platform should have built-in geospatial visualization layer compliant to industry open standard applications
	The platform should provide operators and managers with a management dashboard that provides a real-time status and is automatically updated when certain actions, incidents and resources have been assigned, pending, acknowledged, dispatched, implemented, and completed.
	The platform shall provide the day-to-day operations and situational awareness to the participating agencies during various modes of operation.
	Shall provide a uniform, coherent, user-friendly and standardized interface.
	Shall provide possibility to connect to workstations, video walls and accessible via web browser.
	Dashboard content and layout shall be configurable, and information displayed on these dashboards shall be filtered by the role of the person viewing dashboard.
	The platform should allow creation of hierarchy of incidents and be able to present the same in the form of a tree structure for analysis purposes.
	Shall be possible to combine the different views onto a single screen or a multi-monitor workstation or video walls.
	Should maintain a comprehensive and easy to understand audit trail of read and write actions performed on the system.
	Audit trails should include detailed information about the user, activity type, date and time of addition/change/removal, and IP address accessed when the action occurred.
	Should provide ability to extract data in desired formats for publishing, reporting and interfacing purposes.
	The platform is required to issue, log, track, manage and report all activities underway during the various modes of operation.
	Should provide ability to attach documents to incidents and other entities.
	System should support centralized logging & auditing framework.
	System should have policies and procedures established, and supporting business processes and technical measures implemented, for maintaining complete, accurate and relevant agreements (e.g. SLAs).
	System should maintain complete inventory of critical production assets. Asset could be defined as source code, documents, binaries, configuration data, scripts, supplier agreements, software licenses etc.

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	<p>System shall provide integrated tool for evidence management of critical events and incidences digitally with provision for long term tamper proof data preservation so as to make it admissible in the court of law.</p> <p>Other functionalities/ features required by the client from time to time shall be included</p>
Data Aggregation Normalization and Access	<ul style="list-style-type: none"> The Common integrated smart platform shall be able to normalize the data coming from different devices of various OEMs. It shall support integration with multiple vendors The districts will be using various vendors for various health care services. For example, in the district, various vendors will be used for deployment and each will be generating data in their own format. Hence, Smart platform should be able to define its own data model for each health care service like Health Care Centers, Hospitals, Ambulances, Bike Ambulances, Blood Bank Centers, etc. and map data from different vendors to the common data model This data should be exposed to application eco system using secure APIs using API keys The attributes of the API key(s) should restrict / allow access to relevant data. Multitenant district operations Dashboard: Platform Dashboard should display only relevant data (associated geographical data) for the user who logs in. The platform should be able to integrate with any type of platform being used for the health care services irrespective of the technology used. The platform should be able to normalize the data coming from different sub-systems of same type and provide secure access to that data using data API(s) to application developers. The platform should support distributed deployment of functions (workflows & policies) across district network and compute infrastructure with centralized management and control <p>Other functionalities/ features required by the client from time to time shall be included</p>
Location engine	<p>Map services and geospatial coordinates: provides the geographical coordinates of specific facilities and district infrastructure assets, as well as unmapped facilities</p> <p>Geospatial calculation: calculates distance between two, or more, locations on the map using map api</p> <p>Location-based tracking: locates and traces devices on the map</p> <p>All maps shall have to be dynamic and be able to display on a standard mobile device (android and IOS)</p> <p>Other functionalities/ features required by the client from time to time shall be included</p>
Service Catalog management	<p>The Service catalogue management module should allow to categorize the externalized and non-externalized services into logical groups by creating the service catalogues. In addition, system should allow manage the service catalogues by adding, modifying, or deleting the catalogue details</p> <p>The service catalogue and criticality of the services shall have to be definable by respective user organization and</p> <p>System shall provide catalogue wise number of services / requests serviced during</p>

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	any period of query along with a location map of origin of various service requests to be able to analyse / co-relate to ground situations of those geographic regions
	Platform must allow the data APIs to be exposed to the 3rd party consumers who can consume the normalized data
	Platform must allow the data APIs to be exposed basis the RBAC (Role based AccessControl) data access restriction provided for the 3rd party.
	Other functionalities/ features required by the client from time to time shall be included
Authentication, Authorization	System should support standard Authentication, Authorization Methods
	Platform must have the ability to provide fine-grained restriction of the data basis the attribute and the attribute values assigned to users
	Platform must be able to assign dynamic attributes to the users so that the user can be created with the attributes assigned
	User Attributes can be programmatically used in the entire platform
	Other functionalities/ features required by the client from time to time shall be included
API Repository / API Guide	<ul style="list-style-type: none"> • Cross collaboration APIs: Enabling contextual information and correlation across domains and verticals (Multiple vendor in future) • OEM of the platform should submit their data sheet, ordering guide & API document available on the public domain.
	Other functionalities/ features required by the client from time to time shall be included
ICCC Operations	The solution should be implemented and compliant to industry open standard commercial-off-the-shelf (COTS) applications that are customizable.
	The solution should have the capability to integrate with GIS
	The solution shall integrate with GIS and map information and be able to dynamically update information on the GIS maps to show status of resources.
	The solution should provide operators and managers with a management dashboard that provides a real-time status and is automatically updated when certain actions, incidents and resources have been assigned, pending, acknowledged, dispatched, implemented, and completed. The above attributes shall be color coded.
	The solution shall provide the “day to day operation”, “Common Operating Picture” and situational awareness to the center and participating agencies during these modes of operation
	It shall provide complete view of facilities, video streams and alarms in an easy-to-use and intuitive GIS-enabled graphical interface with a powerful workflow and business logic engine
	It shall provide a uniform, coherent, user-friendly and standardized interface
	It shall provide possibility to connect to workstations and accessible via web browser
	The dashboard content and layout shall be configurable and information displayed on these dashboards shall be filtered by the role of the person viewing dashboard
	The solution should allow creation of hierarchy of incidents and be able to present the same in the form of a tree structure for analysis purposes
	It shall be possible to combine the different views onto a single screen or a multi-monitor workstation

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	<p>The solution should maintain a comprehensive and easy to understand audit trail of read and write actions performed on the system</p> <p>The solution should provide ability to extract data in desired formats for publishing and interfacing purposes</p> <p>The solution should provide ability to attach documents and other artifacts to incidents and other entities</p> <p>The solution is required to issue, log, track, manage and report on all activities underway during these modes of operation:</p> <ul style="list-style-type: none"> • recovery • incident simulation
Integration capabilities	<p>The Platform shall also be able to integrate, connect, and correlate information from health care services providing rule based information drawn from various sub-systems for an alert.</p>
Artificial intelligence-based Analytics	<ul style="list-style-type: none"> • Analytics Engine shall be an artificial intelligence- based smart analytics platform module to maximize business value through advanced machine learning capabilities. The machine learning capabilities aid in automating policies that result in better asset and infrastructure management. • The solution shall be flexible to integrate with other software applications. • Analytics Engine module shall have below intelligence capabilities • Advanced Predictive Analytics shall be part of the solution. • The solution shall be deep learning based. • The solution should support supervised, semi- supervised or unsupervised learning • The solution shall be able to predict insights consuming data from sub systems viz., RCH, Anemia, Blood Bank, EHR, HIMS etc. • The solution shall have predictions with confidence level of at least > 90% • The solution shall be able to predict and integrate with Smart solutions helping in driving operational policies creation. • The solution shall be robust, secure and scalable. The solution shall have a visualization platform to view historic analytics • "The application shall enable the customers to discover, compare, and correlate data across heterogeneous data sources to unravel the patterns that are previously hidden. At a broader level, when you work with the application, system do the following tasks: <ul style="list-style-type: none"> ○ Connect to a variety of data sources ○ Analyse the result set Visualize the results Predict outcomes" • Analytics Engine shall support multiple Data Sources. Min below standard data sources shall be supported – CSV, TSV, MS Excel, NOSQL, RDBMS • Analytics Engine shall provide analysis of data from a selected data source(s). • Analysis enables to define arithmetic and aggregation Operations that result in the desired output. • Analytics engine shall provide capability to check analysis with multiple predictive algorithms. • The Platform must be able to do change-over-time predictive geo spatial analytics • The Platform must be able to do predictive analysis of Utility elevation data without outcomes during disasters

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	<ul style="list-style-type: none"> • The platform must be able to provide actionable insights • The platform must provide pre-built outcome models for rapid deployment with minimal changes • The platform must have capability to do textual, geo spatial analytics • The platform must be able to impute values and make predictions • The platform must be able to consume data from across domains and provide a single insightful outcome • Platform must be able to provide suitability analysis
Resiliency	<p>Should provide ways to define policies that make applications or things respond to external environments</p> <p>The Smart platform should support integration to collaboration tools to bring multiple stakeholders and responders to respond to an emergency or health care services event.</p> <p>The Smart platform should be able to alert any incidents in the network proactively on command and control center</p>
API Based Open Platform	<ul style="list-style-type: none"> • Should provide health care services' API(s) to develop operation applications for each of the health care Services domains. • The smart platform should have API Management capabilities like API Security, API Monetization • The smart platform should be able to provide API access based on roles and access control policies defined for each user and the key issued to that user • The vendor should have already documented different health care Services APIs using which applications can be developed • The vendor should be able to demonstrate existing applications that are developed using these health care services APIs • Enables the district and its partners to define a standard data model for each of the health care services domains <p>Other functionalities/ features required by the client from time to time shall be included.</p>
Policies and Events	<p>System should allow policy creation to set of rules and each policy should have a set of conditions that activate the behaviour it provides. System should allow Default, Time-based, Event-based and Manual override policies creation. However, all manual overrides and actions / sequences carried out post an event shall be traceable to every user and in time sequence as well, so as to be able to improvise on any future similar occurrences</p> <p>System should provision to define a set of conditions that can be used to trigger an event-based policy</p> <p>Other functionalities/ features required by the client from time to time shall be included</p>
Resource Tracking	<p>The solution shall have the following resource tracking capabilities:</p> <p>Track latitude and longitude or geospatial location of resources (ex. Ambulances, Bike Ambulances, etc.) if associated with location-based device.</p> <p>Enable multiple resources to be simultaneously tracked.</p> <p>Enable resource locations to be displayed in the geospatial map if associated with location - based device.</p> <p>Enable details of resources to be called up from a map.</p> <p>Enable tracked resources to be displayed / hidden on a map.</p> <p>Enable display of recent movements of tracked object on a map.</p> <p>Enable display of any alert conditions associated with tracked objects on a map.</p> <p>Enable search and find tracked objects by name.</p>

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	Automatically display the location of the resource on a map with single mouse click.
	Other functionalities/ features required by the client from time to time shall be included
Export Formats	Should support export of the analysis into following formats included but not limited to below:
	XML/JSON
	Excel
	PDF
	CSV
	TSV
API & Interface Security	The access to data should be highly secure and efficient.
	Access to the platform API(s) should be secured using API keys.
	Software should support security standards: OAuth 2.0 HTTPS over SSL, and key management help protect the data across all domains.
	Should support security features built for many of its components by using HTTPS, TLS for all its public facing API implementations. For deployment where ICCC
	Software API(s) exposed to application eco system, API Management, API security features and API Key management functions are required.
	Platform must be compliant to OAUTH 2.0 authorization framework where the client obtains access tokens provided from the authorization server with the approval of the resource owner
	Platform must be able to provide 2FA (Two factor authentication) capability, so that there is additional level of security that is added to the platform and stop the compromised users from logging into the platform
	Platform must be able to set different multi factor authentication support that includes email, SMS and TOTP authentication
	Platform users must be able to set primary second factor authentication mechanism
	Platform must provide reCAPTCHA to prevent SPAM and platform abuse
	Other functionalities/ features required by the client from time to time shall be included
Data Security & Integrity	<ul style="list-style-type: none"> • Data Protection / Production Data integrity: Platform should support procedure in place to ensure production data shall not be replicated or used in non-production environment • Data Protection / Data at rest: Platform should support encryption for tenant data at rest (on disk/storage) • Data Retention: Platform should support capabilities to enforce tenant data retention policies • Data recover & restore: Platform should support capability to recover and restore data in case of a failure or data loss. • Data disclosure & privacy: Platform should disclose data attributes, elements collected from source. All the attributes should be disclosed & appraised to data owner. With appropriate approval from District authority, Platform should have ability to encrypt sensitive data element at rest.
High Availability	Platform shall have no single point of failure.
	Software & hardware fault shall not result total system failure
	All failure should report relevant error messages to the user

Parameter	Integrated command control Center (ICCC) Minimum Specifications
	Platform vendor shall provide supporting infrastructure, appropriate tools to measure & monitor system availability and automated notification for system failure and unavailability
Performance Monitoring	External performance monitoring tool shall include following functionalities
	Identify infra and/or application components between the user and backend server that is causing the problems
	Providing key performance indicators
	Identify the inter-dependencies between application & infra components
	Able to provide network/ system node causing the problem
	Provide email, SMS and/or mobile alert mechanism if performances fall below predefined thresholds
	Performance monitoring shall not adversely affect the performance of the platform
	Should display the threat level based on the number of alerts and criticality of the alerts using Color coded display. It should also follow a pre-defined system to alert different users on different hierarchy based on the criticality of alerts.
	Other functionalities/ features required by the client from time to time shall be included
Containerization	The ICCC platform components should be deployable units over container orchestration platform, to take advantage of this by automating the management of containers and matching resources to the actual demand on the system. solution should use microservices/functions

MSI has to propose required server sizing and infrastructure has to be leveraged in state data center.

3.1.1.3 Business Intelligence Software - (Dashboards & Reports)

Sl. No.	BI Platform Minimum Specifications
1.	The solution should robust and scalable
2.	The system should be able to generate report in the user defined manner.
3.	User should be able to choose any permutation and combinations of data fields to perform analysis.
4.	System shall provide an Reporting and Visualization solution to author, manage, and deliver all types of highly formatted reports
5.	The solution should have mining, analytical and querying capabilities, and should be able to interoperate with other DBMS.
6.	The BI Platform should have the capability to schedule reports on the basis of a time calendar i.e. by hour, day, week, month, etc.
7.	The BI Platform should have the capability to schedule reports on the basis of a trigger or an occurrence such as an email, database refresh, etc.
8.	BI platform should have an adhoc query and analysis environment that works against a logical view of information from multiple data sources in a pure Web environment. BI platform should provide capability combine data from multiple applications or databases in a single.
9.	Platform should be robust, secure, and high available.
10.	BI Platform should support capability of maintaining user security internally, using standard protocols e.g. LDAP, Active Directory, OID, etc.
11.	BI Platform should have native Job Scheduling feature
12.	Breach of KPI benchmarks should have the ability to trigger actions such as Email alerts, workflows, and Invoke Web Service

13.	The solution should provide users the capability to save and share their analysis as exploration, report, or standard formats like Excel, PDF, etc.
14.	The solution should have the ability to use In-Memory Analytics to enable users to conduct fast, thorough Explorations and Analysis on data.
15.	The solution should allow users to change queries by selecting items to be displayed from a sidebar or dynamically filtering and grouping
16.	The solution should provide capabilities to Slice and dice multidimensional data by applying filters on any level of a hierarchy
17.	Ability to consolidate multiple datasets to one dashboard which allows users to slice and dice data and drillup and drill down the record level
18.	Reports and dashboards should be able to visualize through multiple platforms like web, tablet and mobile.
19.	Dashboard/Reports must adhere to role-based authorizations
20.	The solution must cater for standard data visualization types such as bar charts, area charts, gauge chart, Tree charts, donut charts, maps etc.
21.	In the visualization's workspace, user should be able to do the following operations <ul style="list-style-type: none"> • Change the graph/visualization type • Print the graph • Export the graph • Narrow down on the value range • Toggle the axis labels • Integrate with other 3rd party applications seamlessly
22.	Other functionalities/ features required by the client from time to time shall be included

3.1.1.4 Artificial Intelligence Based Advanced Analytics & Data Lake:

Data Ingestion, Data Integration, Data discovery and Data Lake: The Solution should have critical component "Data Lake" for insightful and predictive analytics to enable the departments for data driven decision making by drawing insights. The Following Figure represents High level architecture of the Solution. The following are the requirements for data lake.

Sl. No.	Data Ingestion, Data Integration, Data discovery and Data Lake Compliances
1.	Create a Data Lake (DL) by Integrating various data systems
2.	The various sources of information and data is to be collated on to a data lake with efficient storage on a scalable, robust, and secure.
3.	Solution should support multiple ingestion and integration processes via flat files, RBMS, messaging queues, APIs etc. with high throughput and low latency.
4.	Solution should enable the Data Management, Data Governance and Data Quality
5.	Capable to handle rapid data growth and Huge Volume, Velocity, Variety of data generated via various systems, logs etc. to derive meaningful value
6.	Solution should ingest structured, semi-structured, unstructured, batch or real time data onto Data Lake
7.	Bidder should provide clear technical architecture diagrams for ingesting structured / semi-structured / unstructured data, batch / interactive / real-time data, internal / external data / off-line data sources and reports from different departments
8.	The bidder will monitor daily status of all ETL/ ELT Jobs. In case of any failure, proactively act on it including notifying the incident to respective role-holders.
9.	The bidder should prepare and submit Root Cause Analysis reports on incidents reported.
10.	Vide Auditability <ul style="list-style-type: none"> a. Bidder should implement mechanism to record any access to the data to satisfy compliance audits. b. Ingestion process should generate detail logs for auditing and troubleshooting. c. Ingestion process should log failure or reject records

11.	Capability to classify and store (personal identifiable information) sensitive data in encrypted /masked form and should have capability to decrypt/unmask such information in DW / Data Lake when required by only authorized ID's.
12.	Other functionalities/ features required by the client from time to time shall be included

3.1.1.5 Advanced Analytics:

S. No.	Advance Analytics Minimum Specifications
1.	Solution should be capable of providing and predictive Analytics
2.	The solution should also contain abilities for forecasting and scenario analysis, this will help the department understand the trends of different concern areas.
3.	Using scenario analysis, solution should provide how a forecast would be affected by changing variables
4.	Solution should have What-If and Correlation Analytics
5.	Should Support Machine Learning/Deep Learning/Reinforcement learning models.
6.	Should support Unstructured Text and Document mining Analytics
7.	Proactive monitoring of advanced analytics models and implement course correction, if required.
8.	Know before it happens - Capability to use the past information and suggest possible good/bad occurrences based on certain thresholds and alert users
9.	Should be capable of executing classification, regression, association rules, and clustering algorithms to help end users understand the business better and improve future performance through predictive analytics
10.	Other functionalities/ features required by the client from time to time shall be included

3.1.1.6 Workforce Management (Mobile App)

S. No.	Workforce Management (Mobile App) Minimum Specification
1.	The mobile app shall be developed preferably in an open platform
2.	Mobile app shall be scalable and technically adaptable to future enhancements
3.	Mobile app shall be published and released in all the major platforms such as iOS and Android
4.	Mobile app shall support Unicode
5.	Mobile app shall be multilingual and support English and Telugu
6.	Mobile app shall be easy to update as some data shall be updated daily
7.	Mobile app shall be able to track GPS location of the user device as per user defined setting
8.	App shall also be able to provide accurate mapping and navigation services.
9.	Ability to collect data with high volume, velocity, and variety
10.	Mobile app should be capable of showcasing enriched infographics to its stakeholders.
11.	Mobile app shall be integrated with main core solution proposed. There shall be facility to PUSH through and PULL through mechanism to get and receive information using SMS service.
12.	Mobile app shall provide critical data such as user identification and location information including latitude, longitude and altitude.

S. No.	Workforce Management (Mobile App) Minimum Specification
13.	The platform should provide Integrated Mobile Application for Android and iOS, for capturing real-time information from the field response team using Mobile Standard Operating Procedure.
14.	Field Responder should be able to acknowledge the incident and provide real time updates from the incident site using approved and authorized mobile Apps and mobile interfaces to be provided by the MSI
15.	Field Responder must allow users to see the task details assigned such as ticket id, SLA, and location of the event triggered based on pre-configured rules from the ICCC platform
16.	Field Responder app should support escalation hierarchy of the tasks or events that are not readdressed within the defined SLA as configured in the platform
17.	Mobile app should have capability of – Image compression, B/w conversion from color images Auto cropping, Auto orientation, perspective correction, geo capture Image capture setting (camera resolution, image type)
18.	Mobile app shall have the ability to push information to the mobile app as well as post bulletins and resources on the mobile app through API's.
19.	Mobile app have the feasibility of Capturing field-level activities as per defined survey forms.
20.	Shall register the user for the app and store profile details
21.	Once the user has created a profile, it can be used for all the services desired to be availed by the user
22.	The Mobile App should support role based access for the users
23.	Shall provide live feed from health centres, availability of beds
24.	Unified Messaging system: SMS: The mobile app shall have facility to send SMS to Mobile number of a stakeholders. The SMS shall be auto-generated based on the information or service requested on occurrence of its change of status. All the application needs to be integrated with SMS gateway.
25.	Other functionalities/ features required by the client from time to time shall be included

3.1.1.7 Centralized Contact Center Solution

S. No.	Contact Center Minimum Specification
1.	<p>Solution Capabilities (Out of Box)</p> <ul style="list-style-type: none"> • Interactive Voice Response • Inbound Call Routing • Preview and Predictive Outbound Dialing • Outbound IVR • Mandatory disposition before receiving next call • Recording inbound and outbound calls • Centralized historical and real time reporting • Blocking of calling to sensitive numbers • Choice of leaving Voice mail while waiting in queue • Schedule call back • Abandoned call / missed call recuperation • Quality scoring, feedback and calibration • Click 2 Call Feature
2.	System should support multi call conference feature.
3.	System should have capability to conduct meetings over the VOIP and the entire meeting conversation should be able to record.
4.	There should not be any limitation in the voice call recordings. System should have inbuilt recording software instead of external devices.

S. No.	Contact Center Minimum Specification
5.	Customization regarding the requirements of this proposal, Configuration and installation of IVRS contactcenter system
6.	Integration of contact center system with ICCC.
7.	Have to integrate Contact Center application for incoming and outgoing calls with different service providers to achieve high availability.
8.	System should have skill-based call assignment capabilities.
9.	Screen PoP from CRM - When an agent receives a call, the agent will get a pop-up of the customer page with all the customer data.
10.	Updating missed calls into CRM & Updating recording links to CRM
11.	The calls which are routed to emergency extension, if those calls are missed to attend by the emergency operator, all such missed calls should be called back. For this call back feature needs to be provided.
12.	IP hard phone integration with Contact Center application.
13.	Need to provide auditing, backup and archiving mechanism for recording logs based on the configuration.
14.	Need to provide High Availability for the entire contact center application.
15.	Need to design IVR call flow based on customer requirements.
16.	The IVRS scripts have to be recorded in languages like English and Telugu (Recording to be done by Client)
17.	Call parking facility has to be provided for operator.
18.	There should be a provision automatic call back in the system for all dropped calls (Predictive dialer).
19.	If all the operators are busy, then the call should be routed to overflow group.
20.	If the operator did not select the disposition, then it has to be moved to online after configured seconds.
21.	System should restrict to go pause mode for all the operators at a time.
22.	Admin dashboard should contain all the call and agents related information.
23.	Application should have the option to real time remote monitoring of ACD queue, agent status, and no of calls answered, abandoned etc.
24.	Automatic Call Distributor (ACD) should have the feature to distribute incoming calls to a specific group of terminals used by agents. ACD is a feature used to route calls in a call center environment to the appropriate agents, based on factors such as time available, skill sets and priority levels.
25.	Queue Specific Delay Announcement / Music. For basic ACD applications, the customers must be provided a queue specific (different for each queue) delay announcement if a CSR is not immediately available to answer a call. If a CSR is not available to handle a call, the call must queue for the next available CSR. The system must be able to announce the average wait time to the caller. The system must offer the caller the option of opting out to automated information (i.e. IVR) or call back facility the system must be able to provide music and announcements on hold until the call is answered.
26.	The system must be able to route calls based on Dialed Number Identification Service (DNIS).
27.	The system must be able to route calls based on Automatic Number Identification (ANI).
28.	The system must have the ability to collect caller entered digits (CED) and customer database provided digits (CDPD) supplied by the network in an incoming call's ISDN PRI setup message and provide routing based upon these digits.
29.	The system must support "cradle to grave" reporting which would reveal exactly what happened to a caller from the time they entered the system until the time they hung up, and everything in between.
30.	Backups must be performed scheduled and on demand.

S. No.	Contact Center Minimum Specification
31.	Text to Speech feature has to be provided in the IVR application for reading of any description text information.
32.	CTI (Computer telephony integration) is the technology that allows interactions on a telephone and a computer to be integrated or coordinated. The following functions are implemented using CTI – <ul style="list-style-type: none"> • Calling Line Information Display (Caller's Number, Number Called, IVR Options) • Screen Population on answer, with or without using calling line data • On Screen Dialing (Fast dial, preview and predictive dial) • On Screen Phone Control (Ringing, Answer, Hang-up, Hold, Conference etc.)
33.	The CTI (Computer Telephony Integration) component shall be required for passing all the information from the PBX and IVR, such as the caller identification, Dialed number information, Language option service opted by the caller etc., to the CSR's CRM screens.
34.	The system should provide an agent application integrated with CRM application. It should popup along with the caller information, when the call comes to the agent. The CLI should have the capability to popup all the vital customer data on screen.
35.	The system should support virtual login e.g. an agent can sit anywhere and login by putting his login id and that becomes his workstation.
36.	Entire login, logout, away, total call handled, data of the agent should be captured and produced as reports.
37.	The Agent application should also have the online monitoring display of the ACD queue(s).
38.	Tracking CSR Activities by Reason Codes / Automatic Availability / Wrap up Work. In order to give call center managers detailed information about how CSRs spend their time and to develop precise staffing forecasting models, CSRs must enter a numeric code that describes their reason for entering non-available work modes or for logging out of the system. At least 9 codes must be supported. CSR sets must have the ability to be automatically available to take the next call upon disconnecting from the current call. CSR sets must have the ability automatically to go into a wrap up, unavailable work state at the completion of a call. CSRs must also be able to temporarily remove themselves from the call queue to perform call related tasks. Time spent in this work state (e.g., wrap up, lunch, restroom, etc.) must be included in the individual CSR and group statistics. In addition, the supervisor must be provided with a visual real time indication of CSR's spending time in this state.
39.	The system must allow CSR positions to activate an alarm notifying a supervisor of an emergency condition. The system must also have the ability to automatically record the trunk number and/or calling number if provided, the CSR position involved in the emergency, and to activate a recording of the conversation with recording equipment provided.
40.	Supervisors As CSRs. Supervisors must have the capability to receive ACD calls during busy periods.
41.	Logout of CSRs by Supervisor. Supervisors must be able to logout CSRs from their own "soft phone" or supervisor terminal without having to go to the CSR's desk.
42.	Monitoring CSR Conversations: The supervisor must be able to monitor a CSR's conversation for training or administrative purposes from the supervisor set, without plugging in to the CSR's "soft phone" set. The proposed system must also meet the following requirements: <ul style="list-style-type: none"> • Both silent monitoring and tone indication to the CSR during monitoring must be available.

S. No.	Contact Center Minimum Specification
	<ul style="list-style-type: none"> The system must offer a "soft phone" or supervisor terminal capability for monitoring directly at the CSR's "soft phone" or supervisor terminal for "ride along" CSR training. The "soft phone" or supervisor terminal must be equipped with two jacks in order to permit a supervisor to plug into the "soft phone" set for training purposes.
43.	Integrated Auto-Attendant - The system must provide integrated auto-attendant routing functionality such as "If you know the extension of the party you wish to speak with, you may dial it now". The system must have the capability to prompt customers for the type of service they desire, i.e. "Press 1...", "Press 2..." The proposed system should support these capabilities internally within the proposed Switching/ACD system even without requiring an external IVR.
44.	Announcement Hardware / Capacities - The system must provide customers in queue with a variety of announcements. This capability must be inherent within the ACD architecture avoiding the need for external announcement devices and/or IVR servers.
45.	General Announcement Features - The system must be able to force customers to listen to an entire announcement before being connected to a CSR. Alternatively, the system must be able to immediately connect a call to the CSR if a CSR becomes available before an announcement is completed. The supervisor must have the capability to control which method is being used.
46.	The supervisor application should support all the configuration like Users, Groups, ACD, Shifts, Call Times, Notices, Skill Groups, Restrictions etc.
47.	Incoming Call Announcement - The system must provide audible and visual whisper indication prior to the automatic connection of an ACD call to the CSR. For CSRs that handle calls for multiple applications, a whisper must indicate what type of call is arriving so that the CSR can greet the caller appropriately. The "soft phone" must also display this information to the CSR before delivery of the call.
48.	The system should support virtual login e.g. an agent can sit anywhere and login by putting his login id and that becomes his workstation.
49.	General Announcement Features - The system must be able to force customers to listen to an entire announcement before being connected to a CSR. Alternatively, the system must be able to immediately connect a call to the CSR if a CSR becomes available before an announcement is completed. The supervisor must have the capability to control which method is being used.
50.	System should have multi session web chat functionalities to chat with agents. Each agent is able to chat with more than one customer at a time. The number of concurrent chat sessions can be enabled from the supervisor panel.
51.	System should support Email queuing. Supervisor should be able to assign one or more email addresses to a single Queue
52.	Email routing support integration with Microsoft Exchange 2003 or Microsoft Exchange 2007 or 2010
53.	Agent should be able to re-queue email
54.	System should support to generate Historical Reports and it should be able to perform the following functions View, print, and save reports. Send scheduled reports to a file or to a printer. Export reports in a variety of formats, including PDF, RTF, XLS, and CSV
55.	System should be able to make an automated outbound call to the patient/ANM/Asha worker /MO and get the information through the application, share the details accordingly.
56.	Other functionalities/ features required by the client from time to time shall be included

3.1.1.8 Integrated Grievance Management System (IGRMS)

S. No.	Integrated Grievance Redressal Minimum Specification
1.	The department master should be used as a common component to define a department across the organization.
2.	System should have Department Master facility to accommodate all the grievance services falls under citizen charter but not limited to
3.	Unavailability of Services at Government Hospital
4.	Others misc. Equipment's are not working properly, Proper response from Doctor Etc.
5.	Unavailability of Ambulance, ANM response etc.
6.	Any grievance as decided by Authority
7.	Mapping of Employees with Department to handle complaint
8.	Complaint Auto Routing Master
9.	The workflow master should be used as a common component to define workflow for scrutiny-based services as well as care services.
10.	The workflow should be flexible enough to incorporate or remove events and role /employee against the service whenever there is a change in the workflow of service.
11.	There should be a provision to configure the last mile employee on the basis of their locality, department and category for allocation of complaint. The same master shall be used to define the Level 1 and Level 2 escalation Officers to escalate the complaint to the next higher authority in case of breach of SLA/TAT or the complaint is reopened.
12.	SMS and Email Master
13.	The system should have the facility to configure events for SMS and Email.
14.	The system should have the facility to send SMS and Email to all the services and departmental events.
15.	Complaint Registration Online
16.	The system should be able to accept application through online.
17.	The system should have the facility to upload document up to the size of 5MB maximum.
18.	The system should have the facility to upload a document in a various format such as PDF, DOCX, JPEG.
19.	The system should have the facility to upload multiple documents.
20.	After successful submission of application, Applicant should be intimated via SMS and email with the details of complaints and token number.
21.	The system should have the facility to generate Acknowledgment Receipt for Applicant reference if the application is accepted through Online.
22.	Setting of timelines against a service
23.	The system should have the facility to open the previous complaint – Reopen Complaint
24.	The reopen complaint workflow should be reset from the initial level.
25.	The system should auto generate Acknowledgment after successful submission of the application.
26.	Acknowledgement should be generated for online and offline complaint registration.
27.	System should allow knowing the status of the Complaint registered by the applicant
28.	The system should allow the applicant to provide feedback on the Complaint Action for Resolved and Closed.
29.	MIS (Management Information System) reports show graphical form, Complaint Redressal Performance data.
30.	System should have meaningful dashboard from where user can get brief details at one go
31.	System should have the facility to escalate the request to the appellate authority in case service requested by the citizen is not provided as per the citizen charter timeline.
32.	System should integrate with the Work force mobile application to check and close the token assigned to the concern official.

S. No.	Integrated Grievance Redressal Minimum Specification
33.	System should have facility to capture the different modes of complaints received from end user/citizen.
34.	System should assign the token to the concern as per the role based.

3.1.1.9 Call volumes

The below mentioned call volumes are indicative per peak load per month. The bidders shall account for future expansion of services and seats while sizing actual requirements of hardware, connectivity and applications ICCC.

Service	Inbound	Outbound	Total Calls
ICCC	Approx 5,000	Approx 95,000	Approx 1,00,000

3.1.2 Provision of detailed design including physical layout of ICCC

Required infrastructure and space (approx. 10,000 sq.ft.) shall be provided by the Authority, however, successful bidder will be required to provide to the Authority a detailed Design as mentioned below:

- a. Physical layout of Integrated Command Control Center (with 3D simulation) with approximately 10,000 sq ft floor area. The layout shall consist of the following:
 - i. Command and control set up room
 - ii. Video walls of 50''(2 *15) – 30 units with software and controller.
 - iii. Seating capacity of 30 operators
 - iv. War room video wall of 50'' (2*2)
 - v. Conference cum training hall
 - vi. Cabins – 7
 - vii. Common area
 - viii. Library
 - ix. Demonstration room
- b. Assessment of IT infrastructure and non- IT infrastructure requirements, assessment of software requirements, assessment of integration requirements.
- c. Firewall.
- d. Intrusion prevention system
- e. Formulation of Software Architecture, development of test cases, SoP documentation.
- f. Monthly progress reports of all smart solutions from inception stage along with invoices.

3.1.3 Recruitment and Training of Human Resources

Recruitment and training of all staff at State, District and Facility Level on developed SOPs and protocols to ensure effective implementation of system as detailed out below:

- Personnel at the state level ICCC shall be deployed by the bidder – Executives, Supervisor, Annual Technical support Team.
- Training of centralized command control center State level – Executives+ Supervisors, Annual technical Support Team, District manager and facility personnel shall be ensured.
- District manager and facility Personnel shall be deployed
- Emergency response services shall operate in three shifts each day on all seven days in a week.

3.1.3.1 Resource requirement

○ At state level ICCC

Sl. No.	Service type	Distribution of Seats (2 shifts in day)	Distribution of seats (at night shift)
1.	Team lead and ICCC expert		1
2.	Supervisors	2 (per shift)	1
3.	Executives	30 (per shift)	10

Total 76 members

Selected Master System Integrator (MSI) must ensure the application is up and running round the clock and undertake the further enchantments/ up-dations/ modifications as desired by the Authority during the project duration. MSI shall ensure the availability of the domain experts for undertaking such requests.

○ **Resource requirement at District level ICCC**

Sl. No.	Service/Resource type	Nos.
1.	District Manager	1 at each district
Total		26

○ **Resource requirement at facility level ICCC**

Sl. No.	Service/Resource type	Nos.
1.	Facility Personnel (at 64 health facilities)	1 at each facility per shift
Total		64*3 shifts = 192

- The deployment of manpower for each of the shifts shall be suitably factored by the bidder for weekly offs, holidays, leaves, training etc.

3.1.3.2 Job Roles

○ **Executives:**

- Handle all inbound and outbound calls to customers and clients.
- Identify customers' needs, clarify information, research every issue and provide solutions and/or alternatives.
- Ensure you follow the customer service script provided by the company for uniformity.
- Also, be well-read on company policies and the website for FAQs or policy related answers.
- Build sustainable relationships and engage customers by taking the extra mile.
- Meet personal targets and work towards meeting team targets.
- Maintain records of the conversations with the customer and analyze the data.
- Write and submit timely reports on performance, targets, and customer queries.
- Monitor Health Management system and raise alerts as per approved SOPs.
- Control all operations of Health Management System related to RCH, Anaemia etc.
- Attending the incidents / alerts related to health management and coordinating with concern personnel and respective departments to provide appropriate information.
- Addressing the queries of stakeholders with respect to subject matter.
- Maintain an accurate log of events that occur pre-event, during event, and post-event.
- Creating incident tickets based on the alerts triggered in the system.
- Closing all event incidents by coordinating with the concern team as per SOP within the allocated SLA.
- Monitoring and analysis of parameter values for any deviations
- Respond to requests for help, via the phone and web
- Diagnose and resolve technical hardware and software issues
- Open, track, and close trouble tickets
- Provide excellent ticket documentation
- Research questions using available resources
- Advise user on appropriate action
- Perform Audit of calls efficiently.

- **Supervisors / Team Leads:**
 - Assign tasks to the employees and assess their performance.
 - Set targets and goals for the week, month and year.
 - Provide constructive feedback to improve sales and conversions.
 - Recruit new employees and provide them with training and orientation.
 - Take over calls whenever required and handle heavy duty days.
 - Assess performances with metrics like calls left waiting, calls missed, etc.
 - Ensure that all employees adhere to the company policies and regulations.
 - Create a standard script for employees to refer, if needed.
 - Prepare performance reports regularly (weekly, monthly, annually)
 - Report any issues to the management.
 - Motivate the staff and maintain optimum performance in the center.
- **District Manager:**
 - Provide seamless flow of information from state level ICCC to facility level cell.
 - Ensure coordination with the field level functionaries with respect to events like referral management
 - Supervise monitor and guide district level staff – HR manger, Drug manager, blood manager.
 - Submit reports to the state level ICCC on the work done every month.
- **Facility personnel**
 - Ensure seamless flow of information and data to the district level cell and ICCC
 - Ensure that blood of required blood group is arranged to the referred pregnant women
 - Ensure that the infrastructure, consumables and medication for the pregnant woman is ready at the referred facility.
 - Ensure that the pregnant woman is received and admitted at the referred facility.
 - Ensure coordination with the field level functionaries with respect to events like referral management
 - Supervise monitor and guide facility level staff.
 - Submit reports to the state level ICCC and district level cell on the work done every month.

3.1.4 To operate and maintain all components of ICCC Systems.

The selected Master System Integrator (MSI) shall operate and maintain all components for the entire project duration as mentioned below but only limited to:

- a. Integrations – GoI data from state or GoI portals or any other portals as specified by the client to be acquired for utility alerts
- b. Core software Application
- c. Artificial intelligence analytics for identification of high-risk pregnant women and any other future epidemic outbreaks and monitoring of CD and NCD.
- d. Business Intelligence Tool – Dashboards and Reports
- e. Mobile Application for Referral management
- f. Integrated Grievance management system
- g. Centralized Contact Center
- h. Automated Outbound calling system
- i. Any mobile app that may be required for the control room purpose.
- j. Software for District level center and Facility level cell
- k. Facility to accommodate monitoring of any additional elements of monitoring in future like epidemics out break and other diseases like leprosy, TB etc.

3.1.4.1 Operations and Maintenance (O&M)

MSI will operate and maintain all the components of the ICCC System for a period of three (3) years after Go-Live date. During O&M phase, MSI shall ensure that service levels are monitored on continuous basis; service levels are met and are reported to client. After Go-Live, if any system/sub-system/appliance that is deployed during the O&M phase must be added in the System only after proper induction procedures are followed including hardening and security testing. MSI needs to implement suitable Performance Improvement Process (PIP) in the project. PIP program applies to all the processes of ICCC project. MSI need to submit its detailed approach for PIP in its technical proposal. Every process and procedure implemented in this project must be reviewed and updated by MSI at least on annual basis from the Go- Live Date. All the manpower engaged for O&M support of the project should be citizens of India. MSI will ensure that at no time shall any data of ICCC System be ported outside the geographical limits of the country. Some broad details of O&M activities are mentioned at later sections.

3.1.4.2 Applications Support and Maintenance

Application support includes, but not limited to, production monitoring, troubleshooting and addressing the functionality, availability and performance issues, implementing the system change requests etc. The MSI shall keep the application software in good working order; perform changes and upgrades to applications as requested by the client team. All tickets related to any issue/complaint/observation about the system shall be maintained in an ITIL compliant comprehensive ticketing solution. Key activities to be performed by MSI in the application support phase are as follows:

- a. **Compliance to SLA:** MSI shall ensure compliance to SLAs and any upgrades/major changes to the software shall be accordingly planned by MSI ensuring the SLA requirements are met at no additional cost to the Client.
- b. **Annual Technology Support** MSI shall be responsible for arranging for annual technology support for the OEM products to AP Health Department provided by respective OEMs during the entire O&M phase.
- c. **Application Software Maintenance:**
 - i. MSI shall provide unlimited support through onsite team/telephone/Fax/E-mail/Video Conferencing/installation visit as required by the client.
 - ii. MSI shall address all the errors/bugs/gaps in the functionality in the solution implemented by the MSI (vis-à-vis the FRS, BRS and SRS signed off) at no additional cost during the O&M phase.
 - iii. All patches and upgrades from OEMs shall be implemented by the MSI ensuring customization done in the solution as per the AP Health Department's requirements are applied.

Technical upgrade of the installation to the new version, as and when required, shall be done by the MSI. Any version upgrade of the software / tool / appliance by MSI to be done after taking prior approval of AP Health Department and after submitting impact assessment of such upgrade.

- iv. Any changes/upgrades to the software performed during the support phase shall subject to the comprehensive and integrated testing by the MSI to ensure that the changes implemented in the system meets the specified requirements and doesn't impact any other function of the system. Release management for application software will also require AP Health Department's approval. A detailed process in this regard will be finalized by MSI in consultation with AP Health Department.

- v. Issue log for the errors and bugs identified in the solution and any change done in the solution shall be maintained by the MSI and periodically submitted to the AP Health Department.
 - vi. MSI, at least on a monthly basis, will inform AP Health Department about any new updates/upgrades available for all software components of the solution along with a detailed action report.
 - vii. In case of critical security patches/alerts, the MSI shall inform about the same immediately along with his recommendations. The report shall contain MSI's recommendations on update/upgrade, benefits, impact analysis etc. The MSI shall need to execute updates/upgrades through formal change management process and update all documentations and Knowledge databases etc. For updates and upgrades, MSI will carry it out free of cost by following defined process.
- d. Problem identification and Resolution
- i. Errors and bugs that persist for a long time, impact a wider range of users and is difficult to resolve becomes a problem. MSI shall identify and resolve all the application problems in the identified solution (e.g. system malfunctions, performance problems and data corruption etc.).
 - ii. Monthly report on problem identified and resolved would be submitted to AP Health Department along with the recommended resolution.
- e. Change and Version Control
- All planned or emergency changes to any component of the system shall be through the approved Change Management process. The MSI needs to follow all such processes (based on industry ITSM framework). For any change, MSI shall ensure:
- i. Detailed impact analysis
 - ii. Change plan with Roll back plans
 - iii. Appropriate communication on change required has taken place
 - iv. Proper approvals have been received
 - v. Schedules have been adjusted to minimize impact on the production environment
 - vi. All associated documentations are updated post stabilization of the change
 - vii. Version control maintained for software changes
- The MSI shall define the Software Change Management and Version control process. For any changes to the solution, MSI has to prepare detailed documentation including proposed changes, impact to the system in terms of functional outcomes/additional features added to the system etc. MSI shall ensure that software and hardware version control is done for entire duration of MSI's contract.
- f. Maintain configuration information
- MSI shall maintain version control and configuration information for application software and any system documentation.
- g. Training: MSI shall provide training to AP Health Department personnel whenever there is any change in the functionality. Training plan has to be mutually decided with AP Health Department.
- h. Maintain System documentation: MSI shall maintain at least the following minimum documents with respect to the ICCS System
- i. High level design of whole system
 - ii. Low Level design for whole system / Module design level
 - iii. System Requirements Specifications (SRS)
 - iv. Any other explanatory notes about system
 - v. Traceability matrix
 - vi. Compilation environment
- i. MSI shall also ensure updation of documentation of software system ensuring that:
- i. Source code is documented
 - ii. Functional specifications are documented
 - iii. Application documentation is updated to reflect on-going maintenance and
 - iv. Enhancements including FRS and SRS, in accordance with the defined standards

- v. User manuals and training manuals are updated to reflect on- going Changes/enhancements
- vi. Standard practices are adopted and followed in respect of version control and management.
- j. All the project documents need to follow version control mechanism. MSI will be required to keep all project documentation updated and should ensure in case of any change, the project documents are updated and submitted to AP Health Department by the end of next quarter.
- k. For application support MSI shall keep dedicated software support team to be based at MSI location that will single point of contact for resolution of all application related issues. This team will receive all the application related tickets/incidents and will resolve them. In its technical proposal MSI need to provide the proposed team structure of application support including number of team members proposed to be deployed along with roles and skills of each such member. Application support team shall be employees of MSI.
- l. Any software changes required due to problems/bugs in the developed software/application will not be considered under change control. The MSI will have to modify the software/application free of cost. This may lead to enhancements/customizations and the same needs to be implemented by the MSI at no extra cost. m) Any additional changes required would follow the Change Control Procedure. AP Health Department may engage an independent agency to validate the estimates submitted by the MSI. The inputs of such an agency would be taken as the final estimate for efforts required. MSI to propose the cost of such changes in terms of man month rate basis and in terms of Function point/Work Breakdown Structure (WBS) basis in the proposal.

3.2 Process Overview:

Integrations – GoI data from state or GoI portals or any other portals as specified by the client to be acquired for utility alerts

- a. IDENTIFICATION: High-risk Condition as specified shall be identified through APIs extracted from the Government of India and state portals.
- b. The pregnant woman's location shall be traced and e-folder of the pregnant woman shall be created in sync with RCH card.
- c. The State level ICCC, field level functionaries shall get Alerts of the High-Risk PW.
- d. Real time monitoring of high-risk condition of PW shall be done
- e. Any aggravation in the health condition should generate alerts at the ICCC and also to the field level functionaries.
- f. Regular reminders of checkups, treatment and nutrition shall be given to pregnant women through Phone Calls, SMS etc.
- g. Any missed treatment protocol shall generate alerts to all the associated stakeholders and to the pregnant woman.
- h. Details of the birth planned facility shall be communicated to the pregnant women and to the state level ICCC, district level cell and facility level cell.
- i. The health details of PW shall be provided to facility level cell , district cell.
- j. Ambulance vehicle shall be tagged to the PW
- k. The vehicle carrying PW shall be tracked while taking her to the birth planned hospital and bringing her back from hospital to her home post-delivery in real time.
- l. Immunization of the child shall be ensured through regular Calls, SMS and alerts.
- m. HBNC and HBYC visits done by the ASHAs shall be monitored and make sure that target is achieved.
- n. Neo-natal ambulances tracking and mapping at PHC level.

REFERRAL SYSTEM IN HR-PW FOR ADMISSION IN HOSPITALS:

- a. Birth planning of the high risk pregnant women done by the medical officer shall be updated at the ICCC, district level and at the particular facility level center.
- b. Alerts shall be raised to the field level functionaries – ANMs, ASHAs, tagged ambulance driver, district and facility level cell.
- c. Alerts shall be raised at the facility level cell and Pregnant women's case data shall be shared.
- d. A remainder shall be given to the pregnant woman informing her referred center.
- e. A remainder shall be given to the tagged ANM, ASHA and ambulance driver a week before the EDD (Expected Delivery Date) asking them to carry pregnant woman to the referred hospital.
- f. A picture of the field level functionaries taking pregnant women to the referred facility shall be uploaded in the app.
- g. Real Time monitoring of the vehicle shall be monitored at the state, district and facility level centers.
- h. In case of emergency delivery, even before a week prior to the EDD, on a call to ICCC – Emergency call to field level functionaries shall be done to ensure that the pregnant woman is carried to the referred facility immediately.
- i. After delivery, the Outcome of the delivery shall be uploaded in the app.

3.3 Terms of payment

Authority will make the payments to the successful bidder as below:

- a. MSI will create separate invoice of ICCC work and submit as per payment schedule.
- b. MSI will submit invoice to Authority along with monthly progress report and proof of the work delivered.
- c. The Authority or its authorized personnel will approve / reject the invoice based on the performance of the MSI.
- d. The Authority or its authorized personal will review the submitted invoices and reports.
- e. After all approvals, claims will be processed and payment will be made to MSI

3.3.1 Payment schedule:

Sl. No.	Activity	Timeline	Payment	Milestone/Approval	Penalty on delay in delivery
1.	Design, Integration & Go-Live of ICCC system				
a.	User Acceptance Test (UAT) of ICCC application software.	T+30 days	3%	On approval of UAT by the Authority.	5% of the Invoice amount -up-to 40 th day 8% of the Invoice amount – up-to 50 th day 10% of the Invoice amount -up-to 60 th day
b.	Integration of ICCC and other applications.	T+60 days	3%	On approval by the Authority.	5% of the Invoice amount -up-to 40 th day 8% of the Invoice amount – up-to 50 th day

Sl. No.	Activity	Timeline	Payment	Milestone/Approval	Penalty on delay in delivery
					10% of the Invoice amount -up-to 60 th day
c.	Deployment of manpower, Training and Go-Live of ICCC.	T+60 days	4%	Declaration of staff deployment & Training by successful bidder and Approval of Go-Live by the Authority.	5% of the Invoice amount -up-to 40 th day 8% of the Invoice amount – up-to 50 th day 10% of the Invoice amount -up-to 60 th day
2.	Implementation/Operations & Management (O&M) of ICCC system at all levels.				
a.	O&M, maintenance of ICCC systems, implementation of SLAs and other components as per the SoW at various levels.	By 10 th of every month	Balance (90%) in equal monthly instalments (34 months, starting from the 3 rd month of the contract)	On approval of Monthly Reports. Monthly Reporting Format to be approved by Authority.	Clause no. 3.4 may be referred.

- Above mentioned terms of payment are subjected to the deduction of penalties (as applicable).
- T = Date of signing of Agreement.

3.4 Service Level Agreements (SLAs) and Penalties

The SLA specifies the expected levels of service (i.e. baseline service level) to be provided by the successful agency to the various stakeholders. Payment to the successful agency is linked to the compliance with the SLA metrics laid down in the table provided subsequently. The table also specifies the limits and metrics for lower / higher performance and breach levels.

A summarized metrics of the above-mentioned SLA parameters is provided in the table below and detailed out subsequently.

Successful agency will get 100% of payment if the baseline performance metrics are complied with (and if no additional penalties are imposed as specified in the RFP). The successful agency will get lesser payment in case of a lower performance on any parameter.

3.4.1 Performance Based Service Level Agreement (SLA)

Sl. No.	Definition/ explanation	Measurement Interval	Target	Penalties
1.	Percentage of high-risk Pregnant Women reached out twice out of total High Risk Pregnant Women for admitting in referral facilities.	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment Achieved 75% TO 94% of the target: 0.3% of the monthly payment

Sl. No.	Definition/ explanation	Measurement Interval	Target	Penalties
	Numerator: Number of High-Risk Pregnant Women reached out till delivery with EDD in reporting month. Denominator: Total High- Risk Cases with EDD in reporting month (approx. 5000, RCH Portal). 2 Calls per month -approx. 10,000			Achieved 50% TO 74% of the target: 0.4% of the monthly payment Achieved less than 50% of the target: 0.5% of the monthly payment
2.	Percentage of moderate anaemic PW followed up for IV Sucrose therapy. Numerator: Moderate Anaemic PW put on IV Sucrose therapy in the reporting month. Denominator: Total Moderate Anaemic Pregnant women in the reporting month (approx. 15,000 calls: Anaemia Monitoring Tool).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment Achieved 75% TO 94% of the target: 0.3% of the monthly payment Achieved 50% TO 74% of the target: 0.4% of the monthly payment Achieved less than 50% of the target: 0.5% of the monthly payment
3.	Percentage of Tribal pregnant women in remote tribal areas followed up for admission in birth waiting homes before EDD (estimated date of delivery). Numerator: Number of Tribal pregnant women in remote tribal areas followed up for admission in birth waiting homes with EDD in reporting month. Denominator: Total registered Pregnancies in remote tribal areas with EDD in reporting month. (approx.1000 calls, RCH portal).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment Achieved 75% TO 94% of the target: 0.3% of the monthly payment Achieved 50% TO 74% of the target: 0.4% of the monthly payment Achieved less than 50% of the target: 0.5% of the monthly payment
4.	Percentage of grievances redirected per month out of total grievances registered through 104 and SUMAN regarding health. Numerator: Grievances redirected to competent authority per month.	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment Achieved 75% TO 94% of the target: 0.3% of the monthly payment Achieved 50% TO 74% of the target: 0.4% of the monthly payment

Sl. No.	Definition/ explanation	Measurement Interval	Target	Penalties
	Denominator: Total grievances registered through 104 and SUMAN regarding health.			Achieved less than 50% of the target: 0.5% of the monthly payment
5.	Percentage of ANMs reached out for data completeness in RCH portal for Pregnant women crossed EDD and full immunization among infants. Numerator: Number of ANMs reached out for data completeness in RCH portal among PW crossed EDD and among infants crossed due date of full immunization. Denominator: Number of ANMs with incomplete RCH data elements of Pregnant women crossed EDD and infants crossed due date of full immunization. (approx. 15,000 calls to ANMs: RCH portal).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment
6.	Percentage of high-risk pregnant women followed up for transfer to birth planning facility. Numerator: Number of high-risk pregnant women followed up for transfer to birth planning facility with EDD in reporting month. Denominator: Total registered High –Risk Pregnant Women with EDD in reporting month (approx. 5000 calls: RCH Portal).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment
7.	Percentage of referrals facilitated through ICCC out of referral calls received at ICCC. Numerator: Number of Referred cases admitted at higher centre, facilitated through ICCC within 2 hours of referral received. Denominator: Total Referral calls received at ICCC.	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment

Sl. No.	Definition/ explanation	Measurement Interval	Target	Penalties
8.	Percentage of ASHAs followed up for HBNC visits, administration of IFA Syrup done in reporting month. Numerator: Total number of ASHAs followed up for completion of HBNC visits and administration of IFA Syrup against the due list. Denominator: Total ASHAs with due list of HBNC visits and administration of IFA Syrup in the reported month (approx. 42,752 calls: ASHA App).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment
9.	Percentage of FPC medical officers followed up for completion of ANC checkups under FPC. Numerator: Number of FPC medical officers followed up for completion of PNC check-ups under FPC. Denominator: Total number of FPC MOs expected to conduct PNCs under FPC (approx. 1400 calls: FPC module from Medical Officer App).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment
10.	Percentage of FPC medical officers followed up for completion of PNC checkups under FPC. Numerator: Number of FPC medical officers followed up for completion of PNC check-ups under FPC. Denominator: Total number of FPC MOs expected to conduct PNCs under FPC (approx. 1400 calls: FPC module from Medical Officer App).	Monthly	100%	Achieved 95% TO 99% of the target: 0.2% of the monthly payment
				Achieved 75% TO 94% of the target: 0.3% of the monthly payment
				Achieved 50% TO 74% of the target: 0.4% of the monthly payment
				Achieved less than 50% of the target: 0.5% of the monthly payment

NOTE: There are SOPs available for all SLAs and will be shared with the successful bidder during the formal engagement of the activity. The SLAs shall have sub-components to analyse immediate output/outcome. Such sub-components will be detailed in the SOPs. The SLAs may be changed or increased in number in future as per the requirement of Authority.

The successful bidder must ensure that the workforce is deployed in accordance with the RFP and/or as sanctioned by the authority. In the event of a deployment failure or a lack of manpower, the amount quoted by the successful bidder will be deducted from the payment for the absent duration of number(s) of manpower.

Measurement tool: All data for the calculation shall be taken from the applicable portals being linked as a part of data source such as RCH portal, MO (Medical Officer) app and ANM App. The system generated reports linked with all the SLAs shall be submitted as part of the Monthly Progress Report.

In case of any unplanned downtime due to any reason whatsoever, the problem shall be rectified within a span of 30 minutes. In case of repeated unplanned down times beyond 30 minutes (5 times) one percent of the operational cost will be charged as penalty.

If the expected performance is not achieved, the MD, NHM has the discretion to write off or reduce the penalty of the successful bidder, if the reasons given by the company is justifiable and acceptable.

4 General Conditions of Contract (GCC)

4.1 Definitions and Interpretations

In this tender document and associated documentation, the following terms shall be interpreted as indicated below:

- i. **"Acceptance of Tender"** means the letter or memorandum communicating to the Contractor the acceptance of his tender.
- ii. **"Authority"** Commissionerate of Health and Family welfare, Andhra Pradesh
- iii. **"Acceptance of System"** The system including the hardware, software, solution or any deliverable shall be considered to have been accepted by designated authority, subsequent to its installation, rollout, when all the activities as defined in Scope of Work as laid down in the RFP have been successfully executed and completed by the MSI to the satisfaction of designated authority and the designated authority has indicated its acceptance by signing the Acceptance Certificate. Deliverable like ICCCC and Acceptance of Tender, General Conditions of Contract, Special Conditions of Contract, schedule of Requirements, Technical Specification and Annexures particulars and the other conditions specified in the acceptance of tender, and amendments.
- iv. **"Bid"** means the proposal submitted by the Bidder(s) in response to this RFP in accordance with the provisions hereof. Wherever "Tender" / "RFP" word is used, it shall mean the same as "Bid".
- v. **"Bidder"** means an applicant / Supplier / Contractor / Service provider /System Integrator who has submitted the Bid as per notice inviting tender of this RFP document.
- vi. **"Bid Security"** or "Earnest Money Deposit" or "EMD" shall have the same meaning.
- vii. **"Bid Process"** means the process of selection of the Service Provider through competitive bidding and includes release of this RFP document, submission of Bids, scrutiny and evaluation of such Bids as set forth in the RFP.
- viii. **Client:** Commissionerate of Health and Family welfare, Andhra Pradesh.
- ix. **"Commercial Off-The-Shelf (COTS)"** refers to software products that are ready-made and available for sale, lease, or license to the general public.
- x. **'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 personnel of designated authority which is disclosed to or otherwise learned by MSI in the course of or in connection with the Contract but does not include information which is available lawfully in the public domain.
- xi. **"Contract Agreement"** means the Contract entered by the parties and includes the RFP, the Proposal, the Letter of Award issued by the designated authority, the acceptance of Letter of Award from the MSI together with all Annexures, Schedules, referenced documents and all amendments, corrigendum, addendums and changes thereto.
- xii. **"Contract Value"** means the amount quoted by the MSI in its commercial bid / financial proposal.
- xiii. **"Consignee"** means where the equipment / products are required by the acceptance of the tender to be dispatched by rail, road, air or streamer, the person specified in the Acceptance of tender to whom they are to be delivered at the destination.
- xiv. **"Consortium"** means two or more companies entering the Contract for bidding with the designated authority and includes their respective successors and assignees.

- xv. The "**Supplier / Contractor / Bidder /Tenderer**" means the person, firm or company with whom the order of the supply is placed / participated / intend to participate in the tender.
- xvi. "**Drawing**" means the drawing or drawings specified in or annexed to the specification including GFC.
- xvii. "**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 as per IT Act 2000.
- xviii. "**Delivery of Goods**"- shall be deemed to have completed when the delivery of all the
- xix. Goods under the proposed bill of material has reached the respective designated sites or locations 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 RFP / Contract and has been duly acknowledged by the designated authority's representative
- xx. "**Effective Date**" means the date on which this Contract is signed or Lol is issued by designated authority. If this Contract is executed in parts, then the date on which the last of such Contracts is executed shall be construed to be the Effective Date.
- xxi. "**Equipment / product / goods**" means the goods in the contract, which the Contractor has agreed to supply under the contract;
- xxii. "**Facilities**" means the Equipment to be supplied and installed as well as all the Installation Services to be carried out by the Contractor under the Contract.
- xxiii. "**Goods**" means all of the equipment, sub-systems, hardware, software, products accessories, software and/or other material / items 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 maintained under the contract.
- xxiv. "**Go- Live**" means commissioning and acceptance of ICCC at the location mentioned in the RFP, installation and commencement of all smart city components, including training as per Scope of Work mentioned in RFP. Bidder should have the approval from the designated authority for user acceptance testing.
- xxv. "**Integrated Command and Control Center**" means the integrated/centralized operation center to implement holistic and integrated solution for multiple (existing and future) IT initiative for the designated authority.
- xxvi. "**Intellectual Property Rights**" means any patent, copyright, trademark, trade name, service marks, brands, proprietary information whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.
- xxvii. "**MSI's Team**" means MSI who along with all of its Consortium Members who have to provide Goods & Services to the designated authority under the scope of this Contract. This definition shall also include any and/or all of the employees of SI, Consortium Members, authorized service providers/ partners and representatives or other personnel employed or engaged either directly or indirectly by MSI for the purposes of this Contract.
- xxviii. "**Purchase Officer**" means the officer signing the acceptance of tender and includes any officer who has authority to execute the relevant contract on behalf of the Purchaser/ Employer;
- xxix. The "**Purchaser / Employer**" means Government of Andhra Pradesh. "Purchaser / Employer" means the person named as such in the Tender Document and includes the legal successors or permitted assigns of the Purchaser / Employer.
- xxx. "**Purchase Order**" means the purchase order(s) issued from time to time by the designated authority to the MSI to provide Goods and Services as per the terms and conditions of this Contract.
- xxxi. "**Replacement Service Provider**" means the organization replacing MSI in case of contract termination for any reasons

- xxxii. "Scope of Work" means all Goods and Services, and any other deliverables as required to be provided by the MSI under the RFP.
- xxxiii. "SPV" means special Purpose Vehicles designed and established to lead ICCC. They will be responsible for supervising monitoring and driving the implementation of integrated command and control center and its integration with necessary services.
- xxxiv. "Services" means the work to be performed by the agency pursuant to the RFP and to the contract to be signed by the parties in pursuance of any specific assignment awarded by the designated authority. In addition to this, the definition would also include other related / ancillary services that may be required to execute the Scope of Work under the RFP.
- xxxv. 'Service Level(s)' means the service level parameters and targets and other performance criteria which will apply to the Services and Deliverables as described in the RFP; 'SLA' or 'Service Level Agreement' means the service level agreement specified in the RFP;
- xxxvi. 'Service Specifications' means and includes detailed description, statements to technical data, performance characteristics, and standards (Indian as well as International) as applicable and as specified in the RFP and the Contract, as well as those specifications relating to industry standards and codes applicable to the performance of work, work performance quality and specifications affecting the work or any additional specifications required to be produced by the MSI to meet the design criteria.
- xxxvii. "Sub-Contractor" shall mean the entity named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing of the designated authority and the heirs, legal representatives, successors and assignees of such person.
- xxxviii. 'System' means integrated system/solution emerging out of all the Goods indicated in the Scope of Work and covered under the scope of each Purchase Order issued by the designated authority.
- xxxix. "Signed" includes stamped, except in the case of acceptance of tender or any amendment thereof;
- xl. "Site" mean the Locations as specified in the technical specifications/ scope of work at which equipment / product is required to be delivered /installed / operated / maintained by the Contractor under the contract or any other place approved by the Purchaser / Employer for the purpose
- xli. "Test" means such test as is prescribed by the particulars or considered necessary by the authority whether performed or made by the Inspecting Officer or any agency acting under the direction of the Inspecting Officer.
- xlii. 'Timelines' means the project milestones for performance of the Scope of Work and delivery of the Services as described in the RFP;
- xliii. "Work" means all the work specified or set forth and required in and by the said specifications, drawings and "technical Specifications / schedule of Requirements", hereto annexed or to be implied there from or incidental thereto, or to be hereafter specified or required in such explanatory instructions and drawings (being in conformity with the said original specifications, drawings and technical Specifications / "Schedule of Requirements").
- xliv. The delivery of the equipment shall be deemed to take place in accordance with the terms of the contract, after approval by the Inspecting Officer /team from authority /its representatives the consignee
- xl. "Writing" or "Written" includes matter either in whole or in part, in manuscript typewritten, or printed as the case may be.

Terms and expression not herein defined shall have the meanings assigned to them in the Indian Sale of Goods Act, 1930 or the Indian contract Act, or the General Clauses act, 1897 as the case may be.

Any other details governing the construction, manufacture or supply of stores as may be prescribed by the contract.

4.2 Work Program

Within 7 days of the acceptance of the tender (receipt of letter of acceptance) the MSI shall submit a detailed programme in the form of a bar chart showing all activities of the various components of ICC.

4.3 Contract Documents:

Subject to Article Order of Precedence of the Contract Agreement all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract document shall be read as a whole.

4.4 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

4.5 Contractor's Responsibilities

The Supplier / Contractor / Bidder shall design, manufacture, deliver, supply, install, testing, trial run and commissioning and carry out defect liability period (DLP) including Operation & Maintenance for 3 years (including associated purchases) with due care and diligence in accordance with the Contract.

The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities provided by the Purchaser / Employer; The Contractor acknowledges that any failure, to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.

All activities to clear the goods and transport the equipment to ultimate destination will be done by the bidder.

The Contractor shall comply with all laws in force in India. The laws will include all local, state, national or other laws that affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Purchaser / Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel.

4.6 Confidential Information

The Purchaser / Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party, any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract.

The Contractor shall not use such documents, data and other information received from the Purchaser / Employer for any purpose other than the design, procurement of Plant and Equipment, construction or such other work and services as are required for the performance of the Contract.

4.7 Contract

This contract is for the design, supply, install, testing, trial run and commissioning and carry out defect liability period (DLP) including **Operation and Maintenance for 3 years (including associated purchases)** including support during defects liability period and guarantee period of the equipment of the description, specifications and drawings, and in the quantities set forth in the contract on the date or dates specified therein. All equipment must be brand new and unused. Unpacking/seal opening has to be done in presence of Authority/authorized representatives.

The whole contract is to be executed in the most approved, substantial and workmanship manner, to the entire satisfaction of the Purchaser / Employer or his nominee, who, both personally and may his deputies, shall have full power, at every stage of progress, to inspect the equipment at such times as he may deem fit and to reject any of the equipment which he may disapprove.

4.8 Performance Bank Guarantee

The successful bidder shall furnish a Performance Bank Guarantee (PBG) valid up to the completion of the period of **'Go- Live' / Commercial Operation Date (COD) + 62 months for the project** from a Scheduled Commercial Bank, payable at a designated bank branch located in Andhra Pradesh within 15 days from the receipt of LOA/ purchase order of the tender for an amount equivalent to 10% of the value of the Contract indicated in LOA.

The PBG shall be valid till satisfactory completion of Post Implementation Support. The PBG may be discharged/returned by AUTHORITY upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the PBG. In case the project is extended after the project schedule as mentioned in the RFP, the PBG shall be accordingly extended by the Successful Bidder till the extended period

The Performance Security is to ensure due performance of all obligations of the Service Provider under the Contract against an event of default by the Service Provider and/ or any Material Breach of its obligations there under.

The Purchaser / Employer shall be entitled on his part to forfeit the amount of the Performance Bank Guarantee in whole or in part in the event of any default, failure or neglect on the part of the Contract in the fulfilment or performance in all respects of the contract under reference or any other contract with the Purchaser / Employer shall also be entitled to deduct from the amount of the Performance Bank Guarantee any loss or damage which the Purchaser / Employer may suffer.

4.9 Taxes and Duties

The Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Subcontractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside India.

In the event of exemption or reduction of Custom Duties, Excise Duties, Sales Tax or any other Cess /Levy being granted by the Government in respect of the works, the benefit of the same shall be passed on to the Purchaser / Employer.

4.10 Delivery

The Contractor shall be required by the Purchaser / Employer to deliver the equipment /product on delivery duty paid (DDP) basis at site locations as per Technical Specifications, the quantities of the equipment detailed therein shall be delivered not later than the dates specified in the delivery

schedule. The delivery will not be deemed to be complete until and unless the equipment are inspected and accepted by the Inspecting Officer/team of the authority or its representatives

The bidder has to quote for all the equipment / product as per the schedule of requirement. Transit Insurance to be taken by the applicant.

Notification of delivery: Notification of delivery and dispatch in regard to each and every installment shall be made to the Purchaser / Employer immediately on dispatch and delivery. The tracking number of transport mode along with necessary details for tracking of the dispatched equipment's needs to be communicated to the Purchaser / Employer on every dispatch.

Time for delivery - the essence of the contract: The time and date specified in the contract or as extended for the delivery of the Equipment shall be deemed to be the essence of the contract and delivery must be completed not later than the dates so specified or extended by Purchaser / Employer.

Progress of Deliveries The contractor shall allow reasonable facilities and free access to his works and records to the inspecting officer; progress officer or such other officer as may be nominated by The Purchaser / Employer for the purpose of ascertaining the progress of the deliveries under the contract.

Extension of Time for Delivery the Authority may extend the timeline for delivery of equipment (at one or more locations) at his own discretion due to the reasons which may be beyond the control of Authority. The price quoted shall remain same even in case of extended delivery time line.

4.11 Monthly Progress Report

The MSI shall submit a Monthly progress report by 10th of every month in such form that actual progress to the end of the preceding month may be compared with the approved programme. Monthly progress report shall include the system generated report against each SLA, report template shall be finalized in consultation with the Authority.

4.12 Failure and Termination:

If the contractor fails to deliver the equipment or any instalment thereof within the period fixed for such delivery in the contract or as extended or at any time repudiates the contract before the expiry of such period, the Purchaser / Employer may without prejudice to his other rights:- Recover from the Contractor as a penalty a sum equivalent to 0.5 % value of total LOA / purchase order (contract value) per week subject to maximum of 10%, after which contract will be deemed as cancelled & PBG will be encased by the Purchaser / Employer.

4.13 Consequences of Rejection

If on inspection of the equipment at site, are found to be not matching the requirement of Purchaser/ Employer as mentioned in the tender document and are being rejected by the Inspecting Officer/team of the authority or its representatives, the Contractor would be required to make satisfactory supplies of brand new and unused equipment meeting the requirement as mentioned in the tender document within the stipulated period of delivery.

Removal of rejected consignment - On rejection of any consignment unit of product submitted for inspection at a place other than the premises of the Contractor, such consignment shall be removed by the Contractor at his own cost subject as herein after stipulated, within 10 days of the date of intimation of such rejection.

All rejected equipment shall in any event and circumstances remain and always are at the risk of the Contractor immediately on such rejection. If such equipment are not removed by the Contractor within the periods aforementioned, the Inspecting Officer/Authority's representatives or its

authorized personnel may remove the rejected equipment. The Purchaser/ Employer shall, in addition, be entitled to recover from the Contractor the handling and storage charges on the rejected equipment after the expiry of the time-limit mentioned above.

4.14 Packing and Marking

Packing: The Contractor shall pack at his own cost the equipment sufficiently and properly for transit by rail/road, air and/or sea so as to ensure their being free from loss or damage on arrival at their destination locations as specified in the purchase order. He shall decide the packing for the stores by taking into account the fact that the stores will have to undergo arduous transportation before reaching the destination and will have to be stored and handled in tropical climatic conditions (Including Monsoons) before being put to actual use. Unless otherwise provided in the

Contract, all containers (including packing cases, boxes, tins, drums and wrappings) in which the stores are supplied by the Contractor shall be considered as non-returnable and their cost as having been included in the contract price. Each packages shall contain a packing note specifying the name and address of the Contractor, the number and date of the acceptance of tender and the Designation of the Purchase Officer issuing the supply orders, the description of the equipment and the quantity contained therein.

In addition to the marking as specified above, distinguish color marks should be given so as to distinguish the ultimate Consignees in India

Before any equipment is dispatched from manufacturer's works it shall be properly prepared and packed and the Supplier shall give the Purchaser at least fourteen days' notice that these preparations are to commence. Prior to dispatch all equipment shall be adequately protected by painting or by other approved means for the whole period of transit, storage against corrosion incidental damage, including the effects of vermin, sunlight, rain, high temperatures and humid atmospheres. The Supplier shall be responsible for the equipment being so packed and/ or protected as ensure that it reaches the Site intact and undamaged. The equipment shall be suitable for storage including possible delays in transit. The Supplier shall be deemed to have included in the price schedule for all materials and packing cases necessary for the safe package conveyance and delivery of the equipment. The flanges, valves and fitting shall be protected by wooden discs attached by means of service bolts (which shall not be used at Site) or by other approved means. The sleeves, flanges of flexible couplings shall be bundled by wire. Cases containing rubber rings, bolts and other small items shall not normally weigh more than 50 kg. Gross per case. All spare parts shall be packed for long storage under the climate conditions prevailing at the Site. Each spare part shall be clearly marked or labelled on the outside of its packing with its description, number and purpose and when more than one spare is packed in a single case or other container, a general description of its contents shall be shown on the outside of such case or container and a detail list shall be enclosed. All cases, containers and other packages shall be marked and numbered in approved manner for the purpose of identification. All cases, containers or other packages are liable to be opened for such examination as the Purchaser may require and packing shall be designed to facilitate opening and repacking thereafter. All items shall be clearly marked for identification against the packing list. Every crate or package shall contain a packing list in a water proof envelope and a duplicate copy of the packing list shall be sent by the post to the Purchaser at site. All crates, packages etc., shall be clearly marked with a water proof material to show the weight and where the slings should be attached, and shall also have an indelible identification mark relating them to the packing list.

Marking: The marking of all goods supplied shall comply with the requirement of the Indian Acts relating to merchandise marks or any amendment thereof and the rules made there under. The

following marking of the material is required: - The following particulars should be stenciled with indelible paint on all the materials/packages:

- a. Contract No.
- b. Purchaser / Employer Name & logo.

4.15 Consignee's Right of Rejection

Notwithstanding any approval which the Inspecting Officer may have given in respect of the stores or any materials or other particulars or the work or workmanship involved in the performance of the contract (whether with or without any test carried out by the Contractor or the Inspecting Officer or under the direction of the Inspecting Officer) and notwithstanding delivery of the stores where so provided to the interim consignee, it shall be lawful for the consignee, on behalf of the Purchaser / Employer, to reject the stores or any part, portion of consignment thereof within 45 days after actual delivery thereof to him at the place or destination specified in the contract if such stores or part, portion of consignment thereof is not in all respects in conformity with the terms and conditions of the contract whether on account of any loss, deterioration or damage before dispatch or delivery or during transit or otherwise howsoever.

4.16 Responsibility for Completeness

Any fittings or accessories which may not be specifically mentioned in the specifications but which are useful or necessary are to be provided by the Contractor / Supplier without extra charge, and the equipment must meet the operational requirement if any at the place of delivery.

The assigned scope of work shall be performed as specified in the Purchase order / LOA/ Contract.

All the charges incurred towards man-powers, materials, transportation, making the equipment etc. at the place of delivery shall be borne by the successful bidder.

4.17 Indemnity

The prices stated are to include all rights (if any) of patent, registered design or trade mark and the Bidder shall at all times indemnify the Purchaser / Employer against all claims which may be made in respect of the equipment for infringement of any right protected by patent, registration of designs or trade mark; provided always that in the event of any claim in respect of alleged breach of a patent, registered designs or trade mark being made against Purchaser / Employer, the Purchaser / Employer shall notify the bidder of the same and the bidder shall, at his own expense, either settle any such dispute or conduct any litigation that may arise there from.

The bidder shall return all such property and shall be responsible for the full value thereof to be accessed by the Purchaser / Employer whose decision shall be final and binding on the bidder. The bidder shall be liable for loss or damage to such property from whatever cause happening while such property is in the possession of or under the control of the bidder, his servants, workmen or agents.

4.18 Corrupt Practices

The Bidder shall not offer or give or agree to give to any person in the employment of the Purchaser / Employer or working under the orders of the Purchaser / Employer any gift or consideration of any kind as an inducement or reward of doing or forbearing to do or having done or forborne to do any act in relation to the obtaining or execution of the contract or any other contract with the Purchaser

/ Employer or Government for showing any favor or for bearing to show dis favor to any person in relation to the contract or to any other contract with the Purchaser / Employer or Government. Any breach of the aforesaid condition by the Contractor, or any one employed by him or acting on his behalf, under Chapter IX of the Indian Penal code, 1860 or the Prevention of Corruption Act, 1947 or any other act enacted for the prevention of corruption by public servants shall entitle the Purchaser / Employer to cancel the contract and all or any other contracts with the Bidder and to recover from the bidder the amount of any loss arising from such cancellation.

4.19 Insolvency and Breach of Contract

The Purchaser / Employer may at any time, issue notice in writing summarily terminate the contract without compensation to the Contractor in any of the following events, that is to say:

- a. If the Contractor being an individual or a firm: Any partner thereof, shall at any time, be adjudged insolvent or shall have a receiving order or order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or enter into any assign mentor composition with his creditors or suspend payment or if the firm be dissolved under the Partnership Act, or
- b. If the Contractor being a company is wound up voluntarily or by the order of a Court or a Receiver, Liquidator, or Manager on behalf of the debenture holders is appointed, or circumstances shall have arisen which entitle the Court or Debenture holders to appoint a Receiver, Liquidator or Manager, or
- c. If the contractor commits any breach of the contract not herein specifically provided for.
- d. Provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the Purchaser / Employer and provided also the Contractor shall be liable to pay to the Purchaser / Employer any extra expenditure he is thereby put to and the Contractor shall, under no circumstances, be entitled to any gain on re purchase.

4.20 Laws Governing the Contract

This contract shall be governed by the Laws of India for the time being in force.

Irrespective of the place of delivery and the place of payment under the contract, the contract shall be deemed to have been made at the panel in India from where the acceptance of tender has been issued.

4.21 Confidential Information

- a. AUTHORITY and the Successful Bidder shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract.
- b. The Successful Bidder shall not use the documents, data, and other information received from AUTHORITY for any purpose other than the services required for the performance of the Contract.
- c. The Authority may allow the MSI to utilize highly Confidential Information including confidential public records and the MSI shall maintain the highest level of secrecy, confidentiality and privacy with regard to such Confidential Information. The MSI shall use its best efforts to protect the confidentiality, integrity and proprietary of the Confidential

Information. No member of MSI's Team shall, without prior written consent from the designated authority, make any use of any Confidential and Proprietary Information given by the designated authority, except for purposes of performing the Contract. Each member of MSI's Team shall keep all the Confidential and Proprietary Information, provided by the designated authority to them or their respective employees as confidential.

- d. Additionally, the MSI shall keep confidential all the details and information with regard to the Project, including systems, facilities, operations, management and maintenance of the systems/facilities. The MSI shall use the information only to execute the Project.
- e. The Authority shall retain all rights to prevent, stop and if required take the necessary punitive action against the MSI regarding any forbidden disclosure. The Authority reserves the right to adopt legal proceedings, civil or criminal, against the MSI in relation to a dispute arising out of breach of obligation by the MSI under this clause.
- f. The MSI shall execute a corporate non-disclosure agreement with Authority in the format provided by the Authority and shall ensure that all its employees, agents and Sub-Contractors execute individual non-disclosure agreements, which have been duly approved by the Authority with respect to this Project

4.22 Change in Laws and Regulations

Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Successful Bidder has thereby been affected in the performance of any of its obligations under the Contract.

4.23 Force Majeure

- a. The Successful Bidder shall not be liable for termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- b. For purposes of this Clause, Force Majeure means an event or situation beyond the control of the Successful Bidder that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Successful Bidder. Such events may include, but not be limited to, acts of AUTHORITY in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- c. If a Force Majeure situation arises, the Successful Bidder shall promptly notify AUTHORITY in writing of such condition and the cause thereof. Unless otherwise directed by AUTHORITY in writing, the Successful Bidder shall continue to perform its obligations under the Contract as far as it is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

4.24 Settlement of disputes

Performance of the contract is governed by the terms and conditions of the contract, in case disputes arise between the parties regarding any matter under the contract, either Party of the contract may send a written Notice of Dispute to the other party. The Party receiving the Notice of Dispute will consider the Notice and respond to it in writing within 30 days after receipt. If that party fails to respond within 30 days, or the dispute cannot be amicably settled within 60 days following the response of that party, clause GCC 4.24 shall become applicable.

Arbitration:

- a. In the case of dispute arising, upon or in relation to, or in connection with the contract between AUTHORITY and the Successful Bidder, which has not been settled amicably, any party can refer the dispute for Arbitration under (Indian) Arbitration and Conciliation Act, 1996. Such disputes shall be referred to an Arbitral Tribunal consisting of three arbitrators, one each to be appointed by the AUTHORITY and the Successful Bidder, the third arbitrator shall be chosen by the two arbitrators so appointed by the parties and shall act as Presiding Arbitrator. In case of failure of the two arbitrators, appointed by the parties to reach a consensus regarding the appointment of the third arbitrator within a period of 30 days from the date of appointment of the two arbitrators, the Presiding arbitrator shall be appointed by the Commissioner, department of health, Andhra Pradesh. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings.
- b. Arbitration proceedings shall be held in Andhra Pradesh, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- c. The decision of the majority of arbitrators shall be final and binding upon both parties. The expenses of the arbitrators as determined by the arbitrators shall be shared equally by AUTHORITY and the Successful Bidder. However, the expenses incurred by each party in connection to the preparation, presentation shall be borne by the party itself. All arbitration awards shall be in writing and shall state the reasons for the award.

4.25 Extension of Time

If at any time during performance of the Contract, the Successful Bidder should encounter conditions impeding timely delivery of the Services, the Successful Bidder shall promptly notify AUTHORITY in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Successful Bidder notice, AUTHORITY shall evaluate the situation and may at its discretion extend the Successful Bidder time for performance in writing.

Delay by the Successful Bidder in the performance of its Delivery and Completion obligations shall render the Bidder liable for disqualification for any further bids in AUTHORITY, unless an extension of time is agreed mutually.

4.26 Terms of Extension of the Contract

The Authority shall reserve the sole right to grant any extension of the contract based on the requirement for the project decided by the Authority and satisfactory work by the MSI. The Authority shall notify in writing to MSI before the expiration of the Term hereof. The decision to grant or refuse the extension shall be at the Authority's discretion and such extension of the contract, if any, shall be as per terms agreed mutually between the designated authority and MSI.

4.27 Termination

- a. AUTHORITY may, without prejudice to any other remedy for breach of Contract, terminate this Contract in case of the such an occurrence specified by the authority, AUTHORITY shall give a not less than 30 days' written notice of termination to the Successful Bidder.
- b. If the Successful Bidder does not remedy a failure in the performance of its obligations under the Contract, within thirty (30) days after being notified or within any further period as AUTHORITY may have subsequently approved in writing.
- c. If the Successful Bidder becomes insolvent or goes into liquidation, or receivership whether compulsory or voluntary.

- d. If, in the judgment of AUTHORITY has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- e. If, as the result of Force Majeure, the Successful Bidder is unable to perform a material portion of the Services for a period of not less than 60 days.
- f. If the Successful Bidder submits to the AUTHORITY a false statement which has a material effect on the rights, obligations or interests of AUTHORITY.
- g. If the Successful Bidder places itself in a position of conflict of interest or fails to disclose promptly any conflict of interest to AUTHORITY.
- h. If the Successful Bidder fails to provide the quality services as envisaged under this Contract, AUTHORITY may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. AUTHORITY may decide to give one chance to the Successful Bidder to improve the quality of the services.
- i. If the Successful Bidder fails to comply with any final decision reached as a result of arbitration proceedings.
- j. If AUTHORITY, in its sole discretion and for any reason whatsoever, decides to terminate his Contract.
- k. In the event AUTHORITY terminates the Contract in whole or in part, pursuant to GCC Clause 4.27, AUTHORITY may procure, upon such terms and in such manner as it deems appropriate, services similar to those undelivered or not performed, and the Successful Bidder shall be liable to AUTHORITY for any additional costs for such similar services. However, the Successful Bidder shall continue performance of the Contract to the extent not terminated.

4.28 Payment upon Termination

Upon termination of this Contract pursuant to GCC Clauses 4.27, the AUTHORITY shall make the following payments to the Successful Bidder:

- a. If the Contract is terminated pursuant to GCC Clause 4.27, remuneration for Services satisfactorily performed prior to the effective date of termination.
- b. If the agreement is terminated pursuant of GCC Clause 4.27. The Successful Bidder shall not be entitled to receive any agreed payments upon termination of the contract. However, the AUTHORITY may consider making a payment for the part satisfactorily performed on the basis of Quantum Merit as assessed by it, if such part is of economic utility to the AUTHORITY. Applicable under such circumstances, upon termination, the AUTHORITY may also impose liquidated damages. The Successful Bidder

will be required to pay any such liquidated damages to AUTHORITY within 30 days of termination date.

4.29 Assignment

If Successful Bidder fails to render services in stipulated timeframe and as per schedule, AUTHORITY, at its discretion and without any prior notice to Successful Bidder, may discontinue or minimize scope of work or procure/board any other similar agency to render similar services to complete project in stipulated timeframe.

4.30 Delivery

Equipment /Product to be delivered to the site and delivery address will be given along with Purchase order / LOA. Equipment /Product to be delivered within delivery period as indicated under Delivery schedule after placing the order, however if the authority request to deliver on multiple deliveries, bidder need to adhere to the plan advised by Authority.

4.31 Ownership and Intellectual Property Rights

- a. The designated authority shall have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of the Contract, including but not limited to all processes, products, specifications, reports and other documents which have been newly created and developed by MSI solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under the Contract. MSI undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the designated authority, execute all such agreements/documents and obtain all permits and approvals that may be necessary in regard to the Intellectual Property Rights of the designated authority.
- b. If designated authority desires, MSI shall be obliged to ensure that all approvals, registrations, licenses, permits and rights etc. which are inter-alia necessary for use of the Goods Deliverables, Services supplied / installed by MSI/Consortium/MSI's Sub-Contractors under the Contract shall be acquired in the name of the designated authority and MSI shall have the non-exclusive, limited right to use such licenses till the Term on behalf of the designated authority solely for the purpose of execution of any of its obligations under the terms of the Contract. However, subsequent to the Term of this Contract, such approvals, registrations, licenses, permits and rights etc. shall endure to the exclusive benefit of the designated authority.
- c. Pre-existing work: All intellectual property rights existing prior to the Effective Date of the Contract shall belong to the Party that owned such rights immediately prior to the Effective Date. Subject to the foregoing, the designated authority will also have rights to use and copy all intellectual property rights, process, specifications, reports and other document, drawings, manuals provided or used by the MSI as part of the Scope of Works under the Contract for the purpose of the Contract on non-exclusive, non-transferable, perpetual, royalty-free license to use basis.
- d. Third Party Products: If license agreements are necessary or appropriate between the MSI and third parties for purposes of enabling / enforcing/implementing the provisions hereinabove, the MSI shall enter into such agreements at its own sole cost, expense and risk and all such licenses etc. shall be bought in name of the designated authority unless otherwise directed in writing by the designated authority.
- e. 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 Materials except as expressly authorized by the designated authority in writing

4.32 Transfer of Ownership

- a. MSI must transfer all titles to the assets and goods procured for the purpose of the project to the designated authority at the time of Acceptance of System. This includes all licenses, titles, certificates, hardware, devices, equipment's etc. related to the system designed, developed, installed and maintained by MSI. Ownership of Goods that are part of this Agreement shall not pass to the designated authority unless and until the Goods is accepted in accordance with the conditions of the Contract and to the entire satisfaction of the designated authority and an acceptance notification is provided by the designated authority for to the MSI. MSI is expected to transfer IPR and ownership right of only those solutions which would be customized by MSI for the use of designated authority. For any pre-existing work, MSI and the designated authority shall be held jointly responsible and its use in any other project by MSI shall be decided on mutual consent.

- b. Forthwith upon expiry or earlier termination of the Contract and at any other time on demand by the designated authority, MSI shall deliver to the designated authority all Documents provided by or originating from the designated 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 designated authority at no additional cost. MSI shall not, without the prior written consent of the designated authority store, copy, distribute or retain any such Documents.
- c. The MSI shall execute such documents as may be required by the designated authority for documenting the transfer of title and ownership of Goods. Upon transfer of ownership of the Goods to the designated authority, the MSI shall treat such Goods as Assets as detailed above in this Agreement.

4.33 Other Conditions

The Successful Bidder should comply with all applicable laws and rules of Government of India / Government of Andhra Pradesh.

Support Executive/Supervisor deployed by the Successful Bidder shall not have right to demand for any type of permanent employment with AUTHORITY or its allied Offices.

Commissioner, department of health and family welfare reserves the right to withdraw / relax any of the terms and condition mentioned in the RFP, so as to overcome the problem encountered at a later stage for the smooth and timely execution of the project.

4.34 Risk Purchase

In case the Successful Bidder fails to deliver the project due to inadvertence, error, collusion, incompetency, termination, misconstruction or illicit withdrawal, the Commissioner, health and family welfare, reserves the right to procure the same or similar services from the alternate sources at risk, cost and responsibility of the Successful Bidder.

To
Managing Director

APMSIDC

2nd Floor, PHYCARE Building, Plot No. 9, APIIC IT park, Autonagar
Mangalagiri, Andhra Pradesh

Subject: RFP for “Selection of Master System Integrator (MSI) for setting-up, operation and maintenance of “Integrated Command Control Center for Maternal and Child Health”

Dear Sir,

Having carefully examined all the parts of the RFP documents and having obtained all the requisite information affecting this proposal and being aware of all conditions and difficulties likely to affect the execution of the agreement, I/We hereby propose to implement the project as described in the RFP document in conformity with the conditions of agreement, technical aspects and the sums indicated in this financial proposal.

I/We declare that we have read and understood and that we accept all clauses, conditions and any addendum thereof, and descriptions of the RFP document without any change, reservations and conditions.

I/We agree to abide by this proposal/bid for a period of 6 months from the date of its opening and also undertake not to withdraw and to make any modifications unless asked for by you and that the proposal may be accepted at any time before the expiry of the validity period or the extended bid validity period.

Unless and until the formal agreement is signed, this offer together with your written acceptance thereof shall constitute a binding contract between me/us and the Client.

We submit the Format - Price bid as appended herewith.

Yours faithfully

Signature of the authorized signatory

Financial Proposal (A+B)			
S. No.	Professional Fee	Other Cost	Total Value (Rs.)
1.			

Table for Professional Fee - A				
S. No.	Components	Number of Positions	Per Month Rate Per Resource (Rs.)	Total Man Month Rate (Rs.)
1.				
2.				
3.				
4.				
Total				

Table for Other Expenses - B		
S. No.	Components	Total Value (Rs.)
1.		
2.		
3.		
4.		
5.		
Total		

Note:

Price should be inclusive of GST