

Notice for submission of bids for Expression of Interest

This notice for submission of bids from reputed and experienced bidders for Expression Of Interest (EOI) is issued by Disaster Management Department, Government of Bihar for selection of suitable vendor for taking-up work of Setting-up and operationalisation of Emergency Operations Center Infrastructure (EOCI) in Bihar state on Build, Own, and Operate and Transfer (BOOT) basis for a period of five years.

Bidders will have to submit technical and financial bids separately. The selection process will be in two steps where bids will be evaluated first for technical competence and only those bids that qualify will be processed for financial evaluation.

Bidder will have to submit a demand draft for Rs. 10,000.00 (Ten thousand only) towards cost of the notice for EOI and a Bank guarantee from any public sector/ scheduled/ reputed private sector bank of Rs. 1,00,00,000 (One crore only) towards earnest money deposit (detailed instructions regarding submission of the bid and scope of the work, deliverables, payment conditions etc. can be downloaded from the Disaster Management department, Government of Bihar website www.disastermgmt.bih.nic.in)

1.0 Scope of the project: The Department of Disaster Management, Government of Bihar has planned to set up and operationalize Emergency Operation Centers at state and district headquarters as well as procure mobile and portable EOCs for effective disaster response in case of natural or human induced disasters, on BOOT basis for a period of five years.

- **Two** EOCs at the state level for redundant operations (one functional and another for back-up), one of which will be at the Disaster Management Department in Old Secretariat premises at Patna and the other will be located at the Police Headquarters in Patna
- **One** EOC at each of the 38 district headquarter in Bihar state.
- **Ten** self- contained vehicle mounted (mobile) EOCs (to be located at nine divisional headquarters and one at State EOC) to operate from disaster sites and to act as a back-up EOC to any of the fixed EOCs in case it is non- functional due to disaster or any other reason.
- **Seven** portable VSAT based communication systems with integrated micro BTS to provide limited cell phone coverage at disaster site as well as long distance phone connectivity via VSAT link for districts (Sitamarhi, Madhubani, Darbhanga, Saharsa, Madhepura, Supaul, Araria) falling in seismic zone V.

Responsibility of selected BOOT operator would include (but not limited to) – design, develop, supply, install, test, commission, operate, maintain and manage EOC infrastructure for five years and ensure on an average \geq (equal to or better than) 99.5% availability (service up time) during any quarter (3 month period) by in- built redundancy in network and equipment resources and technologies. The Operator should provide trained manpower to operate, maintain and manage all EOC facilities and systems for efficient functioning at all times as well as to train and handhold designated human resources (HR) of Government of Bihar on operational aspects of EOC during five years of BOOT period.

These EOCs are expected to be state of the art and shall perform at the minimum, rolls defined in the Guideline documents issued by National Disaster Management Authority (NDMA), New Delhi, on Incident Response System (IRS) issued in July, 2010 and National DM Guidelines on “National Disaster Management Information and Communication System in February, 2012 (these document are available on NDMA website www.ndma.gov.in for detailed information).

Operationalisation of EOCs shall include facilities for interoperable converged communication services (voice, data and video) with adequate redundancy based on terrestrial (including wired and wireless technologies) and satellite based communication systems including backup power system. The EOC Communication network will be based on existing Bihar State Wide Area Network (BSWAN), public telephone links and broadband public internet back up by VSAT links. EOC network shall be used for coordination between all agencies and departments that are responsible for emergency response functions. EOC operational software should provide effective Information Management Services, Decision Support Services (DSS) and Messaging services to agencies responsible for disaster management.

1.1 A brief note on EOCs:

EOC can be described as an offsite facility which will be functioning from the State/ District headquarters and which is actually an augmented control room having communication facilities and space to accommodate and facilitate activities of personnel from various line departments of Government and other agencies whose services are generally required during incident response and are categorized as Emergency Support Functions (ESF). EOC is a critical link in the emergency response chain, enabling incident commanders to focus on the needs of the incident, serving as a conduit of information between the incident command and higher levels of multi-agency coordination system entities and promoting problem solving at the lowest practical level.

2.0 Important dates for processing of bids and bid securities etc.:

Sr. No.	Event	Target Date
1.	Date of issue of notice for submission of EOI bid	10.05.2013
2.	Pre Bid Conference	15:00 hrs on 10.06.13
3.	Bid Date and time	15:00 hrs on 24.06.2013
4.	Technical Bid Opening	16:00 hrs on 24.06.2013
5.	Presentation and NCNC (No Cost No Commitment) Demo on Technical Bid by short-listed Bidders.	Date and time will be intimated during pre bid conference
6.	Declaration of short-listed Bidders for Financial Bid opening	
7.	Opening of Financial Bids	
8.	Declaration of selected Bidder	
9.	Date of signing of the Service Agreement	

Eligibility:

1. Organisation:

Any firm, association, company or a consortium with previous experience of similar work can submit EOI bid. The bid should include detailed technical capabilities of the bidder. If the bidder has experience of implementing similar projects for government/ public sector / corporations in India or abroad, these should be furnished.

In case the bidder is a consortium, the same shall not consist of more than six entities and shall be formed under a duly stamped consortium agreement and the lead partner must submit.

- The details of the consortium with roles and responsibilities of each partner. The same should be endorsed by an authorized representative of the lead partner.
- The original stamped consortium agreement shall be attached along with the Bid.
- No change in the constitution of the consortium (Lead Partner/ partners of consortium) will be allowed within the BOOT period without explicit approval of Disaster Management Department, Government of Bihar.

2. Certification (bidder to submit copies of certificates):

The bidder, individually or in consortium is expected to have the latest ISO certification in respect of:

- Quality policy.
- Network Security Management
- IT Services Management

3. Financial Strength:

- The bidder/ lead partner should have an average turnover of Two hundred Crore for the last three years. Of the turnover, the bidder should have average revenues of Fifty Crore from the IT/ Networking services for the last three years. Bidder/ lead partner should submit the Audited Balance sheets and Profit & Loss statements for the last 3 (three) years and should also submit the Statutory Auditor's certificate for revenues from IT/ Networking services.
- Bidder/ all partners of consortium should have positive net worth (measured as paid-up capital plus free reserves) for each of the last three financial years. The bidder/ all partners of consortium also should be in profit for the last three financial years. Bidder/ all partners of consortium should submit the audited Balance Sheet and Profit & Loss account statements. Certificate from Statutory Auditor for the same effect shall be attached by the bidder/ all partners of consortium.

4. Technical Expertise:

- The bidder should have minimum 200 (two hundred) regular IT professional employees on its payrolls as on 31.03.2013 and maintain the minimum strength throughout the BOOT period. A self-certificate to the effect signed and stamped by the Authorized Representative of the bidder/ Lead Partner of consortium should be submitted. The project staff should have minimum 3 (three) years of experience in the field of responsibility.
- The bidder must have established and managed at least Two highly reliable ICT infrastructure/ Wide Area Network service delivery projects (including but not limited to System Integration) with a minimum value of Fifty Crore that were successfully completed during the last five years.
- The bidder must have experience of at least one project in respect of Emergency management/ Incident management/ Tactical Operations Center (TOC)/ Defence Command Center or Emergency Operation Center that included Decision Support

System (DSS) was successfully completed with any State Government/Central Government/ PSU in India or any other Government or public organization in the world in last 5 years.

- The bidder should have completed at least one project that included design, supply, installation and commissioning, software application development, integration of third party Geographical Information System (GIS) applications. Last date of Submission: on or before pre bid conference.

Bids are to be submitted to:

**The Additional Secretary,
Disaster Management Department,
Government of Bihar
Old Secretariat Building,
Patna-800015**



**Notice For
Submission of Expression of Interest (EoI)
For setting-up and operationaliasation of
Emergency Operations Centre Infrastructure
on Build Operate Own and Transfer (BOOT)
basis for a period of 5 (five) Years
In Bihar State**

Reference No:

Date:

Notice Issued By:

**Disaster Management Department
Government of Bihar
Old Secretariat
Patna- 800015, Bihar State**

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DISCLAIMER:

The Disaster Management Department (DMD), Government of Bihar has taken maximum care while preparation of the Notice for submission of Expression of Interest (NEoI) document. This document includes statements, which reflect various assumptions and assessments arrived at by DMD in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. The information contained in this document may not be adequate. Each Bidder should, therefore, conduct its own investigations and obtain necessary information from appropriate sources.

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

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

SECTION A – DEFINITIONS, ACRONYMS AND INTERPRETATION

1.1 I. Definitions

The following terms shall have the meaning ascribed to them below:

“**Associate**” means in relation to the Bidder, a person who controls, is controlled by, or is under the common control with such Bidder. As used in this definition, the expression “control” means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person.

“**Authorised Representative**” shall have the meaning ascribed to it in the section instructions to bidders

“**Bid**” shall mean the Technical Bid and the Commercial Bid submitted by the Bidder, in response to the NEOI, in accordance with the terms and conditions hereof and shall also include the copies of the same.

“**Bid Due Date**” shall have the meaning ascribed to it in the section instructions to bidders

“**Bidder**” shall mean the applicant submitting a Bid as a response to the NEOI. Any reference to the Bidder includes Sole Bidder/Consortium, Member of a Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require;

“**Bidding Documents**” shall have the meaning ascribed to it in the section instructions to bidders

“**Bidding Process**” shall have the meaning ascribed to it in **Clause (.) of the NEOI**.

“**Bid Security**” shall have the meaning ascribed to in **Clause (.)**.

“**Change of Control**” means a transfer of the direct and/or indirect legal or beneficial ownership of any shares, or securities convertible into shares, in the Operator Company that causes the shareholding of the Selected Bidder, together with its Associates, in the total equity to decline below 51% (fifty one per cent) thereof, during the term of the Agreement; provided that any material variation (as compared to the representations made by the Selected Bidder during the Bidding Process for the purposes of meeting the minimum conditions of eligibility or for evaluation of its application or bid, as the case may be,) in the proportion of the equity holding of Operator to the total Equity, shall constitute Change of Control;

Or

In case of Consortium:

“Change of Control” means a transfer of the direct and/or indirect legal or beneficial ownership of any shares, or securities convertible into shares, in the Operator Company that causes the shareholding of the Lead Member, together with its Associates, in the total equity to decline below 51% (fifty one per cent) thereof, and the individual shareholding of the Member(s), together with its Associates, in the total equity to decline below 10% (ten per cent) thereof, during the term of the Agreement; provided that any material variation (as compared to the representations made by the Selected Bidder during the Bidding Process for the purposes of meeting the minimum conditions of eligibility or for evaluation of its application or bid, as the case may be,) in the proportion of the equity holding of Operator to the total Equity, shall constitute Change of Control;

“Consortium” shall have the meaning ascribed to it under **Clause** (.).

“Conflict of Interest” shall have the meaning ascribed to it under **Clause** (.).

“Consortium Agreement” shall have the meaning ascribed to it under **Clause** (.).

“Financial Capacity” shall have the meaning ascribed to it in **Clause** (.).

“Lead Member” shall have the meaning ascribed to it in **Clause** (.).

“Letter of Intent” shall have the meaning ascribed to it under **Clause** (.).

“Member” shall have the meaning ascribed to it in **Clause** (.).

“MEOC” Mobile Emergency Operations Centre

“Official Website” shall refer to the website specified under **(.)**.

“Operator” shall mean the Selected Bidder who executes the Service Agreement with DMD.

“Operator Company” shall mean the Selected Bidder itself or, where applicable, an SPV incorporated by the Selected Bidder for the purposes of the implementation and operation and management of the Project;

“Project” shall mean the design, procurement, supply, implementation and maintenance of EOCI.

“Quarterly Guaranteed Revenue (QGR)” means the maximum quarterly fees, on an equated basis, that the Operator shall be paid by DMD during the Operation and Maintenance Phase, as specified in the Commercial Bid by the Operator;

“Selected Bidder” shall have the meaning ascribed to it in **Clause (.)**.

“Service Agreement” shall mean the agreement to be executed between DMD and the Selected Bidder for undertaking the Project.

“Sole Bidder” shall have the meaning ascribed to it in **Clause (.)**.

“State” shall mean the State of Bihar.

“Stakeholders” means the contractors, citizens, businesses, Government departments and other agencies of the Government of Bihar and their employees.

“Subject Person” shall have the meaning ascribed to it under **Clause (.)**

“Technical Bid” shall have the meaning ascribed to in **Clause (.)**.

“Technical Capacity” shall have the meaning ascribed to it in **Clause (.)**.

“Tender Fee” shall have the meaning ascribed to it under **Clause (.)**.

1.2 II. Acronyms

In addition to terms defined elsewhere herein, the following terms shall have the meaning ascribed to them below:

“DEOC” shall mean the District Emergency Operation Center.

“DSS” shall mean Decision Support System

“EOC” shall mean the Emergency Operation Center(s).

“EOCI” Shall Emergency Operations Centre Infrastructure including systems and facilities for effective disaster management activities at state and district EOCs and Emergency support Function organisations

“ESF” Emergency Support Functions

“ERV” shall mean Emergency Response Vehicle

“MEOC” shall mean EOC in installed in / operating from a vehicle

“ESF” shall mean Emergency Support Functions.

“BSWAN” shall mean Bihar State Wide Area Network.

“HQ” shall mean Head Quarter.

“IMPS” shall mean Information Management Portal System.

“INR” shall mean Indian National Rupees.

“IP” shall mean Internet Protocol.

“ISDN:” shall mean Integrated Services Digital Network

“LOI” shall mean Letter of Intention.

“MPLS” shall mean Multi Protocol Label Switching

“NCNC **demo**” shall mean No Cost, No Commitment demonstration by vendor of capabilities of the offered system.

“NGO” shall mean a Non Governmental Organization.

“NMS” shall mean Network Monitoring and Control System.

“PRI” shall mean Primary Rate Interface (2.048 Mbps or equivalent 32 channels @ 64 Kbps rate interface in case of ISDN)

“NEOI” shall mean Notice for submission of Expression of Interest i.e. this request document dated [XX XX 2102] along with all formats and documents attached hereto and shall include any modifications, amendments, alterations or clarifications thereto.

“SDC” shall mean State Data Center.

“SEOC” shall mean the State Emergency Operation Center.

“SPV” shall mean Special Purpose Vehicle

“VHF” shall mean Very High Frequency.

“VoIP” shall mean Voice over Internet Protocol.

“VPN” shall mean the Virtual Private Networks.

“VSAT” shall mean Very Small Aperture Terminal.

1.3 III Interpretation

In this NEOI, unless otherwise expressly specified, a reference to:

- i. **“Include”** means include without limitation.
- ii. **“May”** means entitled, but not obliged, to exercise a particular right.
- iii. **“Shall”** means an obligation.
- iv. The headings in this NEOI are for information only and are to be ignored in construing it.
- v. References to persons include a reference to body corporate, unincorporated associations, and partnerships and any organization or entity having legal capacity.
- vi. Grammatical variants of terms defined in Section A, Clause I shall bear their corresponding meanings.
- vii. References to recitals, clauses, paragraphs or schedules are to recitals, clauses and paragraphs of and schedules to this NEOI.
- viii. Words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders.

SECTION – 1: OVERVIEW

1.1 Introduction:

This NEOI is being issued by Disaster Management Department of Government of Bihar (“DMD”) to establish and operationalise **Emergency Operations Center Infrastructure** (EOCI) on Build, Own, Operate and Transfer (BOOT) basis for a period of 5 (five) years to support Bihar State Disaster Response (DR) activities. *The Government of Bihar will make 20 (twenty) equated quarterly payments to the Operator during the BOOT period.*

1.2 Bihar State:

Bihar is located in the eastern part of India (between 83°-30' to 88°-00' longitude). It is an entirely land-locked state, although the outlet to the sea through the port of Kolkata is not far away. Bihar lies mid-way between the humid West Bengal in the east and the sub humid Uttar Pradesh in the west which provides it with a transitional position in respect of climate, economy and culture. It is bounded by Nepal in the north and by Jharkhand in the south. The Bihar plain is divided into two unequal halves by the river Ganga which flows through the middle from west to east.



Fig1.1: District Map of Bihar State

1.3 Vulnerability to Disasters

Large part of the state falls within Earthquake zones IV and V. As such many districts are vulnerable to severe earthquake. Around 18 districts of the state frequently suffer due to Riverine flood hazard due to flooding of major rivers flowing through the state.

Overall the state is vulnerable to multiple natural hazards including:

- a. Earthquakes,
- b. Riverine Floods and
- c. High speed winds

It is also vulnerable to accidental / manmade / technology related hazards such as fires, road and rail accidents, terrorist attacks etc

1.4 Disaster response

DMD of Bihar State has taken several initiatives under the disaster management policy and the advice / guidelines issued by the National Disaster Management Authority (NDMA) and Government of India. DMD has also finalized Standard Operating Procedure (SOP) to cope with major disasters, to pursue the holistic approach to disaster management. Various government departments / organisations support the efforts DMD at state level and District Magistrate (DM) at district levels are known as Emergency Support Function (ESF) organisations.

At the district level, the District Magistrate (DM) who is the chief coordinator is the focal point for coordinating all activities relating to prevention, mitigation and preparedness pertaining to response and relief.

1.5 Proposed Emergency Operation Center Infrastructure (EOCI)

The DMD has planned to establish and operationalise Emergency Operation Center Infrastructure (EOCI) including state of the art EOCs at state and district headquarters as well as mobile and portable systems for effective disaster response, in case of natural or manmade disasters, on BOOT basis for a period of 5 (five) years. EOICI envisages:

- 2 (two) EOCs at the state level for redundant operations, one of which will be at the Disaster Management Department in Old Secretariat premises at Patna and the other will be located at the Police Headquarters in Patna after the building under construction is ready for occupation
- 1 (One) EOC is at each of the 38 districts in Bihar state.
- 10 (Ten) self contained vehicle mounted (mobile) EOCs (to be located at 9 divisional headquarters and 1 at State EOC) to operate from disaster sites and to act as a back-up EOC to any of the fixed EOCs in case it is non functional due to disaster or any other reason.
- 7 (Seven) portable VSAT based communication systems with integrated micro BTS to provide limited cell phone coverage at disaster site as well as long distance phone connectivity via VSAT link are planned for districts (Sitamarhi, Madhubani, Darbhanga, Saharsa, Madhepura, Supaul, Araria) falling in seismic zone V

SECTION 2: BRIEF DESCRIPTION OF FACILITIES AND CONCEPTS

2.1 Concept of EOC:

EOC can be described as an offsite facility which will be functioning from the State / District headquarters and which is actually an augmented control room having communication facilities and space to accommodate and facilitate activities of personnel from various line departments of Government and other agencies whose services are generally required during incident response and are categorized as Emergency Support Functions (ESF). EOC is a critical link in the emergency response chain, enabling incident commanders to focus on the needs of the incident, serving as a conduit of information between the incident command and higher levels of multi-agency coordination system entities, and promoting problem solving at the lowest practical level.

EOCs planned under this project are expected to be state of the art and shall perform at the minimum, rolls defined in the Guideline documents issued by National Disaster Management Authority (NDMA), New Delhi, on Incident Response System (IRS) issued in July, 2010 and National DM Guidelines on "National Disaster Management Information and Communication System, of February, 2012 (these document are available on NDMA website www.ndma.gov.in for detailed information).

Roll of EOCs can be briefly described (but not limited to) as:

The basic functions of EOC, derived on the basis of functional framework of disaster management would be to:

1. Receive, monitor, and assess disaster information.
2. Keep track of available resources.
3. Monitor, assess, and track response units and resource requests.
4. Manage resource deployment for optimal usage.
5. Make policy decisions and proclaim local emergencies as needed.
6. Provide direction and management for EOC operations through Standard Operations Procedures (SOP), set priorities and establish strategies.
7. Coordinate operations of all responding units, including law enforcement, fire, medical, logistics etc.
8. Augment comprehensive emergency communication from EOC to any field operation when needed or appropriate.
9. Maintain EOC security and access control.
10. Provide recovery assistance in response to the situations and available resources
11. Keep senior, subordinate and tenant officials informed.
12. Keep local jurisdictions (Village/town/City, district and State) informed.
13. Operate a message center to log and post all key disaster information.
14. Develop and disseminate public information warnings and instructions.
15. Provide information to the news media.
16. Manage donation / aids.

The State EOC will operate under three primary conditions: normalcy (steady state), when no emergency incident exist sufficient to warrant full activation of the EOC; emergency without warning, when an incident occurs requiring full activation of the EOC in response to the incident; and emergency with warning, when the EOC is brought into full or partial activation to preemptively reduce the impact of impending incidents, and respond to the impact of the incident when it transpires. The activation of EOC will be regulated under the assigned authority to designated officials under State's EOP and SOP for state emergency operation center.

Under the Emergency Management with Preparedness, Response and Rehabilitation strategy, DMD has conceived, planned and designed the networks of the EOCs (Emergency Operation Centers) and Mobile / portable EOCs for coordination and optimal management of Emergency Response Resources.

The key factors for success of a coordinated emergency response depends on –

- 1 Redundancy, Scalability and interoperability of Information and Communication Technology (ICT) systems.
- 2 In-depth situational awareness
- 3 Comprehensive ability to quickly undertake "impact assessment".
- 4 Ability to quickly determine and coordinate asset utilizations.
- 5 Organizational flexibilities to accommodate a variety of responding entities,
- 6 Access to all supporting resources to formulate alternative response scenarios.

It is emphasized that the need for a robust and reliable Information and Communication Technology (ICT) infrastructure is crucial for supporting the activities under each of the six key factors, stated above, in a coordinated emergency response. The ICT infrastructure should survive worst disaster situations as public telecom infrastructure as well power supplies are likely to be damaged / affected due to disasters. DMD's Disaster Management System is planned on ICT based Decision Support System (DSS) as its driver.

2.2 Concept of EOCI

Proposed EOCI will support disaster management activities related to preparedness, mitigation, rescue, relief and rehabilitation. The crucial requirement for success of all activities is reliable communication linkages between all Stakeholders including government authorities. EOCI will establish dedicated communication links between responsible authorities and will also use public internet or shared public telecom network resources for communication and information as well as alert dissemination to the responsible government organisations. The proposed communication network for emergency operations will also include unified communication system.

The Operator is expected to maintain all hardware / software / applications / peripherals used in EOCI. The EOCI will have resource scalability and high level of reliability so as to meet any extempore increase in demand of communication and information linkages.

DMD expects that EOC Infrastructure (EOCI) will provide following facilities and capabilities:

- Information Management System (IMS) for Dissemination of information and alert messages to the government stake holders,
- Monitoring (audio, video, and telemetry),
- Data acquisition and analysis (DA&A),
- Coordination and priority setting,
- Resource Management and Communications Facilitation

Interaction within all stakeholders will be via voice, data and videoconferencing and the proposed EOICI will be useful for these activities. The IMS will also have a portal (IMSP) to provide access to NGOs and general public on updated disaster situation awareness reports. This facility will also be useful to receive feedback from Stakeholders.

It is proposed that appropriate communication and information systems shall be used so as to allow all emergency management and response partners to establish and maintain a common operating picture of the incident, based on Decision Support System (“DSS”).

2.2.1 State EOC (SEOC)

SEOC operations (control) room will be the central location where:

- All information pertaining to the prediction as well as occurrence of incident is received and analyzed
- Priorities are determined, strategies are developed and critical resources are assigned to tactical operations.
- Data on disaster parameters, information received from organisations responsible for disaster predictions such as Meteorological Department, Central Water Commission, State Irrigation departments, International weather and earthquake information portals as well as organisations responsible for Tsunami prediction etc. in addition to visual data from disaster sites, will be processed, analyzed and archived.
- Data will be transmitted, from various locations using EOICI or public telecom infrastructure including Internet to ensure that decision makers and people engaged in disaster response have common information base to operate upon. The DSS should provide dynamic information on status of disaster resources, tracking of personnel, equipment and systems necessary for post disaster response.

Planned unified communication system will support the key concepts of interoperability, reliability, scalability and portability to ensure that personnel from different disciplines, jurisdictions, organizations and agencies are able to communicate with each other instantly. For example, communication between first responders such as police, disaster rescue forces, fire brigades that use wireless communication systems mostly equipment operating in Very High Frequency (“VHF”) band and administrators on terrestrial or satellite based Very Small Aperture Terminals (“VSAT”), should be possible with Voice over Internet Protocol (“VoIP”) based unified communication system.

The call centre at SEOC is proposed to provide communication links amongst all Stakeholders including general public. The people can access the call centre to provide inputs on disaster

situations as well as get up-dates on post disaster events. The call centre will also be responsible for issue of emergency alerts to stakeholders.

The large display systems, voice, data communication links and video-audio conferencing facilities at SEOC are for simultaneous use of the concerned officers from DMD and officers of departments (together up-to 15 persons in existing SEOC building and up to 30 persons in the new facility) responsible for emergency support functions (“ESF”). Facilities and systems at SEOC should be designed for near 100% reliability.

Careful management of resources is essential before, during and after incidents. The standardized resource management practices such as identifying, inventorying, and organizing and tracking is being set-up as State Disaster Resource Network (“SDRN”) by DMD. The SDRN provides online resource data base of various parameters such as demographics, existing infrastructure for disaster preparedness such as shelters etc. All Stakeholders will access SDRN to draw plans for disaster response as well as to add new infrastructure facilities. This data base makes it possible for effective sharing and integration of critical resources across jurisdictions. Information management system and portal is expected to supplement SDRN system. Dynamic data base management in DSS should help identifying available resources for effective response.

The Operator is responsible for data migration from existing platform to the proposed data management system platform included in the bid document.

2.3 Structure of EOCI:

EOCI will mainly consist of:

- a. Failsafe communication network based on multiple technologies and redundant network resources, Universal Communications interface and back-up power systems
- b. Facilities at State and District EOCs including Audio and videoconferencing capabilities and Video display systems
- c. Conference / briefing facility to senior government functionaries and Press at SEOC, Patna.
- d. Information Management Portal System and call centre for interaction with stakeholders
- e. Decision Support System software

2.3.1 Planned Network Infrastructure

Public telecom networks such as landline telephones, cell phone networks, and microwave towers are affected / incapacitated during severe natural disasters. Hence the planned Bihar state EOC Infrastructure (EOCI) will have a reliable Emergency Communications Network (ECN) backbone that will be operational on 24*7 basis and will achieve reliability (better than or equal to) $\geq 99.5\%$ using multiple network resources, interoperability between networks and technology diversification.

The proposed communication network is expected to facilitate effective disaster response by maintaining continuous communication between the Emergency Operations Centers (“EOC”) at state, district, Mobile and portable Systems operating at disaster sites using

specially designed mobile vehicle mounted systems or portable emergency communication systems. The network will be used for information management (data, video and voice communications) and to support incident and information management systems during all stages of disaster management.

State Emergency Operations Centre (“SEOC”) and District level EOCs (“DEOC”) will be major nodes of the proposed network. Mobile and portable systems will be added to this network during disaster rescue operations.

2.3.2 The Emergency Communication Network:

The ECN Connectivity Matrix will be:

Sr. No.	Connectivity type	Communication facility	Connected Nodes	Services and redundancies	Minimum Network resources
1	Public telephones and Cell phones	Mainly Voice , fax and Text messages (SMS)	Between all fixed EOCs and all government departments responsible for Emergency Support Functions (ESF)	Primary communication links for Voice, fax and Text messaging	Telephone lines on as required basis
2	SWAN	Voice, data and videoconferencing	Between all fixed EOCs and all government departments responsible for ESF	First back-up for voice and as primary links for data communications and videoconferencing	Data connectivity rate: Between district and state EOCs @ 2.0 Mbps and 64 Kbps with ESF departments
3	MPLS Virtual Private Network (VPN) in case BSWAN is not available	Voice, data and videoconferencing	Between fixed EOCs and all government departments responsible for ESF	To bridge the gaps in BSWAN if any	Data connectivity rate: Between district and state EOCs @ 2.0 Mbps and 64 Kbps with ESF departments
4	VSAT	Voice, data and	Between all	• Second back-up for voice	Satellite spectrum

	network	videoconferencing	fixed transportable EOCs	<ul style="list-style-type: none"> • First back-up for data communications and Videoconferencing 	for 10.0 Mbps <ul style="list-style-type: none"> • One outbound link @ 4 Mbps • Ten Inbound links @ 512 Kbps
5	Broadband Internet	VoIP phones and data transmission	Between all fixed EOCs	Third back-up for data communications and voice communications	<ul style="list-style-type: none"> • 2X2 Mbps link @ SEOC • 512.0 Kbps broadband links @ DEOC
6	Wireless network	Voice	Between transportable EOCs and Disaster Response (DR) forces	Primary for interagency communications amongst disaster response forces	As required

Table 2.1: Connectivity matrix between various nodes of ECN

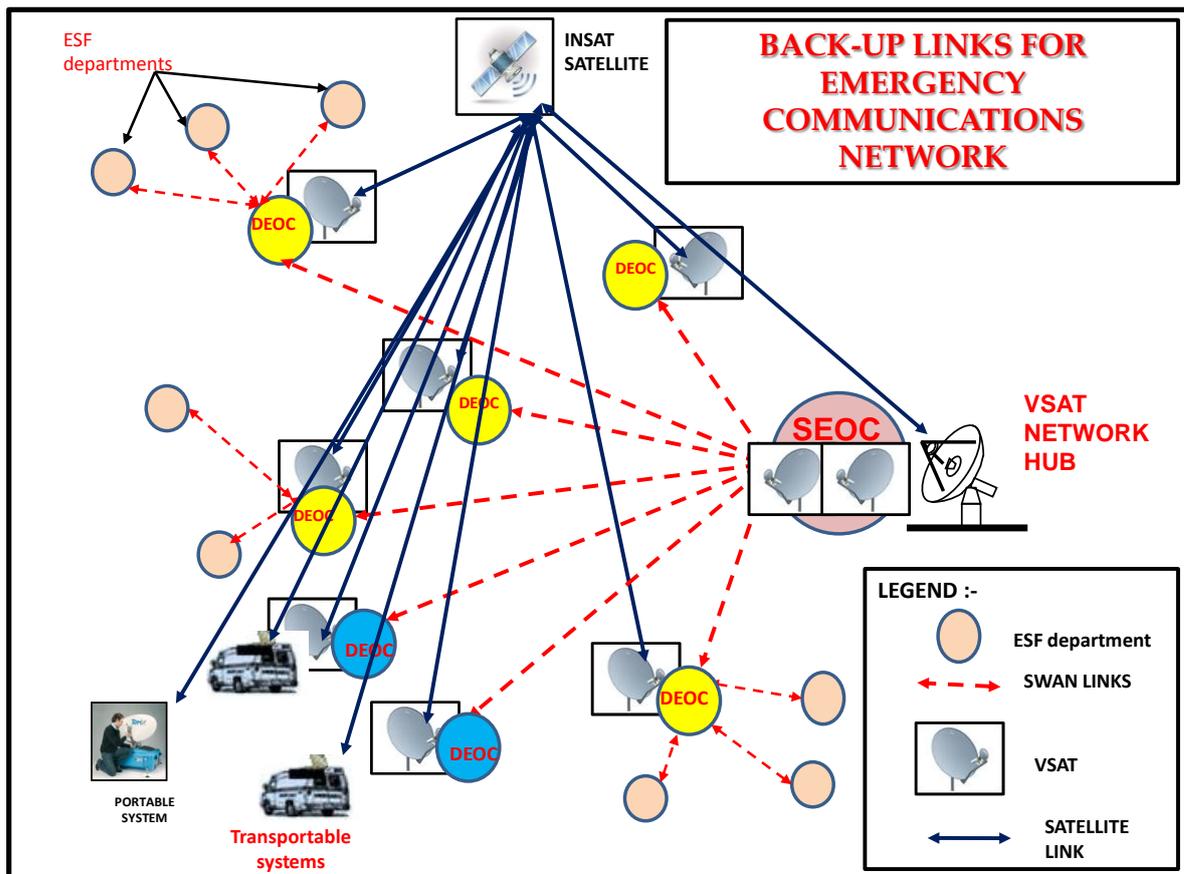


Figure 2-1: Schematic of VSAT and SWAN networks

2.3.2.1 Resources for setting-up of ECN:

Network resources for ECN will be public telephone (landline and cell phone) network, State Wide Area Network, VSAT network, broadband public Internet network and government wireless networks.

a. Public telephone networks:

Landline telephone network of Bharat Sanchar Nigam Limited (BSNL) and cellular networks operated by BSNL, Airtel and other service providers are available all over the state.

b. Bihar State Wide Area Network (BSWAN):

Bihar SWAN is set-up Bihar Electronic Corporation Ltd. (BELTRON) and is in operation for some time. The SWAN interconnects state headquarters with various government departments at state, divisional and sub-divisional levels using terrestrial network resources consisting of optical fiber, copper cables and wireless links and is backed-up by VSAT links.

c. Multi Protocol Label Switching (MPLS) Virtual private Network (VPN)

MPLS VPN at 2.0 Mbps rate between EOCs and at least 64.0 Kbps rates between EOCs and offices of ESF organisations is to be leased from licensed telecom service providers to bridge the gaps in BSWAN. This resource can also be used where BSWAN reliability is not up to the required standards.

d. VSAT network:

The VSAT network will be set-up to interconnect State, Division and sub-division level EOCs. VSAT network will be part of the total project to set-up ECN and EOCs at State (2), Divisions (9), Districts (38), MEOC (10) and portable (7). Schematic of integrated back-up network (VSATS and SWAN) is shown above (figure 2-1).

The VSAT network either can be a shared Hub operation (part of VSAT service provider's network) or dedicated network consisting of a central Hub collocated with State EOC at Patna or a suitable place nearby. VSAT nodes will provide necessary communication facilities for voice, data and video communications. The satellite bandwidth necessary for operation of VSAT network (as already mentioned above to support up to 10.00 Mbps data links) will be available from Antrix, commercial arm of Indian Space Research Organization (ISRO). Same can also be leased from licensed service providers in case option of shared Hub is chosen.

- **Fixed VSATs:**

Schematic of a typical VSAT node is shown in Figure 2.2 below.

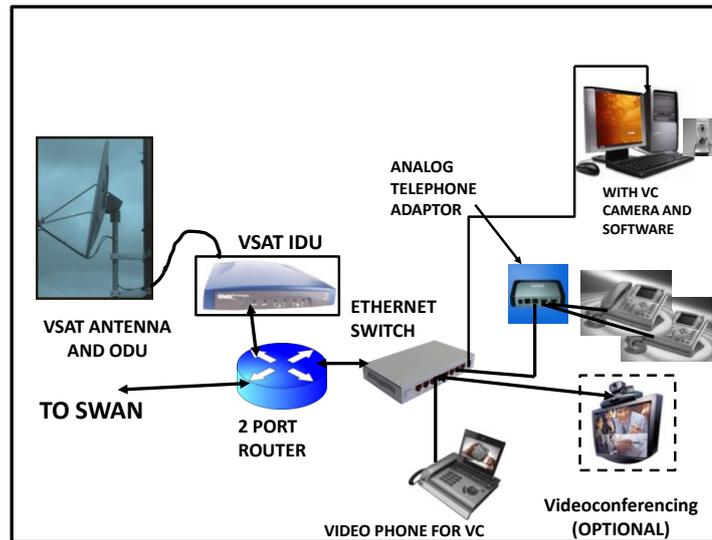


Figure 2.2: Schematic of equipment set-up at each VSAT node

The equipment will consist of:

- VSAT equipment
- Router for switch over between VSAT and SWAN
- Ethernet switch
- VoIP phones or analogue phones with adaptors
- Video phone / standalone Videoconferencing system or / software based Desktop VC
- Data linkage using desktop PC

- **Transportable VSAT systems**

Transportable systems will consist of all-terrain vehicle mounted communication and command centre consisting of:

- a. All terrain 4 wheel drive vehicle with necessary furnishings
- b. Roof mounted antenna with capability to automatically locking and tracking of desired satellite



Figure 2.3: Typical vehicle mounted VSAT and EOC

- c. VSAT equipment (excluding antenna)
 - d. Access equipment for voice, data and videoconferencing
 - e. Laptop computers for 3 operators
 - f. Furniture for control room
 - g. Universal access interface unit
 - h. Extendable VHF antenna, VHF wireless radio base station and hand held sets (10 per vehicle) and a micro BTS for limited area cell phone network with backhaul via VSAT for long distance communications
 - i. External video camera for collection of video information on disaster situation
 - j. Air-conditioned equipment room
 - k. Back-up power consisting of UPS and diesel generator
 - l. Command and control system with necessary software and GIS resource data base
- **Portable VSATs**

Portable VSAT communication systems will consist of segmented antenna that can be assembled at disaster sites and other equipment.



Figure 2.4: Typical Portable VSAT system

The portable VSAT equipment will consist of:

- a. Antenna with manual tracking of satellite equipment (*optional offer for auto-tracking system may be submitted by the bidder*)
- b. VSAT equipment (excluding antenna)
- c. VoIP phones
- d. Integrated extendable VHF radio wireless antenna and a Micro Base Transceiver station (BTS) to provide limited coverage cell phone service at disaster site
- e. 500 VA capacity portable generator set and battery set

The system can provide voice and data communication link using laptop.

To sum-up VSAT network resources to be established are included in the table below:

e. Universal communications interface system:

The Universal communication interface facilitates interconnectivity between various wireless and wire line communication systems. This facility is essential to ensure communication links between organisations responsible for DR activities such as Police, Fire brigade etc. who use wireless radio equipment for intercommunications using VoIP phones available with state and district administration responsible to guide DM efforts.

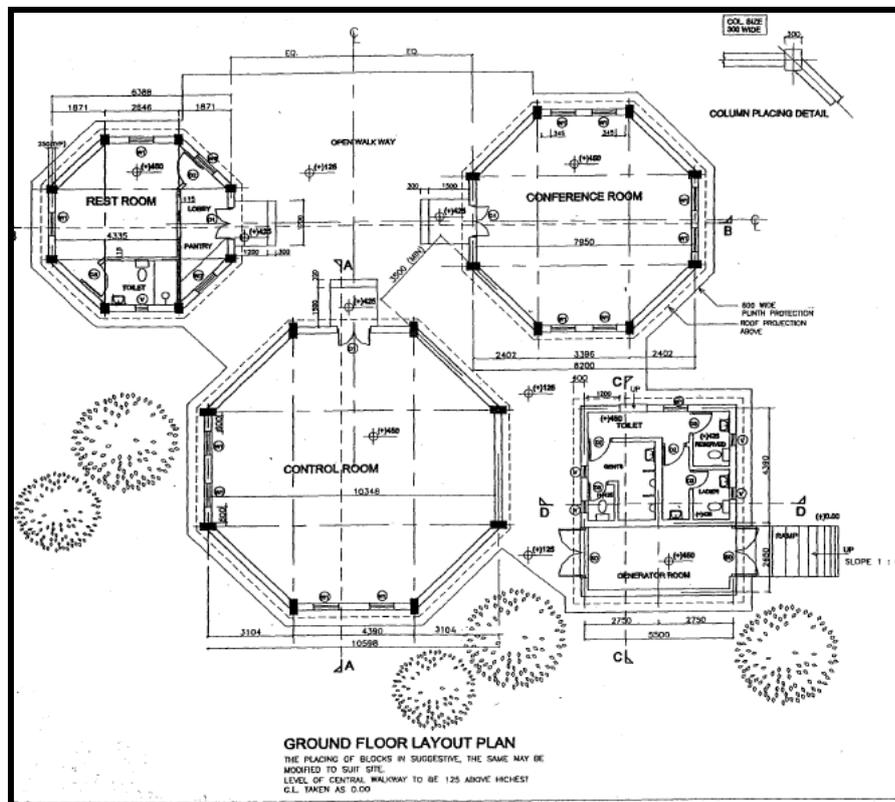


Figure 2.6: Indicative layout plan of existing SEOC building at Old secretariat, Patna

Basic functions of SEOC will be to:

- Receive, monitor, and assess disaster information
- Keep track of available resources
- Monitor, assess, and track response units and resource requests
- Manage resource deployment for optimal usage
- Make policy decisions and proclaim local emergencies as needed
- Provide direction and management for EOC operations through Standard Operations Procedure (SOP), set priorities and establish strategies
- Coordinate operations of all responding units, including law enforcement, fire, medical, logistics etc.
- Augment comprehensive emergency communication from EOC to any field operation when needed or appropriate
- Provide recovery assistance in response to the situations and available resources
- Keep senior and subordinate officials informed on situation up dates
- Operate a message center to log and post all key disaster information
- Develop a system for disseminate public information warnings and instructions
- Provide information to the news media (press briefing)
- Manage donation / aids from national as well international sources



Photograph 2.1: SEOC buildings at Old secretariat, Patna

2.3.3.1 Control room:

The control room is the hub of activities during disaster response and is expected to support all activities mentioned above. SEOC control room will be manned round the clock. Suitable lighting and air conditioning for ensuring efficiency of staff during long working hours would be installed in control rooms. The Control Room will have 30 number of Telephone lines (preferably ISDN PRI) The control room will be equipped with adequate PCs, network printers and fax machines. A scanner and a Xerox machine will enhance the efficiency to the working staff. A PC (or server) along with GSM modem(s) dedicated for sending SMS alerts will be installed to keep senior officers informed about up-dates on disaster events.

The emergency communication network would be utilized for:

- Voice communication and audio conferencing between various responsible organisations and officials
- Data transfer for monitoring of scope of disasters and official communications (such as e-mails) for information collection as well as for issuing orders / directions etc.
- Video file transfers and Videoconferencing between various agencies to get pictorial information regarding disasters and face to face meetings for deciding on course of response to Disasters.

- To act as network hub for Emergency Communication Network (ECN) and control centre for issuing Emergency warning messages to senior government officials and ESF organisations
- Information dissemination to Public, International Aid agencies, NGOs etc. using Internet based portals

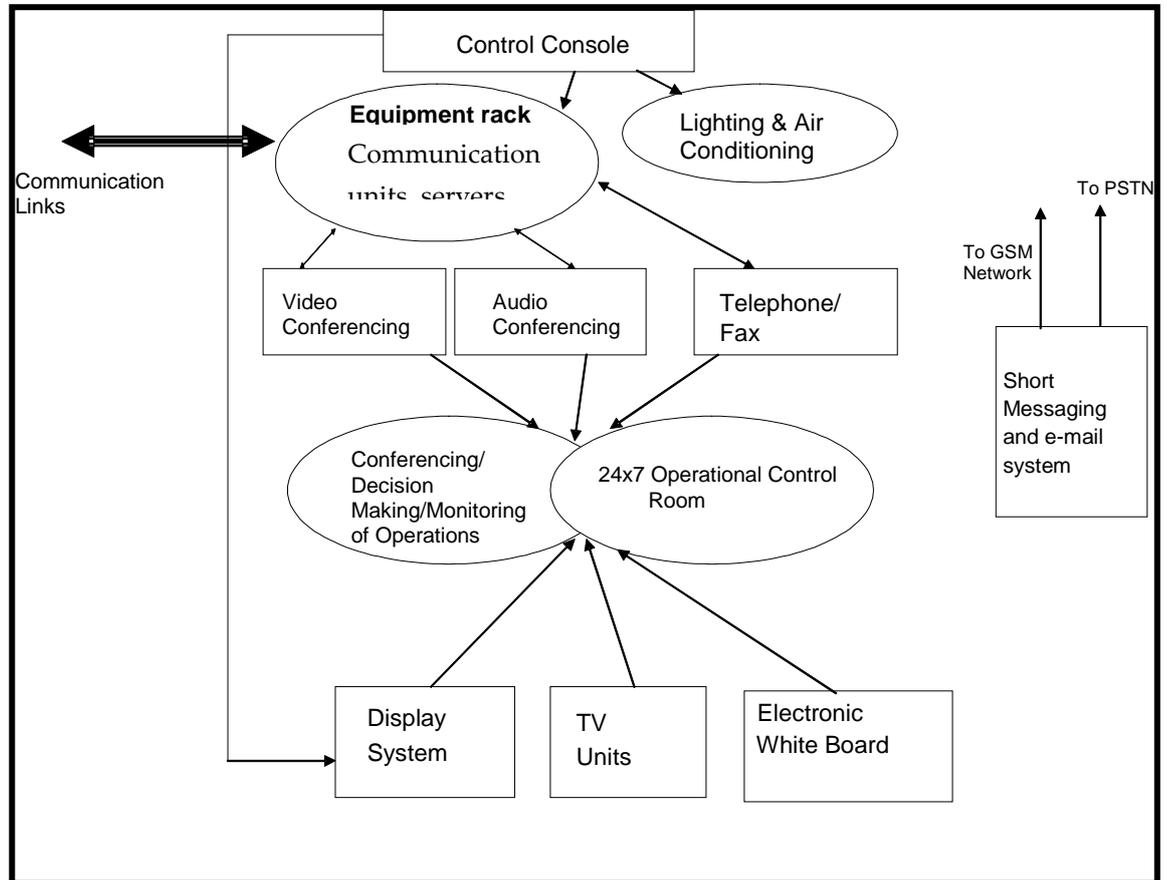


Figure 2.7: Functioning and interconnection between various operational systems at SEOC

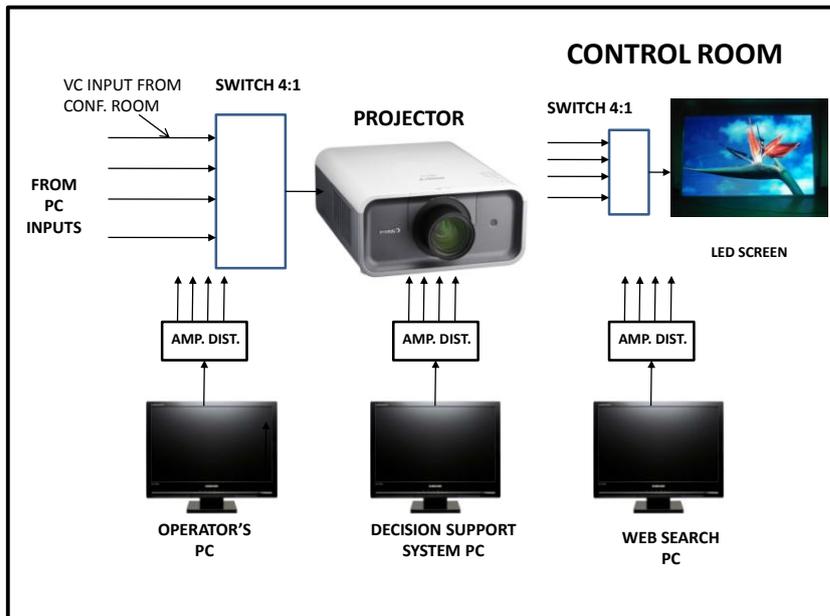


Figure 2.8: Display Equipment set-up in Control room

2.3.3.2 Conference room:

The conference or briefing room will have essential display systems (LED Screens / Projector with screen) and suitable conference tables and chairs.

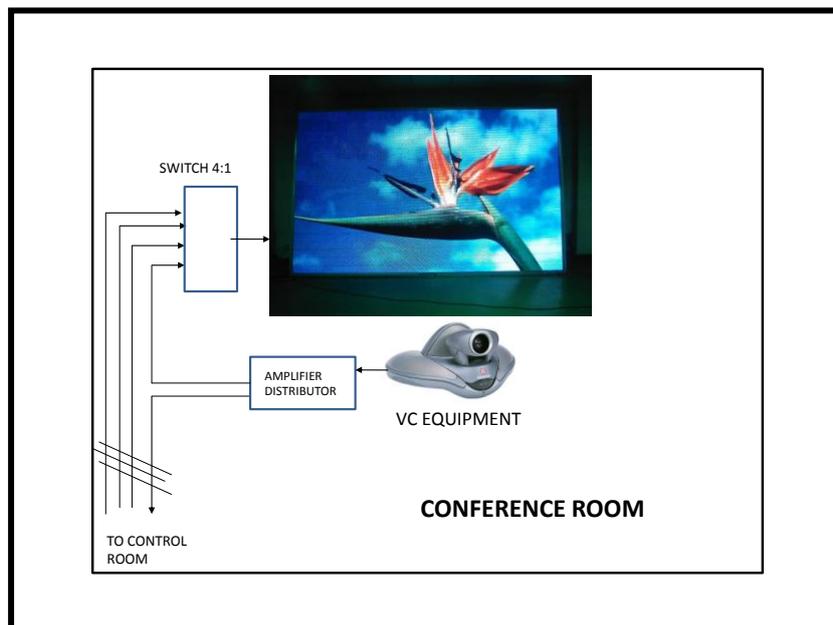


Figure 2.9: Schematic of display equipment Set-up in conference room

The conference room will be used to:

- a. Brief senior functionaries of the government on disaster situation, actions taken and to facilitate the government to decide on the course of action to effectively respond to disasters
- b. Arrange interaction between government functionaries and first responders operating at disaster sites for real time information on disasters
- c. Conduct press briefings

2.3.3.3 Equipment and network resources at SEOC:

The SEOC will be equipped with suitable systems for:

- a. Multiparty Audio and video conferencing
- b. News gathering (TV news channels, public access telephone numbers etc.)
- c. Large Video display systems for geographical maps / Weather maps / satellite imagery (such as maps obtained by remote sensing satellites)
- d. Terrestrial (land line and Cellular) Telephone and data links
- e. Infrastructure for a 24X7 call centre
- f. Voice recording with time stamp to record all incoming and outgoing calls from / to public
- g. Short Messaging System to send disaster alerts to responsible officers
- h. Very High Frequency (VHF) radio base station / handsets (walkie-talkie)
- i. Equipment for Satellite communication links such as VSATs, Satellite phones etc.
- j. Universal interface for interconnectivity between different communication links (wireless radio, VoIP phones etc.)
- k. Decision support system and software
- l. Computers, servers for text messaging, voice broadcasting and State Disaster Data Network (SDRN), LANs
- l. Printers, fax and Xerox machines or composite machine
- m. Air-conditioning
- n. Furniture for staff and in conference rooms
- o. Physical map display system
- p. Access control systems for security of data bases
- q. Emergency power back-up consisting of UPS and Diesel Generator set with adequate diesel storage capacity

2.3.4 Systems and facilities at DEOC:

District level EOCs will act as eyes and hands of SEOC in all disaster response activities. These remote EOCs may act as back-up control rooms in case SEOC is unable to directly communicate with remote locations.

The Deputy Commissioner, (DC) who is head of the district administration, will be the local leader and responsible officer; who will be assisted by his deputies at district HQ and

concerned Block level officers. The DC will be supported by other departments that carry out emergency support functions such as police, fire brigade, health, transportation, irrigation, food and civil supplies etc. All these organisations will have communication links based on Public telephone and SWAN infrastructure. Minimal Wireless radios are included in the proposal as back-up in case public telecom infrastructure has failed or is not up to the required reliability standards. DEOC will have a back-up system for issuing warning messages to ESF organisations and other government officials. This will be ensured by installing necessary software in the Desktop PC that is part of ECN.

Layout plan and photograph of typical DEOC are given below

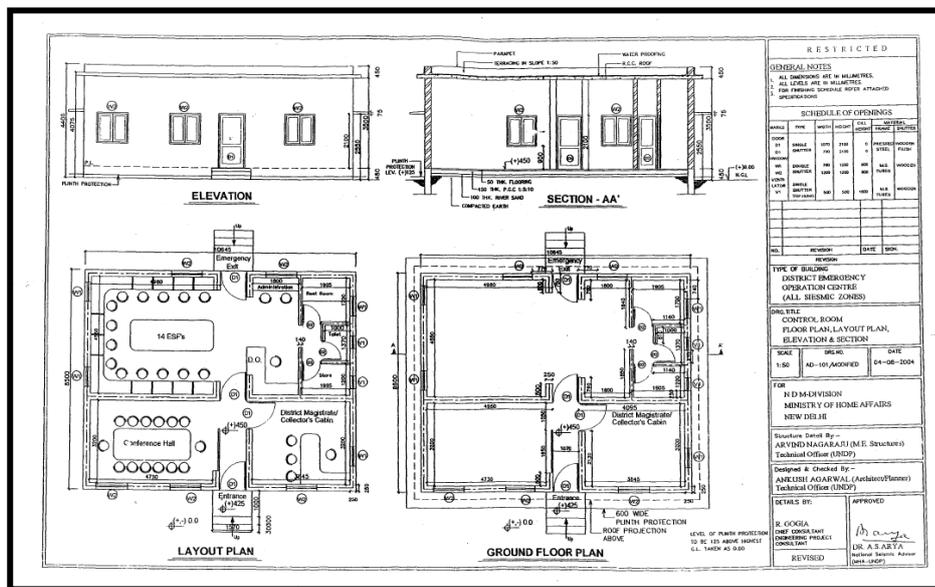


Figure 2.10: Layout plan of typical DEOC



Photograph 2.2: DEOC building at Supaul district

The state government has already constructed large number of dedicated buildings for District EOCs and (some are under construction) may earmark spaces at existing buildings / construct dedicated buildings at most vulnerable sub-divisions. DEOCs wherever set-up will have:

- a. Tabletop video phone based Video Conferencing (VC) desktop based VC
- b. News gathering (TV news channels, public access telephone numbers etc.)
- c. Video display system for geographical maps / Weather maps / satellite imagery (such as maps obtained by remote sensing satellites)
- d. Terrestrial (land line and Cellular)Telephone and software for voice broadcasting
- e. Very High Frequency (VHF) radio base stations / hand sets
- f. Equipment for Satellite communication links such as VSATs, Satellite phones (when permitted by regulatory authorities) etc.
- g. Computers, LAN ,Scan /print / Fax composite machine
- h. Air-conditioning (at least for electronic equipment)
- i. Furniture for staff
- j. Physical map display system
- k. Emergency power back-up UPS and Diesel Generator set with adequate diesel storage

2.4: The Disaster Information Management System

The state control room will be operational round the clock and will coordinate with district EOCs / flood control rooms that function during disaster season (June and October in case of floods). Flood and rain monitoring system Flood Monitoring and Information System (FMIS) is operational for last few years. FMIS provides information on floods and to some extent helps in prediction of severity of floods. Alert and warning messages are sent to divisional and sub-divisional offices via telephone calls, fax messages or SMS.

2.4.1 Call centers for access to public and issuing alert messages to government officials:

A call centre that is operational round the clock (24X7) will be set-up to provide access to public via toll free telephone number “1070” which is specifically allotted for such purposes for State level EOCs. Similarly call centers operational during day time with access number 1077 will be set-up at each District level EOC). Both access numbers are allotted by Department of Telecommunications (DoT) and Ministry of Home Affairs (MHA), Government of India for this purpose.

Proposed facility will provide:

- Access to public to convey information to the State EOC regarding disaster events as well as get updates on disasters from the EOC
- On-line call recording mechanism to ensure that information received as well as disseminated from SDR&IC is recorded for subsequent analysis and effecting corrective actions if necessary
- to receive information on disaster situations from state, central agencies responsible to provide such inputs, collate and generate alert messages for senior officers for deciding on course of action if necessary

- Collate and format the information received from public as well as central and state government agencies regarding disasters or impending disasters to facilitate generation of text message to be sent via SMS (Short Messaging Service) to a large number of responsible senior officers from various organisations responsible for disaster response
- Collection of information from hospitals etc. for conveying up-dated information to responsible officers or general public (if permitted by authorities to do so)

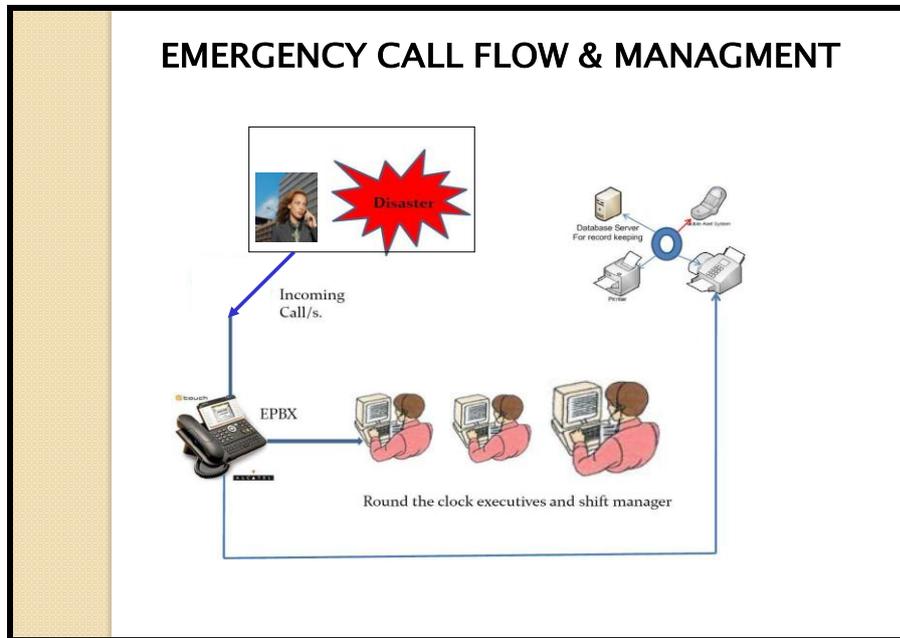


Figure 2.11: Concept of SDR&IC with facility for SMS and audio conferencing

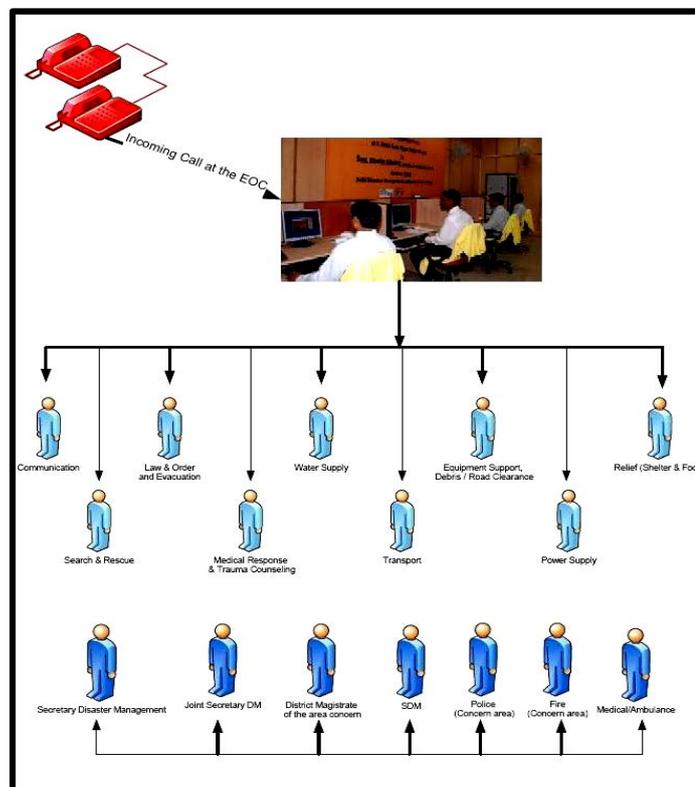


Figure 2.12: Concept diagram showing dissemination of alerts to various organisations

- Integration with Emergency Medical Services (EMS) network control room that has “108” as access number so that EOC can initiate necessary response in case of major disaster which in normal case also needs EMS support.

Call centers that are operational during day time only at DEOCs can be upgraded to 24X7 operations with additional staff to cater for increased communication requirements during disaster situations in vulnerable district HQ during flood / high wind season / incidence of a major disaster. This call centre will provide access to public and other stake holders.

2.4.2 Information Management System Portal (IMSP):

The IMSP will be web based information access system set-up for the benefit of Government officials as well as general public. The schematic of the system is shown in the figure 4.3 below.

The operational staff at SEOC will be responsible to collect information on impending disasters from:

- Various government agencies responsible for issuing advance warnings
- TV and radio news channels
- Public

Collate the information received from various sources and prepare a status report after validation from available sources. The validated information will be uploaded on the portal after obtaining permission from designated authorities.

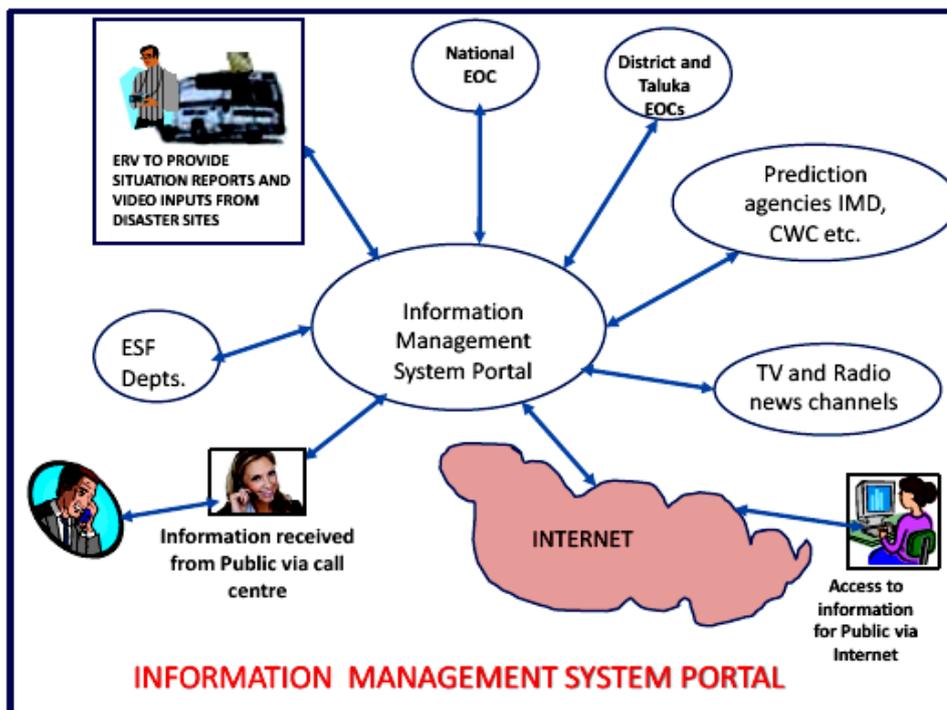


Figure 2.13: Schematic of Information Management Portal

The portal will be hosted at the data centre in use for other portals of Bihar state government.

2.5 Decision Support System (DSS):

The DSS will be a robust portal based solution for public safety and emergency management that provides four core capabilities:

- a. Dynamic Team Management (Collaboration, Communication and Control)
- b. Disaster Planning (Before)
- c. Emergency Operations (During)
- d. Disaster Recovery (After)

Dynamic Team Management should address inter-agency collaboration, communication and control requirements because, as a disaster progresses, it is necessary to communicate, to discuss and to direct activities with different individuals & groups.

The proposed DSS software shall be easy to use and assimilate. The amount of time required for training application Administrators and time to train an average user should be as low as possible. Using any browser-based tool, an average EOC manager should be able easily create and modify role-based web dashboards containing situation maps, event log, and resource status boards, without reliance on a vendor to make these changes. The application must be able to manage more than one incident concurrently.

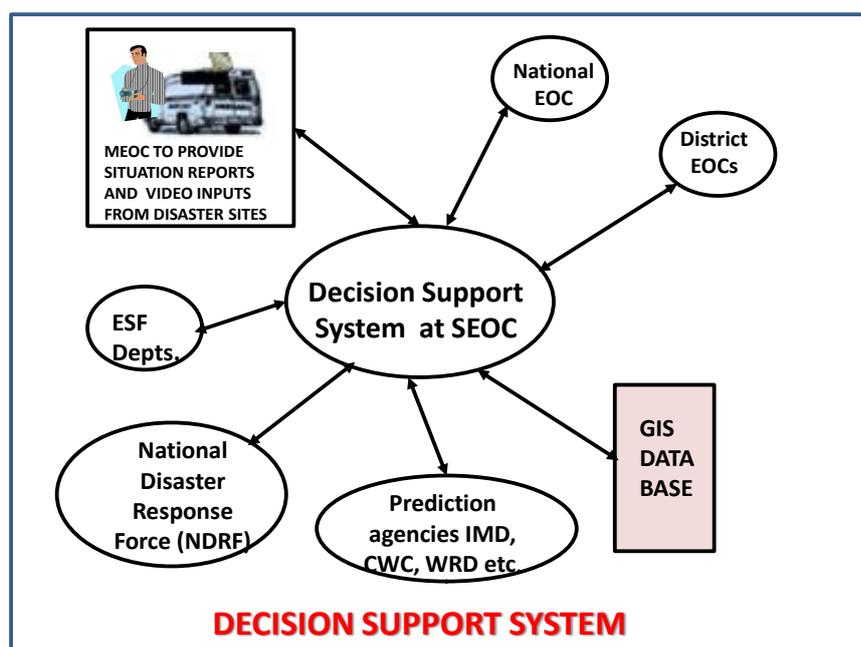


Figure 2.14: Schematic for DSS

The proposed software must support automated mass messaging / email notifications based on user-configurable thresholds, including incident type, severity and proximity to any map layer (e.g. critical infrastructure). Disaster Planning should encompass all actions taken prior to the occurrence of a disaster in order to mitigate risk and impact.

(Preparedness, Correlate Plans and Content with Procedures, Implement Action Plans, Conduct Trainings & Exercises and measures put in place to mitigate long-term risks, such as early warning processes)

NOTE:

The web portal and application design-documents shall be prepared in consultation with DMD project team. Both system level and user level documents should be made available to DMD

SECTION – 3: INFORMATION & INSTRUCTIONS TO BIDDERS

3.1 Notice for EoI

Vide this NEoI, DMD invites bids for selection of an Operator (“**Bid**”) for setting-up and managing BS-EOCI on BOOT basis for the period of 5 (five) years from the date of commissioning of the facility. This NEoI describes functional, technical and communication network requirements of the EOICI to be set-up and operationalised.

DMD GoB intends to select the Operator through an open competitive bidding in accordance with the procedure set out herein.

3.2 Due diligence by Bidder

Bidders are encouraged to inform themselves fully about the assignment and the local conditions before submitting the Bid by paying a visit to the site, sending written queries to the DMD, and attending the pre-bid conference on the date and time specified in Clause () and obtain additional information at their own cost and responsibility.

3.3 NEoI Document and Tender Fee

- The NEoI document can be downloaded from the Official Website of DMD GoB, www.disastermgmt.bih.nic.in till bid due date mentioned in Section 3.7 below.
- A Tender Fee of INR 10,000/- (INR Ten Thousand only) in the form of a demand draft drawn on any bank mentioned in Clause 2.14.1 in favour of " **Disaster Management Department**", payable at **Patna**, Bihar State shall be paid along with the Bid (“**Tender Fee**”).

3.4 Validity of the Bid

Bids shall remain valid for 180 days from the Bid Due Date. A Bid valid for a shorter period may be rejected as non-responsive.

In exceptional circumstances, DMD may request the Bidder(s) for an extension of the period of validity. The request and the responses thereto shall be made in writing (or by fax). The validity of the Bid Security shall also be suitably extended.

3.5 Brief description of the Bidding Process

DMD has adopted a single stage, two phase selection process (collectively “**Bidding Process**”) for evaluating the Bids comprising Technical Bid and Commercial Bid. The Technical Bid and Financial bids are to be submitted in separate sealed envelopes. Both envelopes should be clearly marked with name and address of the bidder (s), due date of bids.

Both bids should be enclosed in a single sealed envelope which should be clearly marked with name of the project for which bids are submitted along with due date of the bids. *Name of the company should not be marked on the outer envelope.*

3.5.1 BID Evaluation process:

- a. In the first phase, it will be checked whether bid documents are prepared and submitted as per instructions for bidders in NEoI document,
- b. Next it will be verified whether bidder satisfies pre-qualification criteria (included in **Section 5**) for selection for further evaluation process.

Note:

It may be noted that Bids of only those Bidders that satisfy pre-qualification criteria will be considered for technical and commercial evaluation.

- c. Detailed technical evaluation will be carried out as specified in **section 5** of this NEoI and marks will be allotted as specified in **section 5**.
- d. A list of short-listed Bidders who score 70 (seventy) and above marks shall be prepared.
- e. These short listed Bidders will be informed that their bid is shortlisted
- f. Subsequently shortlisted bidders will be asked to demonstrate performance of various applications / software offered for the Project at No Cost (to DMD) and No Commitment ("NCNC") basis.

Note:

- No Cost (to DMD) and No Commitment ("NCNC") means that the bidder has to arrange the demonstration at no cost to DMD and DMD doesn't make any commitment for placement of orders on such bidder (s), even in case of successful demonstration of capabilities of offered systems.
 - Commercial Bids of those Bidders who don't participate in NCNC demo or those Bidders that are unable to successfully demonstrate capabilities as specified in their Bids will not be considered for further evaluation.
- g. In the second phase, a commercial evaluation will be carried out, only with respect to the short-listed Bidders, as specified in **section 5**.
 - h. Bids will finally be ranked according to their combined technical and financial scores, calculated in accordance with **Clause 5 of this NEoI**.
 - i. Finally the first ranked Bidder shall be declared as selected ("**Selected Bidder**") and LOI shall be issued to him, while the second ranked Bidder will be kept in reserve.
 - j. The Selected Bidder shall be required to execute, within 15 days of receipt of LOI, the Service Agreement with DMD GoB.

3.6: Currency conversion rate and payment

For the purposes of technical evaluation of Bidder, prices shall be quoted in Indian National Rupees ("INR") by all Bidders, including the foreign Bidders.

All payments to the Operator shall be made in INR in accordance with the provisions of this NEoI. The Operator may convert INR into any foreign currency as per the applicable laws and the exchange risk, if any, shall be borne by the Operator.

3.7 Key Events and Dates

DMD GoB would endeavor to adhere to the following schedule:

Sr. No.	Event	Target date
1.	NEOI issue date	XX XX 2012
2.	Pre Bid Conference	XX XX 2013
3.	Bid Due Date	1500 Hrs on XX XX 2013
4.	Technical Bid Opening	1600 Hrs on XX XX 2013
5.	Presentation and NCNC Demo on Technical Bid by short-listed Bidders.	To be intimated later
6.	Declaration of short-list of Bidders for Commercial Bid opening.	To be intimated later
7.	Opening of Commercial Bids	To be intimated later
8.	Date of signing of the Service Agreement.	To be intimated later

3.8 Communications

All communications including the submission of the Bid should be addressed to:

The Principal Secretary
Disaster Management Department Government of Bihar
Old Secretariat, Patna-800015

Phone No.:

Fax No. :

The **Official Website** of the DMD is: www.disastermgmt.bih.nic.in

All communications, including the envelopes, should contain the following information, to be marked at the top in bold letters:

NEOI Notice No. xx of 2012

Name of the Bidder

3.9 GENERAL

3.9.1 Detailed description of the objectives, scope of services, deliverables and other

requirements relating to this Project are specified in this NEoI (NEoI) document. In case an applicant firm possesses the requisite experience and capabilities required for undertaking the Project, it may participate in the Bidding Process either individually (“**Sole Bidder**”) or as Lead Member of a consortium of firms in response to this invitation. The term applicant (“**Bidder**”) means the Sole Bidder or the Lead Member, as the case may be. The manner in which the Bid is required to be submitted, evaluated and accepted is explained in this NEoI document.

3.9.2 Bidders are advised that the selection of Operator shall be on the basis of an evaluation by DMD GoB through the Bidding Process specified in this NEoI document. Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Bidding Process will be given and that DMD’s decisions are final, without any right of appeal whatsoever.

3.9.3 Bidders shall submit their Bids in the manner specified in this NEoI. Upon selection, the Bidder shall be required to enter into a Service Agreement with DMD in the form specified at **Schedule (.)**.

3.9.4 The following conditions shall be adhered to while submitting a Bid:

- (a) Bidders should provide requested information truthfully and details should be sufficient to satisfy any reasonable person
- (b) information supplied by a Bidder (or other constituent Member if the Bidder is a Consortium) must apply to the Bidder, Member or Associate named in the Bid and not, unless specifically requested, to other associated companies or firms; and
- (c) In case the Bidder is a Consortium, each Member should substantially satisfy the pre-qualification requirements to the extent specified herein.

3.9.5 **Information regarding financial performance:** Notwithstanding anything to the contrary contained herein, in the event that the Bid Due Date falls within three months of the closing of the latest financial year of a Bidder, the Bidder shall ignore such financial year for the purposes of its Bid and furnish all its information and certification with reference to the 5 (five) years or 3 (three) years or 1 (one) year, as the case may be, preceding its latest financial year. For the avoidance of doubt, financial year shall, for the purposes of Bid hereunder, mean the accounting year followed by the Bidder in the course of its normal business.

3.9.6 **Number of Bids**

No Bidder or its Associate shall submit more than one Bid for the Project. A Bidder applying individually or as an Associate shall not be entitled to submit another Bid either individually or as a member of any Consortium, as the case may be.

3.9.7 **Cost of Bids**

The Bidders shall be responsible for all of the costs associated with the preparation of their Bids and their participation in the Bidding Process including subsequent negotiation, visits to DMD, Project site etc. DMD will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

3.9.8 **Acknowledgement by the Bidder**

It shall be deemed that by submitting the Bid, the Bidder has:

- (a) Made a complete and careful examination of the NEoI
- (b) Received all relevant information requested from DMD;
- (c) Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the NEoI or furnished by or on behalf of DMD;
- (d) Satisfied itself about all matters, things and information necessary and required for submitting an informed Bid and performance of all of its obligations there under;
- (e) Acknowledged that it does not have a Conflict of Interest; and
- (f) Agreed to be bound by the undertaking provided by it under and in terms hereof.

3.9.9 DMD shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to NEoI or the Bidding Process, including any error or mistake therein or in any information or data given by DMD.

3.9.10 Right to reject any or all Bids

3.9.10.1 Notwithstanding anything contained in this NEoI, DMD reserves the right to accept or reject any Bid and to annul the Bidding Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.

3.9.10.2 Without prejudice to the generality of **Clause** (.), DMD reserves the right to reject any Bid if:

- (a) At any time, a material misrepresentation is made or discovered, or
- (b) The Bidder does not provide, within the time specified by DMD, the supplemental information sought by DMD for evaluation of the Bid.

Misrepresentation/ improper response by the Bidder may lead to the disqualification of the Bidder. If the Bidder is the Lead Member of a Consortium, then the entire consortium may be disqualified / rejected. If such disqualification / rejection occurs after the Bids have been opened and the highest ranking Bidder gets disqualified / rejected, then DMD reserves the right to consider the next best Bidder, or take any other measure as may be deemed fit in the sole discretion of DMD, including annulment of the Bidding Process.

3.9.11 Clarifications by Bidders

3.9.11.1 Bidders requiring any clarification on the NEoI may send their queries to DMD in writing one week before the date for Pre-Bid meeting mentioned in the Schedule of Bidding Process at **Clause** (.).

The envelopes shall clearly bear the following identification:

“Queries / Request for Additional Information

Concerning NEoI, Notice No. XX of 2012

For Selection of BOOT (Build, Own, Operate, Transfer) Operator for setting up EOCI (Emergency Operations Centre Infrastructure)

For Disaster Management Department, Government of Bihar”

Queries should also be e-mailed to XXXXXXXX

DMD shall endeavour to respond to the queries within the period specified therein but not

later than 7 (seven) days prior to the Bid Due Date. DMD will post the reply to all such queries on the Official Website only without identifying the source of queries.

3.9.11.2 DMD reserves the right not to respond to any questions or provide any clarifications, in its sole discretion, and nothing in this **Clause** (.) shall be construed as obliging DMD to respond to any question or to provide any clarification.

3.9.12 Amendment of NEOI

3.9.12.1 At any time prior to the Bid Due Date, DMD may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the NEOI document by the issuance of addendum/ amendment and posting it on the Official Website.

3.9.12.2 The amendments will be posted on the Official Website along with the revised NEOI containing the amendments and will be binding on all Bidders.

3.9.12.3 In order to afford the Bidders a reasonable time for taking an amendment into account, or for any other reason, DMD may, in its sole discretion, extend the Bid Due Date.

3.9.13 Language

The Bid with all accompanying documents (“**Bidding Documents**”) and all communications in relation to or concerning the Bidding Process shall be in English language and strictly in the forms provided in this NEOI, wherever applicable. In case any of the Bidding Documents are in another language, it must be accompanied with an accurate translation of the relevant passages in English, and in case of any discrepancy between the original and the translated copy, the translated (in English) copy shall prevail.

3.9.14 Format and signing of Bid

3.9.14.1 The Bidder shall provide all the information sought under this NEoI. DMD would evaluate only those Bids that are complete in all respects.

3.9.14.2 The Tender Fee shall be placed in a sealed envelope clearly marked as “TENDER FEE”. The original and two copies of the Technical Bid shall be placed in a sealed envelope clearly marked “TECHNICAL BID”. The envelopes containing the Tender Fee & Technical Bid shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address, reference number, and be clearly marked “DO NOT OPEN, EXCEPT IN PRESENCE OF THE OFFICIAL APPOINTED, BEFORE [*insert the time and date of the submission deadline as indicated in this NEoI*]” and shall bear the submission address and NEoI No. Covers thus prepared should also indicate clearly the name, address, telephone number, e-mail ID and fax number of the Bidder to enable the Bid to be returned unopened in case it is not received in time. The Client shall not be responsible for

misplacement, losing or premature opening. If the Technical Bid envelope is not sealed and/or marked as stipulated, DMD may decide this to be case for rejection of Bid.

3.9.14.3 All Bidding Documents, other than the Commercial Bid, should be hard bound and numbered in volumes if there are more than 1 (e.g. Technical Bid Volume-1, 2 etc.). All Bidding Documents should be page numbered and appropriately flagged and must contain an index showing contents with page numbers. **Any deficiency in the documentation may result in the rejection of the Bid.**

3.9.14.4 In case of any discrepancy observed by DMD in the contents of the submitted original bid documents with respective copies, the information furnished in original paper bid document will prevail over others.

3.9.14.5 As part of the Bid, Bidder should also provide the Technical Bid in soft copy format, in the form of a non-re-writeable CD (Compact Disc) as follows:

3.9.14.5 Two copies of CD each containing the Technical Bid - should be sealed along with the hard copies of the Technical Bids.

3.9.14.6 All CDs submitted by the Bidder must be in sealed covers. The sealed covers as well as the CD media must be duly signed by the Bidder using a "Permanent Pen / Marker", should be super-scribed with "Technical Bid-Soft Copy" and should bear the name of the Bidder.

3.9.14.7 Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted in the original paper bid document. In case of any discrepancy observed by DMD in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.

Please note that:

- Prices should not be indicated in the Technical Bid document or CD and should only be indicated in the Commercial Bid.
- Telex / Telegraphic / Tele-fax / E-mail Bids will not be considered.
- Copies of technical bids to be submitted along with the original.
- If the outer cover is not sealed and marked as indicated above, DMD will assume no responsibility for the Bid's misplacement or premature opening and may at its discretion reject the Bids.

3.9.14.8 The Bid and its copy shall be typed or written in indelible ink and signed by the authorised signatory of the Bidder who shall initial each page, in blue ink. In case of printed and published Bidding Documents, only the cover may be initialed. All the alterations, omissions, additions, or any other amendments made to the Bid shall be initialled by the person(s) signing the Bid. The Bids must be properly signed by the authorised representative (“**Authorised Representative**”) as detailed below:

- (a) by a duly authorised person holding the Power of Attorney, in case of a Limited Company or a corporation; or
- (b) by a duly authorised person of the Lead Member, holding the Power of Attorney, in case of consortium.

A copy of the Power of Attorney certified under the hands of a partner or director of the Bidder and notarised by a notary public in the form specified in schedule (1) shall accompany the Proposal.

3.9.14.9 Except as specifically provided in this NEOI, no supplementary material will be entertained by DMD, and that evaluation will be carried out only on the basis of Bidding Documents received by the closing time of Bid Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, DMD reserves the right to seek clarifications under and in accordance with the provisions of Clause 2.18.

3.10 Technical Bid

3.10.1 Bidders shall submit the Technical Bid to provide complete technical information on the solution offered by the bidder and should satisfy requirements of NEOI document

3.10.2 The Technical Bid, besides the other requirements of the Bid, shall comprise of the following, in the appropriate format, properly indexed wherever provided and appropriately indexed:

- Technical Bid Letter;
- General Information about the Bidder;
- Bidder’s financial strength;
- Bidders experience in design, implementation, operation and maintenance of EOC or similar highly reliable systems;
- Technical Solution development and Integration approach;
- Specifications of the ICT Components and Bill of Quantities (BoQ);
- Manpower resource allocation;
- Project Implementation and Management Plan;
- Training approach and methodology;
- Bidder’s experience in establishing and managing network operation and Help desk

- management; and
 - Deviations from the Tender Terms & Conditions along with clauses and page numbers.
- 3.10.3 Failure to substantially comply with the requirements spelt out in this Clause 2.12 shall make the Bid liable to be rejected.
- 3.10.4 If the Bidder makes a false averment regarding his qualification, experience or other particulars, or its commitment of services for the Project is not fulfilled at any stage after signing of the Service Agreement, it shall be liable to be debarred for any future assignment of DMD for a period of 5 years. The award of this Bid to the Bidder may also be liable to cancellation in such an event.
- 3.10.5 The Technical Bid shall not include any financial information relating to the Commercial Bid.
- 3.10.6 DMD reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the NEoI. Any such verification or the lack of such verification by DMD to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of DMD there under.
- 3.10.7 In case it is found during the evaluation or at any time before signing of the Service Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Operator, and if the Operator has already been issued a LOI or entered into the Service Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this NEoI, be liable to be terminated, by a communication in writing by DMD without DMD being liable in any manner whatsoever to the Bidder or Operator, as the case may be.
- In such an event, DMD shall forfeit and appropriate the Bid Security as mutually agreed pre-estimated compensation and damages payable to DMD for, *inter alia*, time, cost and effort of DMD, without prejudice to any other right or remedy that may be available to DMD.

3.11 Commercial Bid

- 3.11.1 Bidders shall submit the Commercial Bid in the format given in the schedule (.) ("**Commercial Bid**") clearly indicating the Quarterly Gross Revenue (QGR) to be charged by the Bidder, in both figures and words, in INR. In the event of any difference between figures and words, the amount indicated in words shall prevail. For the avoidance of doubt, it is clarified that the QGR shall be quoted in equal installments for the duration of the Operation and Maintenance Phase i.e. 5 years.
- 3.11.2 The QGR of the Project shall only be indicated in INR. A Bid in any other currency may be summarily rejected.
- 3.11.3 Bid shall be opened on the dates mentioned in Clause (.) in the presence of Bidders representatives who may attend at their cost. The Bidders' representatives who are present

shall sign a register evidencing their attendance.

3.11.4 Bid Prices

- a. The Commercial Bid once submitted cannot be amended. However, in some circumstances (such as major anomaly in the technical specifications having a major impact on pricing), DMD may decide to take fresh Commercial Bids from all the technically qualified Bidders before the actual opening of the Commercial Bid.
- b. Prices quoted shall be inclusive of applicable taxes and duties and shall be firm and not be subject to any upward revision on any account whatsoever, throughout the period and scope of the Service Agreement, subject to change order provisions. However Service tax can be charged extra at applicable rates. In the event of any increase or decrease of the rate of taxes and duties due to any statutory notification/s during the term of the Service Agreement, the consequential effect shall be to the account of the DMD.

3.12 Modification and Withdrawal of Bids

3.12.1 Written Notice

The Bidder may modify, substitute or withdraw its Bid after the Bid's submission, provided that DMD receives written notice of the modification, substitution or withdrawal, prior to the Bid Due Date.

3.12.2 Signing and Marking of Notice

The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the abovementioned provisions.

3.12.3 Last Date for Notice

No Bid may be altered / modified subsequent to the Bid Due Date, unless expressly sought by DMD. Unsolicited correspondences from Bidders will not be considered. No Bid may be withdrawn in the interval between the last date for receipt of Bids and the expiry of the bid validity period specified by the Bidder in the Bid. Withdrawal of a Bid during this interval may result in the forfeiture of the Bid Security of the Bidder.

3.13 Bid Security

3.13.1 Amount of Bid Security and currency

The Bidder shall furnish, as part of its Bid, a Bid Security in the form of Bank Guarantee in accordance to the format detailed in Schedule (.) issued by any of the Nationalised or Schedule banks in India or from any of the following Private Sector banks located in India: ICICI Bank, Axis Bank, IDBI Bank and HDFC Bank for **INR. 1, 00, 00,000/- (INR One**

Crore only). The Bid Security shall be furnished in INR by all the Bidders, including any foreign Bidders.

3.13.2 Rejection of Bids and Validity of Bids

Any Bid not secured in accordance with above mentioned Clause (.), may be rejected by DMD as being non-responsive, without any further correspondence. DMD may decide to relax this provision and call for the security afresh from the defaulting Bidder.

Bids shall remain valid for 180 days from the Bid Due Date prescribed by DMD. A Bid valid for shorter period may be rejected as non-responsive.

In exceptional circumstances, DMD may request the Bidder(s) for an extension of the period of validity. The request and the responses thereto shall be made in writing (or by fax). The validity of the Bid Security shall also be suitably extended.

3.13.3 Discharge of Bid Security of Unsuccessful Bidder

Bid Security of the unsuccessful Bidders', except the second highest Bidder, will be discharged / returned by DMD within 30 days from the date of award of contract to the successful Bidder. The Bid Security of the second highest Bidder will be released upon the Operator furnishing the Implementation Phase Performance Guarantee in accordance with the Service Agreement. DMD shall not be liable to pay any interest on the Bid Security.

3.13.4 Discharge of Bid Security of Selected Bidder

The Bid Security furnished by the Selected Bidder shall be refunded to the Bidder after submission of Implementation Phase Performance Guarantee. DMD shall not be liable to pay any interest on the Bid Security.

3.13.5 Forfeiture of Bid Security

The Bid Security can be forfeited if a Bidder:

- a. Withdraws its Bid during the period of bid validity;
 - b. Having been notified of the acceptance of its Bid by DMD during the period of bid validity;
 - c. fails or refuses to execute the Service Agreement;
 - d. fails or refuses to furnish the Performance Security, in accordance with the bid requirement;
 - e. engages in any of the Prohibited Practices specified in Section 4 of the NEOI;
- or
- f. is found to have Conflict of Interest as specified in **Clause (.)**

SECTION 4: ELIGIBILITY AND OTHER ISSUES

4.1 Eligibility of Bidders

For determining the eligibility of Bidders for their qualification hereunder, the following shall apply:

- (a) The Bidder may be a Sole Bidder or a group of entities (“**Consortium**”), coming together to implement the Project. However, no Bidder applying individually or as a member of a Consortium (“**Member**”), as the case may be, can be member of another Bidder.
- (b) **A Bidder may be an individual, partnership firm or association of people, a body corporate or a company duly incorporated in accordance with the applicable local laws, or any combination of them with a formal intent to enter into an agreement or under an existing agreement to form a Consortium. A Consortium shall be eligible for consideration subject to the conditions set out in Clause (.).**
- (c) A Bidder shall not have a conflict of interest (“**Conflict of Interest**”) that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. A Bidder shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:
 - (i) the Bidder, any Member or Associate (or any constituent thereof) and any other Bidder, any Member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Bidder, any Member or an Associate thereof (or any shareholder thereof having a shareholding of not more than twenty five per cent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its Member or Associate, as the case may be, is not more than twenty five per cent of the paid up and subscribed share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act, 1956. For the purposes of this **Clause (.),** indirect shareholding held through one or more intermediate persons shall be computed as follows: (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (“**Subject Person**”) shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the

- intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary; or
- (ii) a constituent of such Bidder is also a constituent of another Bidder; or
 - (iii) such Bidder, or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, or any Associate thereof or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, any Member or any Associate thereof; or
 - (iv) Such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
 - (v) Such Bidder, or any Associate thereof has a relationship with another Bidder, or any Associate thereof, directly or through common third party/parties, that puts either or both of them in a position to have access to each others' information about, or to influence the Bid of either or each other; or
 - (vi) Such Bidder, or any Associate thereof has participated as a consultant to the DMD in the preparation of any documents, design or technical specifications of the Project.
- (d) A Bidder shall be liable for disqualification if any financial or technical adviser of DMD in relation to the Project is engaged by the Bidder, any Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, any Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this NEoI. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

Explanation: In case a Bidder is a Consortium, then the term Bidder as used in this **Clause (.)**, shall include each Member of such Consortium.

- 4.2** To be eligible for qualification, a Bidder shall fulfil the following conditions of eligibility:
- (a) **Technical Capacity:** For demonstrating technical capacity and experience (“**Technical Capacity**”), the Bidder shall have relevant experience as mentioned in the **clause (.)**
 - (b) **Financial Capacity:** The Bidder shall satisfy the requirements as mentioned in the **clause (.)**

In case of a Consortium, the combined Technical Capacity of all the Members should satisfy the conditions of eligibility and unless otherwise specified herein, the Financial Capacity should be satisfied by the Lead Member of the Consortium.

4.3 Change of Control

In case a Sole Bidder decides to form an SPV, the Sole Bidder shall, for the term of the Service Agreement, including the Operation and Maintenance Phase, hold equity share capital of not less than 51% (fifty one percent) of the subscribed and paid up equity of the SPV.

In case a Consortium decides to form an SPV, each Member, other than the Lead Member, shall, for the term of the Service Agreement, including the Operation & Maintenance Phase, hold equity share capital of not less than 10% (ten per cent) and the Lead Member, shall, for the term of the Service Agreement, including Operation and Maintenance Phase, hold equity share capital of not less than 51% (fifty one per cent) of the subscribed and paid up equity of the SPV.

4.4 Documents to be submitted:

The Bidders shall enclose with its application, to be submitted as per the format at Appendix-A, complete with its Annexes, the following:

- (i) Certificate(s) from a chartered accountant duly certified or the concerned client(s) stating the payments made/ received or works commissioned, as the case may be, during the past 5 years in respect of the projects specified in clauses (.) and (.). In case a particular job/ contract has been jointly executed by the Bidder (as part of a consortium), it should further support its claim for the share in work done for that particular job/ contract by producing a certificate from the chartered accountant or the client; and
- (ii) Duly certified Certificate(s) from a chartered accountant, specifying the turnover (including the turnover from IT infrastructure services), net worth and net profit of the Bidder and /or each Member of the Consortium, as the case may be, as mentioned in the Section (.), and also specifying that the methodology adopted for calculating such net worth conforms to the provisions of this Clause (.) For the purposes of this NEoI, net worth shall mean the sum of subscribed and paid up equity and reserves from which shall be deducted the sum of revaluation reserves, miscellaneous expenditure not written off and reserves not available for distribution to equity share holders.
- (iii) The Bidder should submit a Power of Attorney as per the format at Appendix-B, authorising the signatory of the Bid to commit the Bidder. In the case of a Consortium, the Members, except the Lead Member should submit a Power of Attorney in favour of the Lead Member as per format at schedule (.).

4.5 Formation of SPV

The Selected Bidder, whether a Sole Bidder or a Consortium, may, in its discretion, form an appropriate Special Purpose Vehicle, incorporated under the Companies Act, 1956 ("SPV"), to execute the Service Agreement and implement the Project. In case a Consortium elects to form an SPV, it shall, in addition to forming an SPV, comply with the following additional requirements:

- (a) The Bid should contain the information required for each member of the Consortium;
- (b) Members of the Consortium shall nominate one Member as the Lead Member (the “**Lead Member**”), who shall have an equity share holding of at least 51% (fifty one per cent) of the paid up and subscribed equity of the SPV. The nomination(s) shall be supported by a Power of Attorney, as per the format at Appendix-C, signed by all the other Members of the Consortium, except the Lead Member;
- (c) the Bid should include a brief description of the roles and responsibilities of individual Members, particularly with reference to financial, technical and obligations during the Operation and Maintenance Phase
- (d) a Sole Bidder cannot at the same time be a member of a Consortium applying for qualification.
- (e) Further, a Member of a particular Consortium cannot be member of any other Consortium applying for qualification;
- (f) the Members of a Consortium shall form an appropriate SPV to execute the Project, if awarded to the Consortium;
- (g) Members of the Consortium shall enter into a Consortium Agreement, substantially in the form specified at Appendix-D (“**Consortium Agreement**”), for the purpose of making and submitting the Bid. The Consortium Agreement, to be submitted along with the Bid, shall, inter alia:
 - (i) convey the intent to form an SPV with shareholding/ ownership equity commitment(s) in accordance with this NEOI, which would enter into the Service Agreement and subsequently perform all the obligations of the Operator in terms of the Service Agreement, in case the Project is awarded to the Consortium;
 - (ii) clearly outline the proposed roles and responsibilities, if any, of each Member;
 - (iii) commit the minimum equity stake to be held by each Member;
 - (iv) commit that each of the Members, whose experience will be evaluated for the purposes of this NEOI, shall subscribe to 10% (ten per cent) or more of the paid up and subscribed equity of the SPV, except the Lead Member, who shall subscribe to 51% or more of the paid up and subscribed equity of the SPV and shall further commit that each such member shall hold equity share capital during the term of the Service Agreement, including the Operation and Maintenance Phase;
 - (v) convey the intent to form an SPV with shareholding/ ownership equity commitment(s) in accordance with this NEOI, which would enter into the Service Agreement and subsequently perform all the obligations of the Operator in terms of the Service Agreement, in case the Project is awarded

to the Consortium;

- (vi) clearly outline the proposed roles and responsibilities, if any, of each Member;
 - (vii) commit the minimum equity stake to be held by each Member;
 - (viii) commit that each of the Members, whose experience will be evaluated for the purposes of this NEOI, shall subscribe to 10% (ten per cent) or more of the paid up and subscribed equity of the SPV, except the Lead Member, who shall subscribe to 51% or more of the paid up and subscribed equity of the SPV and shall further commit that each such member shall hold equity share capital during the term of the Service Agreement, including the Operation and Maintenance Phase;
 - (ix) Members of the Consortium undertake that they shall seek prior written consent of DMD for any Change of Control;
 - (x) include a statement to the effect that all Members of the Consortium shall be liable jointly and severally for all obligations of the Operator in relation to the Project in accordance with the Service Agreement; and
- (h) Except as provided under this NEOI and the Documents, there shall not be any amendment to the Consortium Agreement without the prior written consent of the Authority.

2.2.6 In case a Sole Bidder or a Consortium elects NOT to form an SPV, all the conditions specified in **Clause** (.), except for **Clauses** (.) and (.) shall apply to the Consortium. In addition to these conditions, the following additional conditions shall apply:

- (a) Parties – the Parties to the Service Agreement will be the Sole Member or each of the Consortium Members as the case may be. Therefore, the Members who's Financial Capacity and Technical Capacity has been evaluated for qualification, will need to be direct parties to the Service Agreement, together with the other Members, if any. One cannot be a sub contractor to the other. To explain by way of example, where a Consortium consisting of two companies "A" and "B" are the Selected Bidder, then the Service Agreement will have to be executed by each of "A" and "B" as parties to the Service Agreement. One of "A" or "B" cannot be a sub contractor to the other.
- (b) Joint and several liabilities in case of a Consortium – each of the Consortium Members who's Financial Capacity and Technical Capacity has been evaluated

for qualification, will need to undertake explicit joint and several liability obligations in favour of DMD in the Service Agreement.

- (c) The Consortium shall not exceed six Members. The Member who's Financial Capacity has been evaluated for qualification, shall be the Lead Member. The Lead Member shall be duly authorized by the other Members and shall be the designated Member responsible for compliance, execution and performance under the Service Agreement – notwithstanding the joint and several liability. DMD's dealings with such Lead Member will qualify as adequate dealing with the other Members.
- (d) Where the Consortium Members who's Financial Capacity and Technical Capacity has been evaluated for qualification rely upon their respective Associates for achieving their financial and technical qualifications, then such Associates will need to provide an appropriate undertaking to DMD in the format prescribed in Schedule (.) hereto. A Sole Bidder shall also furnish the undertaking in the format prescribed in **Schedule (.)** hereto.
- (e) Members of the Consortium shall nominate the Member whose Financial Capacity had been evaluated for qualification, as the Lead Member (the "**Lead Member**"). The nomination(s) shall be supported by a Power of Attorney, as per the format at **Schedule (.)**, signed by all the other Members of the Consortium, except the Lead Member;
- (f) Members of the Consortium shall enter into a Consortium Agreement, substantially in the form specified at **Schedule (.)**, ("**Consortium Agreement**"), for the purpose of making and submitting the Bid. The Consortium Agreement, to be submitted along with the Bid, shall, inter alia:
 - (i) clearly outline the proposed roles and responsibilities, if any, of each Member; and
 - (ii) include a statement to the effect that all Members of the Consortium shall be liable jointly and severally for all obligations of the Operator in relation to the Project in accordance with the Service Agreement.

2.2.7 Any entity which has been barred by the Central/ State Government, or any entity controlled by it, from participating in any project, and the bar subsists as on the date of Bid, would not be eligible to submit a Bid, either individually or as member of a Consortium.

2.2.8 A Bidder including any Member or Associate should, in the last 3 (three) years, have neither failed to perform any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, Member or Associate, as the case may be; nor have been expelled from any project or contract by any public entity; nor have had any contract terminated any public entity for breach by such Bidder, Member or Associate.

2.2.9 In computing the Technical Capacity and Financial Capacity of the Bidder/ Members under Clauses (.) and (.), the Technical Capacity and Financial Capacity of their respective Associates would also be eligible hereunder.

For the avoidance of doubt, a certificate from a qualified external auditor who audits the book of accounts of the Bidder or the Consortium Member shall be provided to demonstrate that a person is an Associate of the Bidder or the Consortium, as the case may be.

SECTION 5: BID EVALUATION PROCESS

1.3.1 5.1 Preliminary checks:

- a. Whether all instructions regarding preparation and submission of bid document and fees for the bid and bid security are followed
- b. Whether power of Attorney documents submitted in respect of authorised signatory are valid and meet requirements of NEOI document
- c. Whether All Bidding Documents, other than the Commercial Bid, should be hard bound and numbered in volumes if there are more than 1 (e.g. Technical Bid Volume-1, 2 etc.). Whether all Bidding Documents are page numbered and appropriately flagged and contain an index showing contents with page numbers.

Any deficiency in the documentation may result in the rejection of the Bid.

5.2 Pre Qualification Checks:

All bids that satisfy preliminary checks will be subjected to Pre-Qualifications checks as given in the following table.

Sr. No.	Criteria	Documents to be submitted
1	Quality Certification	
a	ISO certification, , for Systems Integration or Security Management certification	Valid Certificate
b	ISO certification not more than 2 years old, in the area of IT Services Management	Valid Certificate
2	Financial Strength	Documents Required
a	The Bidder should have a minimum average turnover of INR 200 Crores for the last three financial years from all its businesses and a minimum average turnover of INR 80 Crores for the last three financial years from all its IT infrastructure services businesses.	Sole Bidder or Lead Member of Consortium, as the case may be, should submit audited annual reports, including balance sheet and profit and loss account statement, for the last 3 financial years along with the statutory auditor's certificates for turnover, net worth and net profit.
b	Sole Bidder / Lead Member of the Consortium should have positive net worth for each of the last three financial years.	
c	Minimum net worth of the Sole Bidder/ Lead Member at the end of last financial	

	year should be at least INR 50.0 Crores.	
d	The Sole Bidder/ Lead Member of the Consortium should have positive earnings (net profit), for at least the last three financial years.	
3	Technical Expertise and experienced staff	Documents Required
a	The Bidder should have minimum 100 regular IT professional employees on its payrolls as on 31 October 2012	A certificate to the effect signed and stamped by the Authorized Representative of the Bidder should be submitted.
b	Experience of the staff responsible for the Project. Each senior manager should have at least 3 years experience in the respective field.	CV of the project manager, operations manager and other senior professionals who shall be involved in the implementation and operation of the project also needs to be submitted.
c	The Bidder must have experience of at least: <ul style="list-style-type: none"> • One project of ICT infrastructure / services in WAN environment including application deployment and/or • System integration with an aggregate value of Rs 50 Crores successfully completed during the last 5 years. 	Work order issued by the appropriate authority, indicating the scope and cost of the project to be submitted.
D	The Bidder must have experience of implementing at least one project related to: <ul style="list-style-type: none"> • Tactical Operations Center (TOC) or • Emergency Operation Center (EOC) or • Fusion Center or • Defense Command Center successfully completed with any State Government/Central 	Work Order issued by the appropriate authority, indicating the scope and cost of the project to be submitted.

	<p>Government/PSU in India or a government organization or a reputed company anywhere in the world in last 5 (Five) years, of value more than Rs 5.0 (Five) Crore.</p> <p>The scope of above project should include implementation of EOC project or deployment of Incident Management Application or Crisis Information Management System.</p>	
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All bids that satisfy pre-qualifications will be scrutinized further as per guidelines for technical bid evaluation described in following table.

5.3 Detailed Technical Bid Evaluation Criteria

Sr. No.	Attribute	Criteria	To be Allotted marks	Maximum marks
1	EOC Design and Implementation Projects (including Crisis mgmt. application, Audio Video systems, communication networks but excluding civil works)	≥ 3 Projects	10	10
		≥ 2 Projects	7	
		1 Project:	3	
2	EOC operation and Management Experience	≥ 2 Projects	10	10
		1 Project	5	
3	BOOT experience in IT Network projects	≥2 Projects	10	10
		1 Project	5	
4	Network Operations Centre experience (Mission Critical, WAN, LAN, Security, managing E-mail services, Internet services etc., for 24x7 operations) in Projects with	≥ 2 Projects	10	10
		1 Project	5	

	over 100 WAN nodes			
5	Call centre based facility management including 24X7 operation of call centre (at least 100 agents)	≥ 3 Years	5	5
		≥1 year	2	
6	Proposed Solution/Architecture for DMD applications and operations, software platforms proposed, development & integration approach and methodologies and capability demonstrated during NC-NC Demo	Based on Qualitative analysis of evaluation committee		15
7	Experience and qualification of Resources (Project management, Operations and facility management)		Evaluation committee to decide based on data and analysis	15
	<ul style="list-style-type: none"> • Project head, • Network system designers, • IT experts including security system handlers, • Communication network installers • testing and commissioning personnel 	≥ 10 to 15 years in relevant field		
	<p>Operations and maintenance personnel</p> <ul style="list-style-type: none"> • Operations General manager • VSAT network in-charge • Call centre and alert system manager • IT network systems and security systems including access control manager • Audio Video systems manager • Facility engineer 	≥ 5 to 10 years in relevant field		
8	Proposed Training Management Plan, experience and quality of training personnel and proposed training tools / material	Based on Qualitative analysis of evaluation committee		5

9	Financial strength (average turnover from all its businesses for the last three financial years)	≥1,000 Crores	15	15
		≥500 Crores	10	
		≥200 Crores	5	
10	Relationship with OEM for major system and Spare Parts	≥ 5 years:	5	5
≥3 years:		3		
≥1 year :		1		
	Qualifying marks		70	
	Total Marks			100

1.4 5.4 Evaluation of Commercial Bids

Commercial Bids of those Bidders who qualify the technical evaluation will only be opened. The place, date and time for the opening of the Commercial Bids shall be announced separately.

The commercial scores will be calculated as

$$F_n = F_{min} / F_b * 100$$

Where

F_n = Normalized financial score of the Bidder under consideration,

F_b = Evaluated cost for the Bidder under consideration,

F_{min} = Minimum evaluated cost for any Bidder.

1.5 5.5 Evaluation of Bid - Final Evaluation

The overall score will be calculated as follows:-

$$B_n = 0.7 * T_n + 0.3 * F_n$$

Where

B_n = overall score of Bidder under consideration

T_n = normalized technical score for the Bidder under consideration

F_n = Normalized financial score of the Bidder under consideration

1.6 5.6 Deciding Award of Contract

DMD will decide the Selected Bidder and award the Project to the Bidder ranked 1 after the Technical and Commercial evaluation. The 2nd ranked bidder shall be kept in reserve and it shall replace the 1st ranked bidder in case the 1st ranked bidder fails to fulfill the conditions laid down in the NEoI

It may be please noted that:

- a. The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at [Patna] shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.
- b. DMD, GoB, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:
 1. suspend and/or cancel the Bidding Process and/or amend and/or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
 2. consult with any Bidder in order to receive clarification or further information;
 3. Retain any information and/or evidence submitted to the DMD by, on behalf of and /or in relation to any Bidder; and /or
 4. Independently verify, disqualify, reject and/or accept any and all submissions or other information and/or evidence submitted by or on behalf of any Bidder.
- c. All documents and other information supplied by DMD or submitted by a Bidder shall remain or become, as the case may be, the property of the DMD. The DMD will not return any submissions made hereunder. Bidders are required to treat all such documents and information as strictly confidential.
- d. DMD reserves the right to make inquiries with any of the clients listed by the Bidders in their previous experience record

1.7 5.7 Notification to award to Selected Bidder

Before the expiry of the period of bid validity and on completion of the Commercial Bid evaluation, DMD shall notify the successful Bidder in writing by registered letter or by fax, that its Bid has been accepted. The Bidder shall acknowledge in writing receipt of the notification of award and will send his acceptance to enter into Agreement within seven (7) days. The signing of agreement will amount to award of contract and Bidder will initiate the execution of the work as specified in the agreement.

1.8 5.8 Performance Guarantee

Subsequent to awarding of Project, Bidder shall furnish Implementation Phase Performance Guarantee and Project Performance Guarantee as detailed in the Service Agreement. The Bid Security, of the Selected Bidder, shall only be released after such Bidder furnishes the Implementation Phase Performance Guarantee in the prescribed form.

SECTION 6: PAYMENT SCHEDULES AND PENALTIES

(During Implementation and Operations Stages)

6.1 Terms of payment

NEoI has specified that payment for BOOT operations will be made in 20 (twenty) equal quarterly instalments and the bidder's quote should specify rate at which quarterly payment should be made by DMD. This quarterly entitlement of the selected bidder (Operator) is termed as **"Quarterly Guaranteed Revenue "(QGR).**

The payment to the BOOT Operator for Services rendered to DMD under this Agreement shall be made after deduction of penalty charges calculated on the basis of:

- Any delay in implementation of the project or
- Less than specified up time of networks and facilities as described in section 6.5 below

The net entitlement after deduction of penalty charges will be hereinafter referred to as **"Actual Quarterly Revenue" ("AQR").**

For the purpose of calculation entitlement to Operator will be worked out on a monthly basis. **Maximum Monthly Entitlement (MME)** of the operator will be worked out by dividing QGR by 3 (three). **"Actual Monthly Entitlement"** hereinafter referred to as (**"AME"**) would be calculated by deducting applicable penalties from MME. Penalties are calculated as per table 6.1 below and the uptime achieved by the Operator during each month of the quarter for the EOCI services including network links during the month and the penalties incurred under other areas of service such as quality and availability of Voice, video and data links, interiors and audio / video facilities at EOCs as well as uptime of application services such as DSS and IMSP.

Steps in calculations will be:

1. Maximum Monthly Entitlement (MME) = $QGR / 3$
2. Actual Monthly Entitlement (AME) = MME – the penalties levied by DMD under the Agreement
3. Total AQR payable = Sum of the AME payable for each of the 3 months in the relevant quarter.

It is clarified that the Operator would be paid at least 70% of the QGR for every quarter during the term of the Agreement, as mentioned herein. Further, while entitlements are calculated on a monthly basis, payment of AQR to the Operator would be made only on quarterly basis.

Upon expiry of the Agreement, DMD shall purchase all the equipment owned, installed and used by the Operator at zero residual value or INR 1.0 (One) only and the Operator shall forthwith transfer all the rights, title and interest in the equipment to DMD on payment of the aforementioned amount by DMD.

In the event of termination of this Agreement, DMD shall purchase all the equipment owned, installed and used by the Operator for the purposes of providing Services under this Agreement, at the value mentioned in concession Agreement.

DMD would be required to pay the Operator, for the Proprietary Software, (Incident management Software, NMS, Anti-virus) in accordance with the provisions of concession Agreement

Payment schedules during various stages of the BOOT project will be:

6.2: Implementation Phase:

DMD will not make any payment to the operator during implementation phase. Operator's performance to meet agreed time lines is the essence of this project. Any delays in completion of the project by delivery of facilities or services will attract penalties as described in this section.

First payment to the Operator will be made after completion of first quarter of operations phase.

6.3 Operations Phase:

The Operator will submit quarterly invoice as per accepted QGR quoted in the Bid document. Third Party Agency (TPA) appointed by DMD will check and certify Quality of service and Up-Time of various services and calculate applicable penalties if any. Applicable payment will be effected within 15 days of submission of invoice if it is otherwise correct in all respects.

6.4 Penalty for delay in completion of SEOC facilities Implementation Phase (Completion Date/Go-Live)

SEOC facility is most critical in EOCI as it is the centre of all activities related to disaster management in the state. Hence completion of facility in Old Secretariat within specified time schedule is of primary importance. Penalty for delay in completion of SEOC is also higher than that for facilities at DEOC.

For every week or part thereof of delay until actual completion of Implementation Phase, the penalty imposed on the Operator, without prejudice to DMD's other remedies under the Agreement, shall be 10% of the QGR.

If the delay continues beyond 10 weeks, DMD shall have the right to terminate the Agreement.

6.5 Penalty for delay in completion and commissioning of sites other than SEOC,

For every three months or part thereof of delay until actual completion and commissioning of all the sites that have been handed over to the Operator, the penalty imposed on the Operator, without prejudice to DMD's other remedies under the Agreement, shall be 10% of QGR.

6.6 Penalties for below par Quality of Service (QoS) of EOCI during the Operation and Maintenance Phase

EOCI network has to be made available round the clock and throughout the term of the Agreement. The following table provides the calculation of penalty and entitlement of AME based on the different components of EOCI Project. The Uptime and penalty relationship is shown in the table 6.1 below

Sr. No.	Sub-system / facility description	Penalty in case of Uptime $\geq 99.5\%$	Penalty in case of Uptime ≥ 98.0	Penalty in case of Uptime ≥ 97	Penalty in case of Uptime ≥ 95.0	Penalty in case of Uptime < 95.0
1	ICTS Network (Including connectivity between SEOC, DEOC, MEOC and portable VSATs)	MME	1.0 penalty for every 1% reduction in Uptime or part thereof	1% penalty for every 1% reduction in Uptime or part thereof	2% penalty for every 1% reduction in Uptime or part thereof	Flat 30% of MME in case
2	Applications Software (AS) including Decision Support System and Information Management Portal	MME	MME	1.0% penalty for 1% reduction in Uptime or part thereof	1% penalty for every 1% reduction in Uptime or part thereof	

3	SEOC – Interiors and Audio Visual (AV) system	MME	MME	1.0 % additional penalty for 1% reduction in Uptime or part thereof	1% penalty for every 1% reduction in Uptime or part thereof	Uptime is less than 95% for one or more subsystems / facility.
4	MEOC or ERV – Interior, LAN and AV system	MME	1.0% penalty for every 1% reduction in Uptime or part thereof	1% penalty for every 1% reduction in Uptime or part thereof	2% penalty for every 1% reduction in Uptime or part thereof	

Table 6.1: Rates of penalty for less than specified up time

Total Quarterly Payment will be:

$$= \text{MME} ((\text{AME-ICTS}) * (\text{AME-AS}) * (\text{AME-SEOC AV}) * (\text{AME- MEOC}))$$

Typical calculations for illustration:

Payment to be made to Operator in case Uptime in each system is 98.0% will be

$$= \text{MME} (0.98 * 1.00 * 1.0 * 0.98)$$

$$= \text{MME} (0.9604)$$

Similarly the payment to the Operator in case Uptime for every system is 97% or 96% or 95% will be:

- 97% will be= MME (0.8852)
- 96% will be = MME (0.7638)
- 95% will be = MME (0.7310)

Payment to the Operator in case Uptime of any system or all systems is below 95% will be =MME (0.7)

6.7 Method for system uptime calculation

System Uptime calculation is most critical element in determining actual monthly and finally Quarterly Revenue entitlements of the Operator.

The Uptime will be calculated for individual node in the network and averaged out over total number of nodes as explained below.

Percentage Uptime for individual VSAT node which is down for 30 minutes in a month:

$$= \frac{(\text{Total number of Minutes in a month} - \text{Downtime in minutes for the VSAT})}{\text{Total number of Minutes in a month}} \times 100$$

$$= \frac{((60 \times 24 \times 30) - (30))}{(60 \times 24 \times 30)} \times 100$$

$$= 99.93 \%$$

Percentage Uptime of VSAT system in case of 10 VSATs in a network with 2 VSATs having Uptime equal to 99.93%

$$= \frac{(\text{Sum of \% Uptime of each VSAT node})}{\text{Number of VSATs in the system}}$$

$$= \frac{(99.93 + 99.93 + 100 + 100 + 100 + 100 + 100 + 100 + 100 + 100)}{10}$$

$$= \frac{999.86}{10}$$

$$= 99.986 \%$$

Percentage Uptime of VSAT network when the hub is down for 30 Minutes will be considered as Downtime for all VSATs and Uptime will be 99.93%

Percentage Uptime for other systems will be calculated in similar manner. Principals are:

- a. Uptime equals to Uptime of main equipment or system which results in non availability of total functionality (for example Hub in a VSAT network)
- b. Uptime of individual nodes will be added to up-times of similar nodes and total system Uptime will be average Uptime of all nodes

SECTION 7: DELIVERABLES

Consolidated List of Equipment and Services required to be delivered by the Operator:

Sr. No.	Scope of work / Equipment / System / Services	Quantity / service requirements
1	Scope of work	The EOCI Project will be undertaken on a BOOT (Build, Operate, Own and Transfer) basis and the Operator will be responsible for design, development, supply, install, test, commission, operate, maintain and manage operate and manage supplies / systems and services under the scope defined in this NEOI for a period of five (5) years from the date of completion of the Implementation Phase as per the terms and conditions of the Agreement.
2	Project implementation schedule	Implementation phase will be considered as completed, when the facility is ready for acceptance testing by DMD
a	SEOC	Quantity (1) Within 6 calendar months from the date of start of implementation phase (signing of contract and submission of implementation phase bank guarantee by the operator)
b	DEOC	Quantity (38) Within 9 calendar months from the date of start of implementation phase (signing of contract and submission of implementation phase bank guarantee by the operator)
c	MEOC	Quantity (10) Within 9 calendar months from the date of start of implementation phase (signing of contract and submission of implementation phase bank guarantee by the operator)
d	Portable communication systems	Quantity (7) Within 9 calendar months from the date of start of implementation phase (signing of contract and submission of implementation phase bank guarantee by the operator)
3	Project Management and operator's responsibilities	The responsibility of the Operator includes design, development supply, installation, testing & commissioning, operation and management including staff for the operate and upkeep of EOCI consisting of EOCs including SEOC

		facility at Patna, DEOCs at 38 District Headquarters, MEOCs (10) and portable systems (7). The operator has also to provide, operate and maintain Application services for Information Management Portal and Decision Support System
4	SEOC	Total quantity 2 (Two). Building for one facility is ready. Second building to install redundant SEOC will be available within two years.
a	Communication system	The SEOC should be equipped with highly reliable and redundant emergency communication systems using dedicated / shared networks and public network facilities for voice, data and videoconferencing. Redundant network resources will be: <ol style="list-style-type: none"> 1) BSWAN (provided by DMD) 2) MPLS-VPN capacity 3) VSAT network with nodes at SEOC (2) and District Hqrs (38) 4) Public Telephone links (30 land Lines) and cell phone links (5) The Operator should ensure interconnectivity at all times (including disaster situations) between <ul style="list-style-type: none"> • SEOC (2) • DEOCs (38); • MEOC (10); • Portable VSAT systems (7); MPLS-VPN is to be provided where BSWAN connectivity doesn't exist. Such locations would not be more than 20 and the connectivity is required @128 KBPS
b	Broadband Internet	2X2 Mbps links
c	ICT Network	a. Systems for interconnection with GSWAN, MPLS-VPN, VSAT network and broadband Internet b. Integrated Information Management Portal System (IMPS), c. Decision Support System (DSS) d. Unified Communication system and radio gateway e. VoIP gateway for up to 500 users and VoIP phones (8). This gateway will be accessed via BSWAN, MPLS-VPN and VSAT network
d	Call centre	a. Call centre with infrastructure (workstations, phones, furniture etc.) for 30 agents and 60 ISDN telephone lines

		<p>from Telecom service providers with suitable EPABX for call handling / distribution etc.</p> <p>b. Interactive Voice Response system</p> <p>c. SMS origination facility</p>
e	Data management and archiving (video, audio and data etc).	The information should be stored for short term usage (up to 4 weeks) in databases and subsequently can be archived. An on line storage. Minimum online capacity of 2X5 TB should be provided. Any additional data can be archived
f	Hardware, servers , peripherals etc	<p>Hardware and peripherals:</p> <ul style="list-style-type: none"> ⊙ Routers, firewalls for interconnection with BSWAN and MPLS-VPN ⊙ Servers as required for application system design of the operator, ⊙ Work stations for operators in Control room and for senior officers in conference room (10) ⊙ Peripherals <ul style="list-style-type: none"> a. Network printers (2) c. Composite scan, print , fax machines (2) d. Fax machines (1) e. A3 Scanners (1)
g	Audio/ Video and multimedia management system	<p>Suitable capacity MCU for Video and audio conferencing with all government stake holders</p> <ul style="list-style-type: none"> ⊙ Software based VC facility using work stations for control room staff (2) ⊙ Large Video display systems in Operations(control) room and large screen display systems (≥ 50 inches) in Conference room in SEOC for monitoring news channels, Videoconferencing, geospatial information and visual information related to Incident Management System. ⊙ 2 large screen display systems along with cameras and videoconferencing systems should be provided. One will be for Conference room and a spare kept in control room ⊙ Capacity to display of any video inputs from any source on any one of the display systems in operations and Conference room. Facility to display multiple video inputs on a single screen should be provided. For e.g.: TV news channel and video conferencing should be simultaneously displayed by screen splitting on a single screen. ⊙ Seating capacity for 15 persons to be provided along with a

		<p>standard U shaped table in VC room</p> <ul style="list-style-type: none"> ⊙ Content feeds using a junction box for upto 10 ports for outside of SEOC for press correspondents ⊙ Each seat to have audio receptacle coming from podium for recording purpose (up to 15 seats) for press correspondents ⊙ Video conferencing facility with any EOC including MEOCs at disaster sites (1). ⊙ Public address system in each room of SEOC
5	VSAT Network	A shared hub or captive system network operating in STAR mode.
6	Furniture / fixtures and facility management	Furniture and fixtures including carpeting in Operations room and VC room
7	Access control	Access control in Operations room, VC room, alert and warning room and operator's staff room
8	Power supply	<ul style="list-style-type: none"> ⊙ UPS based backup power of sufficient rating to support full equipment load for 1 hour (around 10 KVA). UPS in 1+1 configuration with each system catering for full load should be provided at SEOC. ⊙ Diesel generator set of at least 50.0 KVA capacity to cater for full load along with diesel storage capacity of 1,000 (one thousand) liters. ⊙ Power distribution for equipment and emergency lighting for equipment supplied by the operator ⊙ Up keep of power supply system including generator, UPS etc.
9	Operating costs	Staff costs and Electricity, diesel, paper and other consumables
10	DEOC	Total number 38
a	Equipment and systems at each DEOC location	<p>Router, firewall to interconnect with GSWAN Node</p> <ul style="list-style-type: none"> ⊙ MPLSVPN node of 1 Mbps capacity ⊙ Fixed VSAT node (1) ⊙ VoIP phones (2) using ATA (1) registered with VoIP gateway at SEOC ⊙ Workstation with software based VC facility (1) ⊙ Wired or wireless LAN ⊙ Limited call / dispatch management and alert warning facility during emergency situation for effective management ⊙ Broadband Internet on shared Internet connectivity @ 1.0

		<p>Mbps (on DSL or ADSL)</p> <ul style="list-style-type: none"> ⊗ Laser Printers (2) ⊗ All in one Scanner, printer and fax (1) ⊗ UPS for 1 hour Backup for all equipment provided by operator
11	MEOC or ERV	Total number 10
a	Equipment and systems at each ERV	<p>All terrain sturdy 4X4 drive vehicle</p> <ul style="list-style-type: none"> ⊗ Auto deploy VSAT node (1) ⊗ Hardware based VC system (1) ⊗ LCD display (1) ⊗ All weather CC TV camera for day and night operations with PTZ operation capability (1) ⊗ Laptop computers (3) ⊗ VoIP phones (2) using ATA (1) registered with VoIP gateway at SEOC ⊗ Universal communication interface (using soft clients and VoIP switching matrix) to bridge VHF networks of: Police, Fire brigade, National Disaster Rescue Force (NDRF) and Revenue department operating in 136 to 174 MHz frequency band. Provision is to be made for 2 (two) R F channels per network and 2 VoIP channels on MPLS-VPN and VSAT (total 12 ports) ⊗ VHF base station for local network with one base station and 10 handheld sets ⊗ Remote operated telescopic mast (40 Feet when extended fully) (1) ⊗ HF wireless transceiver (1) ⊗ Furniture and fixtures for working persons 3) ⊗ Diesel engine generator (1) for equipment, air conditioner and lighting ⊗ Fuel supply for travel to disaster site and running the facility for up to 72 hours ⊗ UPS of required rating to power up electronic equipment and emergency lighting (back-up 2 hours), ⊗ Airconditioning of the equipment room ⊗ Wireless LAN ⊗ Laser Printer and MiniPlotters (1 unit). ⊗ All in one-Printers/ scanner/ fax (1 unit.)
12	Portable VSATs	Each system should consist of Schedule II Annex II Section 1.5 and Annex III Section 1.3

		<ul style="list-style-type: none"> ⊙ Carbon fiber sturdy 1 meter nominal diameter manual deploy antenna system (1) ⊙ VSAT RF system (1) ⊙ Integrated VSAT Modem or with rain proof shelter system (1) ⊙ VHF base station for local network (1) ⊙ integrated micro base station for limited coverage cell phone operation and long distance linkage via VSAT ⊙ Sturdy carrying cases (not more than 3) to ensure that single package weight ≤ 30 KG ⊙ SMF Batteries (as required) and 500 VA portable Petrol / Kerosene driven engine generator and battery charger for powering the system (1 each)
13	Manpower	To work at SEOC, DEOCs, ERVs and at disaster sites with portable systems
a	Details of manpower requirements	Manpower is to be provided at various EOCs as mentioned below. Infrastructure for helpdesk and technical operational staff of the operator (for manning VSAT hub, operating Video conferencing systems, video switching etc.) will be part of operators deliverables
b	SEOC	<p>Management, help desk and call centre staff:</p> <p>a. Staff to be available 0900 to 1800 hours and 24 hours on call basis:</p> <ul style="list-style-type: none"> ⊙ Operations manager ⊙ VSAT/ ICT network in-charge ⊙ Call centre system manager ⊙ Facility engineers (as necessary) <p>b. Staff to be available for more than one shift or on 24X7 basis</p> <ul style="list-style-type: none"> ⊙ Operating staff for various network systems ⊙ Help Desk engineers (as necessary) ⊙ Call centre agents during normal time 3 per shift on 24X7 basis) ⊙ Call centre operators during emergency 10 per shift for 2 shifts (0600 to 2200 hours)
c	DEOC	<p>Staff to be available 0900 to 0600 hours and 24 hours on call basis:</p> <p>Call centre / Help desk staff : 1 per EOC site</p>
d	MEOC (ERV)	Staff to be available 0900 to 0600 hours and 24 hours on call

		<p>basis:</p> <p>Driver (1) and Engineer Level-1 (1) per ERV.</p> <p>The (L-1) engineer should be trained in installing, commissioning, operating and managing all equipments and services integrated into ERV. This staff will have to move to disaster site and remain there till operations are concluded.</p>
e	Staff capabilities and SOP	<p>All operational staff to be properly trained and should have at least 1 year working experience of the systems</p> <ul style="list-style-type: none"> ⊗ Operator should be in a position to rampup staff strength at a short notice to meet emergency requirements ⊗ SOP should be clearly worded to help operating staff as well as government functionaries to operate systems efficiently and without causing any harm to systems
14	Training for DMD / GoB operating personnel	Total 500 persons of DMD / GoB are to be trained. Training is to be provided at SEOC (using facilities set-up at SEOC) at the interval of every six months and for up to 50 participants in each program.
15	Uptime requirements	<p>Communication Network infrastructure ≥ 99.5%</p> <p>Application software ≥98%</p>
16	Quality of Service	<p>Voice</p> <ul style="list-style-type: none"> ⊗ Bit Error Rate (BER): Better than 10⁻⁶ ⊗ End to end delay: ≤ 700 milliseconds ⊗ Grade of service: ≤3% <p>Video-Conferencing</p> <ul style="list-style-type: none"> ⊗ Bit Error Rate (BER): Better than 10⁻⁶ ⊗ Video error concealment for smooth video in high packet loss conditions ⊗ Dynamic bandwidth allocation and priority of service <p>Data</p> <ul style="list-style-type: none"> ⊗ Bit Error Rate (BER): Better than 10⁻⁶

Note:

a. **The operator has to take care of expenses towards:**

(i) Facility Management:

- a) Arrange AV, Printers, and Plotters as compatible with reporting format & workload at all the manned locations and as specified elsewhere in this NEOI.
- b) Arrange Workstations/Peripherals for Network Monitoring at SEOC, as per Technical specification for Workstation.
- c) Expenses for consumables, generator fuel /lubricant, electricity consumed for equipment and. Air-conditioning

(ii) Manpower Charges

This includes salary, travel, stay, communication and other out of pocket expenses, for manpower deployed at various locations including ERVs.

b. Resources to be provided by DMD are:

- a. SEOC buildings at Patna
- b. Buildings for DEOC and space for installation of operator's equipment including working space for operator's staff
- c. Space for location of MEOC vehicles and portable VSAT systems at SEOC and Divisional Hqrs
- d. Primary backbone network for emergency communication on BSWAN
- e. GIS data base with different layers of information regarding available infrastructure
- f. State Disaster Resource Network that provides online inventory of resources including trained manpower available for disaster management. It also provides information on demographics, livelihood activities, shelters etc. that is useful for, preparedness, mitigation, relief and rehabilitation activities.
- g. State Data Centre for locating application servers
- h. Connectivity with Important Government offices (Including 14 ESF) at SHQ and ESF departments at District HQ, on BSWAN
- i. Telephone lines at DEOC

SECTION 8: ACCEPTANCE TESTS AND PROCEDURE

8.1 Introduction

- a. DMD will appoint a qualified and experienced Third Party Agency (TPA) to supervise acceptance testing of EOCI
- b. Acceptance Tests will be carried out on all subsystems of EOCI to check whether supplied / installed systems meet specifications indicated in NEoI document as well as system performance specified by the manufacturer / bidder in the bid document.
- b. Additional tests will include checking of interfaces with other subsystems which work in tandem.
- c. Finally overall system performance will be checked as a whole to ensure that there are no glitches in the design / implementation.
- d. Suggested tests and procedures are included in this section as indicative in nature and no inference should be drawn that these are exhaustive. Final list of tests as well as Acceptance Test Procedure (ATP) will be worked out in coordination with Operator.
- e. DMD may opt for Factory Acceptance Tests (FAT) in case certain important tests can't be conducted in the field.
- f. The Operator may also work out a test plan to demonstrate that offered systems meet requirements of the NEoI as well as there is sufficient margin to take care of deterioration of the system over its working life (end of life performance).

8.2 Systems and Subsystems to be tested

Following systems and sub-systems shall be tested:

- i. MPLS-VPN set-up by the Operator as back-up to BSWAN
- ii. VSAT network
- iii. Network Monitoring System (NMS) at VSAT Hub set-up at SEOC in case captive VSAT network is provided (optional test)
- iv. Systems installed in MEOC (Emergency Response Vehicle) and portable equipment
- v. Equipment installed at DEOC in standalone modes and in network mode
- vi. Audio / video and Multimedia management systems at SEOC

- vii. Call centre operations and Alert and warning system
- viii. Information Management System
- ix. Decision Support System
- xi. Power supply systems and its back-up capacity in the case of mains supply failure

8.3 Details of proposed tests

Sr. No.	Name of the system / sub-system	Parameter to be tested	Purpose / procedure
1	MPLS-VPN (MPLS-VPN is required where BSWAN connectivity doesn't exist between EOCs or EOC and ESF offices.)	Bandwidth	Committed Information Rate (CIR) or link bandwidth between SEOC and DEOC will be at least 128 Kbps with capacity up-gradation up-to 512 Kbps on demand CIR between SEOC / DEOC and offices of ESF organisations will be 64 Kbps with capacity up-gradation up to 128 Kbps on demand
		Network interfaces	All interfaces of MPLS nodes match the equipment supplied by the Operator
		Network switch over operations	VSAT and MPLS network wherever exist at same locations will take over the transmission in case of failure of other system
		Security	The system security doesn't permit intrusion by unauthorized sources / users
		Setting-up priority of services	To check that it is possible to set-up priority of messages (voice over data or video over voice etc.) over the network
		The system BER	BER for data transmission is (either equal to or less than) $\leq 10^{-7}$
2	VSAT network	Operating mode	STAR network operating in DVBS / FTDMA mode
		Frequency of operation	C band or Ku band as offered by the bidder
		Link capacity	SEOC to DEOC up to 10.0 Mbps DEOC to SEOC up to 512 Kbps

		Communication facilities	Voice, Data and Videoconferencing in IP mode
		System BER	BER for data transmission is (either equal to or less than) $\leq 10^{-6}$
3	Back-up power	UPS Capacity	Rating of UPS is sufficient to support equipment at each node for at least 1 hour in case of mains failure
		Diesel Generator	Power rating is sufficient to support all equipment including air-conditioning systems
		Fuel storage capacity	To support operation of Diesel generator for a minimum period of 48 Hours

SCHEDULES

FORMATS FOR SUBMISSION OF THE BID

1.9 SCHEDULE 1: FORMAT FOR POWER OF ATTORNEY

(To be executed on a non-judicial stamp paper of appropriate value as per the stamp duty laws, relevant to the place of execution. Foreign companies submitting Bids are required to follow the applicable law in their country)

Power of Attorney to be provided by the Sole Bidder/ Lead Member in favor of its representative as evidence of authorized representative's authority.

Know all men by these presents, We [●] (name and address of the registered office of the Bidder or Lead Member of the Consortium, as applicable) do hereby constitute, appoint and authorize Mr./Ms [●] (name and residential address) who is presently employed with us and holding the position of [●] as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for *Appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up Emergency Operations Centre Infrastructure (EOCI) for Disaster Management Department (DMD), Government of Bihar* in response to the NEoI dated [●] issued by DMD, including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, power of attorney in favour of the lead member, guarantees or any other document which DMD may require us to submit. The aforesaid attorney is further authorized for making representations to and providing information / responses to DMD, representing us in all matters and generally dealing with DMD in all matters in connection with our Bid till the completion of the Bidding Process as per the terms of the NEoI.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the NEoI.

Signed by the within named [●] [Insert the name of the executant company] through the hand of

Mr. [●] duly authorized by the Board to issue such Power of Attorney

Dated this [●] day of [●]

Accepted

[●] Signature of Attorney (Name, designation and address of the Attorney)

Attested

[●]

(Signature of the executant) (Name, designation and address of the executant)

[●]

Signature and stamp of Notary of the place of execution

Common seal of [●] has been affixed in my/our presence pursuant to Board of Director's Resolution dated [●].

WITNESS

1. [●]
(Signature)

Name [●]
Designation [●]

2. **[●]**
(Signature)
Name [●]
Designation [●]

Notes:

- (1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s).
- (2) In the event, power of attorney has been executed outside India, the same needs to be duly notarized by a notary public of the jurisdiction where it is executed.
- (3) Also, the executants (s) should submit for verification the extract of the charter documents and documents such as a Board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executants (s).

1.10 SCHEDULE 2: POWER OF ATTORNEY TO BE PROVIDED BY EACH OF THE MEMBERS OF THE CONSORTIUM (OTHER THAN THE LEAD MEMBER) IN FAVOR OF THE LEAD MEMBER

WHEREAS Disaster Management Department (DMD) has issued a Notice for submission of Expression of Interest (NEOI) on [●] [Insert Date] for inviting Bids in respect of *Appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up Emergency Operations Centre Infrastructure (EOCI) for Disaster Management Department, Government of Bihar* on the terms and conditions contained in the NEOI and the Bidding Documents (as defined in NEOI);

AND WHEREAS [●], [●] and [●] (Insert names of all Members of Consortium) the Members of the Consortium are desirous of submitting a Bid in response to the NEOI, and if selected, undertake the Project in accordance with the NEOI;

AND WHEREAS all the Members of the Consortium have agreed under the Consortium Agreement dated [●] entered into between all the Members and submitted along with the Bid to appoint [●] (Insert the name and address of the Lead Member) as the Lead Member to represent all the Members of the Consortium for all matters regarding the NEOI and the Bid Documents and the Bid;

AND WHEREAS pursuant to the terms of the NEOI and the Consortium Agreement, we, the Members of the Consortium hereby designate M/s [●] (Insert name of the Lead Member) as the Lead Member to represent us in all matters regarding the Bid and the NEOI, in the manner stated below:-

Know all men by these presents, We [●] (Insert name and address of the registered office of the Member 1), [●] (Insert name and address of the registered office of the Member 2) [●] (Insert name and address of the registered office of the Member n) do hereby constitute, appoint and authorise [●] (name and registered office address of the Lead Member), which is one of the Members of the Consortium, to act as the Lead Member and our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of Consortium's Bid in response to the NEOI dated [●], issued by DMD including signing and submission of the Bid and all documents related to the Bid as specified in the NEOI, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document, which DMD may require us to submit. The aforesaid Attorney shall be further authorized for making representations to and providing information / responses to DMD, representing us and the Consortium in all matters named in the NEOI, and generally dealing with DMD in all matters in connection with our Bid, till completion of the Bidding Process in accordance with the NEOI.

We, as Members of the Consortium, hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the NEOI.

Signed by the within named [●][Insert the name of the executant company] through the hand of Mr. [●] duly authorized by the Board to issue such Power of Attorney

Dated this [●] day of [●]

Accepted

[●]

Signature of Attorney (Name, designation and address of the Attorney)

Attested

[●]

(Signature of the executant) (Name, designation and address of the executant)

[●]

Signature and stamp of Notary of the place of execution

Common seal of [●] has been affixed in my/our presence pursuant to Board of Director's Resolution dated [●]

WITNESS:

1. **[●]**
 (Signature)
 Name [●]
 Designation [●]

2. **[●]**
 (Signature)
 Name [●]
 Designation [●]

Notes:

- (1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s).

- (2) In the event, power of attorney has been executed outside India, the same needs to be duly notarized by a notary public of the jurisdiction where it is executed.

- (3) Also, wherever required, the executant(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

1.11 SCHEDULE 3: FORMAT FOR TECHNICAL BID LETTER

ON THE LETTERHEAD OF THE BIDDER

Reference:

To,

**The Principal Secretary
Disaster Management Department
Government of Bihar
Old Secretariat, Patna-800015**

Sir/ Madam,

**Subject: Selection and appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up
Emergency Operations Centre Infrastructure (EOCI) for Disaster Management Department (DMD),
government of Bihar (GoB)**

Reference: NEOI No: < REFERENCE NUMBER> Dated <DD/MM/YYYY>

Dear Sir,

With reference to your NEOI Document dated [●], I/we, having examined all relevant documents and understood their contents, hereby submit our Bid for selection as Operator for [*Appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up Emergency Operations Centre Infrastructure (EOCI) for Disaster Management Department, Government of Bihar*].

The Bid is unconditional and unqualified.

1. All information provided in the Bid and in the Appendices is true and correct and all documents accompanying such Bid are true copies of their respective originals.
2. This statement is made for the express purpose of appointment as the Operator for the aforesaid Project.
3. I/We shall make available to DMD any additional information it may deem necessary or require for supplementing or authenticating the Bid.
4. I/We acknowledge the right of the DMD to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
5. I/We certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.
6. I/We declare that:
 - (a) I/We have examined and have no reservations to the NEOI and the Bidding Documents, including any addendum issued by DMD;

- (b) I/We do not have any Conflict of Interest in accordance with Clause (.), of the NEOI Document;
 - (c) I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, in respect of any tender or request for proposal issued by or any agreement entered into with DMD or any other public sector enterprise or any government, Central or State;
 - (d) I/We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; and
 - (e) No bar from any Central/State Government or any other entity controlled by it, for participating in any project, subsists as on the date of Bid.
7. I/We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to select the Operator, without incurring any liability to the Bidders in accordance with the NEOI document.
 8. I/We declare that we/any member of the consortium, are/is not a Member of a/any other Consortium applying for selection as an Operator.
 9. I/We certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a court of law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
 10. I/We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a court of law for any offence committed by us or by any of our Associates.
 11. I/We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our directors.
 12. I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by GSDMA [and/ or the Government of India] in connection with the selection of Operator or in connection with the Bidding Process itself in respect of the above mentioned Project.
 13. The Bid Security of INR 1, 00, 00,000/- (INR One Crore only) in the form of a Bank Guarantee is attached, in accordance with the NEOI document.
 14. I/We agree and understand that the Bid is subject to the provisions of the NEOI document. In no case, shall I/we have any claim or right of whatsoever nature if the Project is not awarded to me/us or our Bid is not opened or rejected.
 15. I/We agree to keep this offer valid for 180 (one hundred and eighty) days from the Bid Due Date specified in the NEOI.
 16. A Power of Attorney in favour of the authorised signatory to sign and submit this Bid and documents is attached herewith.
 17. In the event of my/our entity/ consortium being selected as the Operator, I/we agree to enter into the Service Agreement in accordance with the form provided by DMD. We agree not to seek any changes in the aforesaid form and agree to abide by the same.
 18. I/We have studied NEOI and all other documents carefully and also surveyed the Project site. We understand that except to the extent as expressly set forth in the Service Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the DMD or in

respect of any matter arising out of or concerning or relating to the Bidding Process including the award of the Project.

19. The Commercial Bid is being submitted separately. This Technical Bid read with the Commercial Bid submitted shall constitute the Bid which shall be binding on us.
20. I / We agree and undertake to abide by all the terms and conditions of the NEoI Document. In witness thereof, I/we submit this Bid under and in accordance with the terms of the NEoI Document.

Yours faithfully,

(Signature, name, designation and address of the authorised signatory)

(Name and seal of the Bidder / Lead Member)

1.11.1 SCHEDULE 4: SUGGESTED CONTENT OF TECHNICAL SOLUTION

1. The Bidder is required to describe the proposed technical solution in this section. Following should be captured in the explanation:
 - a) Clear articulation and description of the design and technical solution and various components including manufacturer of equipment or sizing of infrastructure (including diagrams and calculations wherever applicable).
 - b) Extent of compliance to technical requirements specified in the scope of work.
 - c) Technical Design and clear articulation of benefits to DMD GoB of various components of the solution vis-a-vis other options available.
 - d) Strength of the Bidder to provide services including examples or case-studies of similar solutions deployed for other customers.

2. The Bidder should provide detailed design and sizing calculation for the following listing all assumptions that have been considered:
 - a. IT Components design Approach & Methodology
 - b. Operations & Maintenance
 - c. Approach & Methodology for Commissioning of the EOCI for DMD GoB.
 - d. Adherence to Best practices to meet relevant standards of International Standards Organisation (ISO)

3. Bidder shall provide a detailed project plan with timelines, resource allocation, milestones etc. in for Supply, Installation, Commissioning, Operations and Maintenance of the ICT components for EOCI.

1.11.2 SCHEDULE 5: FORMAT - GENERAL INFORMATION ABOUT THE BIDDER

Details of the Bidder		
1.	Name of the Bidder	
2.	Address of the Bidder	
3.	Status of the Company (Public Ltd/ Pvt. Ltd)	
4.	Details of Incorporation of the Company	Date:
		Ref. #
5.	Details of Commencement of Business	Date:
		Ref. #
6.	Valid Sales tax registration no.	
7.	Valid Service tax registration no.	
8.	Permanent Account Number (PAN)	
9.	Name & Designation of the contact person to whom all references shall be made regarding this tender	
10.	Telephone No. (with STD Code)	
11.	E-Mail of the contact person:	
12.	Fax No. (with STD Code)	
13.	Website	

1.11.3

*SCHEDULE 6: SPECIFICATIONS OF THE OFFERED SYSTEMS,
SUBSYSTEMS, EQUIPMENT AND COMPONENTS*

Sr. no.	Description of the equipment / system	Make / Model	Technical specifications
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

1.11.4 SCHEDULE 7: MANPOWER DETAILS

The Bidder should provide a detailed resource deployment plan to ensure that technically qualified staff is available to deliver the Project. The Bidder would require qualified Emergency Operations Centre Design expert, Project Manager, etc. who have to be necessarily the employee of the Vendor. But the other resources like the civil works staff, etc. may be employed/ sub-contracted by the Bidder. However, the Bidder would have to monitor and manage the staff on a daily basis.

1. The Bidder should provide the summary table of details of the typical manpower that will be deployed on this project for *implementation and O&M*.

Sr. No.	Type of Resource	No. of Resources	Key Responsibilities	Academic Qualifications and Certifications (e.g. EOC operation and emergency management, Communication, Network, ITSM etc)	Years of Relevant Experience
1.	Project manager				
2.	Emergency Operations Centre Design Expert				
3.	Onsite support				
4.	Others				

1.11.5 SCHEDULE 8: *DEVIATIONS FROM BID TERMS & CONDITIONS*

The given format should be followed while marking out the deviations from Bid terms and conditions:

S. No.	Page No.	Section No.	Clause No.	Statement of deviations and variations	Remarks
1.					
2.					
3.					
4.					
5.					
6.					

1.11.6 SCHEDULE 9: PROFORMA OF BANK GUARANTEE TOWARDS

BID SECURITY

Format of the Unconditional and Irrevocable Bank Guarantee for Bid Bond

(To be executed on a non-judicial stamp paper of appropriate value as per the stamp duty laws, relevant to the place of execution.)

In consideration of the [●] (Insert name of the Bidder) submitting the Bid for *Appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up Emergency Operations Centre Infrastructure (EOCI) for Disaster Management Department (DMD) Government of Bihar (GoB)* in response to the Notice for submission of Expression of Interest (NEoI) dated [●] [Insert date of NEoI] issued by DMD, and DMD agreeing to consider the Bid of [●] [Insert the name of the Bidder] as per the terms of the NEoI, the [●] [Insert name and address of the bank issuing the Bid Bond, and address of the head office] (hereinafter referred to as “**Guarantor Bank**”) hereby agrees unequivocally, irrevocably and unconditionally to pay to DMD GOB or its authorized representative at [●] forthwith on demand in writing from DMD GOB or any representative authorized by it in this behalf an amount not exceeding INR 1,00,00,000/- (INR One Crore) only, on behalf of M/s [●][Insert name of the Bidder].

This guarantee shall be valid and binding on the Guarantor Bank up to and including [●] [Insert date of validity of Bid Bond in accordance with the NEoI] and shall not be terminable by notice or any change in the constitution of the Guarantor Bank or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between concerned parties.

Our liability under this Guarantee is restricted to INR [●] [insert amount in words] only. DMD GOB or its authorized representative shall be entitled to invoke this Guarantee until [] [Insert Date, which is 30 days after the date in the preceding sentence]. The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from DMD GOB or its authorized representative, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to DMD GOB or its authorized representative.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection, disputes, or disparities raised by the Bidder or any other person. The Guarantor Bank shall not require DMD GOB or its authorized representative to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against DMD GOB or its authorized representative in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at [●] shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger,

amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly, DMD GOB or its authorized representative shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder to enforce any security held by DMD GOB or its authorized representative or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to DMD GOB and may be assigned, in whole or in part, (whether absolutely or by way of security) by DMD GOB to any entity to whom it is entitled to assign its rights and obligations under the NEOI Documents.

The Guarantor Bank hereby agrees and acknowledges that DMD GOB shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to INR 1,00,00,000/- (INR One Crore only) and it shall remain in force until [●] [*Date to be inserted on the basis of NEoI*], with an additional claim period of thirty (30) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this BANK GUARANTEE only if DMD GOB or its authorized representative serves upon us a written claim or demand.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this [●] day of [●] at [●].

Witness:

1 [●]
Signature
Name and address.
Name:
Designation with Bank Stamp Signature

2 [●]
Signature
Name and address.
Name:
Designation with Bank Stamp Signature

Name and address

Attorney, as per power of attorney No. [●]

For: [●] [*Insert Name of the Bank*]

Banker's Stamp and Full Address:

Dated this [●] day of [●] 2011

Note: The Stamp Paper should be in the name of the Executing Bank.

Instructions for Furnishing Bank Guarantee

1.12 SCHEDULE 10: COMMERCIAL BID LETTER

ON THE LETTERHEAD OF THE BIDDER

To,
The Principal Secretary,
Disaster Management Department
Government of Bihar
Old Secretariat
Patna- 800015, Bihar State

Subject: Appointment of BOOT (Build, Own, Operate, Transfer) Operator for setting up ICT (Information & Communication Technology) Infrastructure for Gujarat State Disaster Response (GSDR)

Reference: NEOI No: <NEOI REFERENCE NUMBER> Dated <DD/MM/YYYY>

I/We, [●] (Bidder's name) herewith submit the Commercial Bid as laid down in NEOI dated XXXXXX for selection of my/our firm as Operator for above.

I/We agree that this offer shall remain valid for a period of 180 (one hundred and eighty) days from the Bid Due Date or such further period as may be mutually agreed upon.

ITEM	Figure in INR	Figure in words
QGR		

Yours faithfully,

(Signature, name and designation of the authorised signatory)

Note: The Financial Proposal is to be submitted strictly as per forms given in the NEOI.