

# Guidelines for Establishment and Operation of Emergency Operations Center (EOC)



### October 2024



NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA) GOVERNMENT OF INDIA



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NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA) Government of India NDMA Bhawan, A-1, Safdarjung Enclave, New Delhi-110 029

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A publication of: National Disaster Management Authority (NDMA) Government of India NDMA Bhawan A -1, Safdarjung Enclave New Delhi-110029

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### FOREWORD

Given the unique geo-climatic conditions and huge population, India is typically prone to all kinds of disasters e.g. cyclones and floods, earthquakes, droughts, cloud & glacial bursts etc. Disaster risks in India are further compounded by increasing vulnerabilities related to climate change and environmental degradation owing to changing demographics and socio-economic conditions, unplanned urbanization and development within high-risk zones. To mitigate/ assuage this scale of vulnerability and such losses, India has a robust policy and institutional framework for DRR. However, there are still many challenges in their efficient implementation due to multiple levels of administration, overlapping jurisdictions and stakeholders plus a variety of regional constraints.

An Emergency Operations Centre (EOC) is one critical infrastructure in "preparedness" that augments the capacity of authorities and other stakeholders not only for a coordinated and timely response but also in undertaking myriads of mitigation and preparedness activities right from risk communication, hazard monitoring, early warning generation and dissemination, resource management, decision making, etc. The EOC establishes effective linkages among key stakeholders at the different administrative levels and aids in the smooth and collaborative functioning of these stakeholders with the support of various physical, human, and ICT infrastructure.

Recognising the fact that an effective EOC system can act as the central coordination and control unit, from the national to the event site level and ensures the effective discharge of various disaster risk management functions including continuing operations of infrastructure and services that support emergency planning and response, NDMA initiated the formulation of these guidelines.

With technical assistance from UNDP India, the guidelines aim to put forward the optimal standards for establishment and effective functioning of EOCs at different administrative levels by proposing a comprehensive directive on the premises design of the EOC, its physical & ICT infrastructure and the Standard Operating Procedures for its functioning during normal and emergency times. The preparation process of the guidelines underwent extensive literature studies and multiple rounds of discussions with various technical experts, operation teams, SEOCs & DEOCs and other stakeholders.

Hopefully, the states will setup the EOCs at the state and district levels acknowledging the operational challenges in disaster response operations and the beneficial impact of EOCs in achieving Disaster Risk Resilience goals and the Hon'ble PM's 10-Point Agenda for the country.

Member and HoD

Kishe &. Untsa

**Dr Krishna S. Vatsa** Member

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# **ABBREVIATIONS**

CWC	Central Water Commission
CDRN	Corporate Disaster Resource Network
DCR	District Control Room
DDMA	District Disaster Management Authority
DDMP	District Disaster Management Plan
DIC	District Incident Commander
DIPR	Directorate of Information and Public Relations
DIR	Daily Incident Report
DMP	Disaster Management Plan
DSS	Decision Support System
EOC	Emergency Operations Centre
ERO	Emergency Response Objectives
ERV	Emergency Rescue Vehicle
ESF	Emergency Support Function
EWS	Early Warning System
FIR	First Information Report
GSI	Geological Survey of India
HF	High Frequency
HVRA	Hazard Vulnerability & Risk Assessment
IC	Incident Commander
ICP	Incident Command Post
ICT	Information & Communication Technology
IDP	Incident Demobilisation Plan
IDKN	India Disaster Knowledge Network
IDRN	Indian Disaster Resource Network
IMD	India Meteorological Department
INCOIS	Indian National Centre for Ocean Information Services
IRS	Incident Response System
IRT	Incident Response Team
MHA	Ministry of Home Affairs
NCESS	National Centre for Earth Science Studies
NDMA	National Disaster Management Authority
NDMIS	National Disaster Management Information System

NDMP	National Disaster Management Plan
NEOC	National Emergency Operations Centre
NEOC	National Emergency Operations Centre
NERC	National Emergency Response Centre
NGO	Non-Governmental Organisation
OIC	Onsite Incident Commander
PRI	Panchayati Raj Institutions
PWD	Public Works Department
QRT	Quick Response Team
RO	Responsible Officer
RTO	Regional Transport Office
SDMA	State Disaster Management Authority
SDMP	State Disaster Management Plan
SEC	State Emergency Committee
SEOC	State Emergency Operations Centre
SIC	State Incident Commander
SOP	Standard Operating Procedure
SPO	State Protocol Officer
TEOC	Tehsil Emergency Operations Centre
VHF	Very High Frequency

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# INTRODUCTION TO THE GUIDELINES

1

#### 1.1. VISION

The disaster response process involves multiple stakeholders functioning in critical time frames. The Emergency Operations Centres (EOC) provide a common coordination platform for all these agencies to deliberate the situation in view of available data & resources. Therefore, the EOCs need to be integrated in the Disaster Management mechanism in the country, at all levels i.e. national, state, district and sub- district levels for more effective response till the last mile.

#### **1.2. SCOPE**

These guidelines provide an overarching framework for establishing and operating EOCs at various sub-national levels. The guidelines shall be adapted by States and Districts in their individual context which includes their HVRA profile, their administrative structure and financial capacities etc.

The guidelines incorporate the latest national and international directives on EOC management and operations during emergencies and normal times to provide a comprehensive outlook to stakeholders and strengthen response planning, inter-agency & intra agency coordination, monitoring & evaluation and data management at state, district and sub-district levels. These guidelines include:

- The necessity and institutional provisions to establish EOCs in the country at different levels.
- A comprehensive directive for establishing the physical infrastructure of EOCs e.g. site selection, architectural design recommendations, equipment & ICT infrastructure plan etc at state, district and tehsil/ taluk levels.
- The Standard Operating Procedures (SOP) for EOC functioning at sub-national levels to guide the operational methodology to be employed for a response to the impact (impending or actual) of both natural and human caused/induced hazards i.e. their functions during normal & emergency times, staffing structure etc.
- The optimum/ minimum standards to be followed in this regard.

#### **1.3. OBJECTIVES**

The main objectives of the guidelines are:

- To establish EOCs as a pivotal response structure in the Disaster Management paradigm of the country as lack of a dedicated response facility and resources, is an identified gap within the response mechanism in the country.
- To provide guidance to government and other stakeholders on the establishment and operationalisation of EOCs at various sub-national levels.
- To recommend the essential technical prerequisites for establishing EOCs at state, district and tehsil levels.

- To suggest SOP, incorporating different response approaches towards enhancing stakeholder's comprehension and promoting more effective coordination and operational efficiency through the EOC.
- To ensure prompt response action upto the community level through a proactive approach rather than a reactive process.

#### **1.4. INTENDED AUDIENCE**

The guidelines are intended for all individuals who have designate responsibilities in the planning, coordination, operation and activation of the EOCs. This includes:

- Government officials and personnel at the national, state, and district level, both from disaster management and concerned ministries.
- Academic, research and technical institutions.
- Personnel from NGOs, global organisations and international agencies.
- Professional bodies and government-associated organisations.
- Donors and funders
- Community level workers
- Disaster responders and frontline workers
- Health and allied health professionals
- Community leaders
- Media personnel
- Individual citizens and citizen groups

These guidelines are applicable to those who have designated responsibilities in the operation and activation of the EOC.

# EOCs IN DISASTER MANAGEMENT

# 2

#### 2.1. OVERVIEW OF EOCs

A prompt, well-coordinated and effective response mounted in the aftermath of a disaster not only minimizes loss of life and property but also facilitates early recovery. However, there are many challenges in its efficient implementation due to multiple levels of administration, overlapping jurisdictions and stakeholders plus a variety of technological constraints. An EOC is one critical infrastructure that augments the capacity of authorities and other stakeholders not only for a coordinated and timely response but also in undertaking myriads of mitigation and preparedness activities right from risk communication, hazard monitoring, early warning generation and dissemination, resources management and decision making, etc.

The EOC provides a strategic platform to establish effective linkages among key stakeholders at the different administrative levels and aids in the smooth and collaborative functioning of these stakeholders with the support of various physical, human, and ICT infrastructure. An effective EOC system rests on the principle of accountability, unified and permeating chain of command till the last mile. Hence, the EOC acts as the central superintending and control unit, from the national to the event site level and ensures the effective discharge of various disaster risk management functions including continuing operations of infrastructure and services that support emergency planning and response.

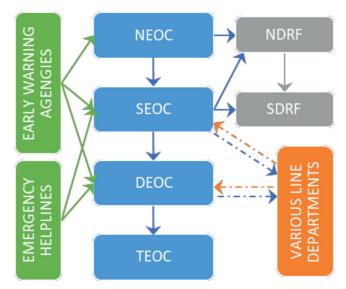


Figure 01: Vertical & Lateral Association of EOC

During an emergency, the EOC collects a large amount of data from multiple sources. Analysts from appropriate stakeholder organizations analyse the data and distil it into reports so that decision makers have the best possible information and intelligence when deciding how the jurisdiction will respond. Further, the EOC communicates information to response team members in the field, giving them greater insight into their work.

EOCs can be at various levels of operation: National level, State level, District level and sub-

<sup>&</sup>lt;sup>1</sup>NDMA Guidelines: National Disaster Management Information and Communication System, 2012

district level. Each EOC is designed and developed in such a manner as to normally work in an independent way to fulfill the local requirements<sup>(1)</sup>. In addition, it should also have the capability to access or send information from/to any of the EOCs across the country. The set up and scope of activities for each of these may vary as per the capabilities and the context of the area of operations but the basic objective of these is the same at every level.

The EOC stays operational throughout the year in preparedness mode, working to take care of the extended preparedness activities of data management, awareness and training, capacity building, which are essential for the smooth functioning of the EOC during crisis situations. Additionally, it also provides a backup support to all emergency helplines in the jurisdiction. During an emergency, the EOC gets upgraded and representatives of all emergency stakeholders man it round the clock.

EOCs form a critical link in the emergency response chain enabling the Incident Commanders to focus on the needs of the incident, serving as an information conduit between incident command and various concerned administrative factions and promoting problem resolution at the lowest practical level.

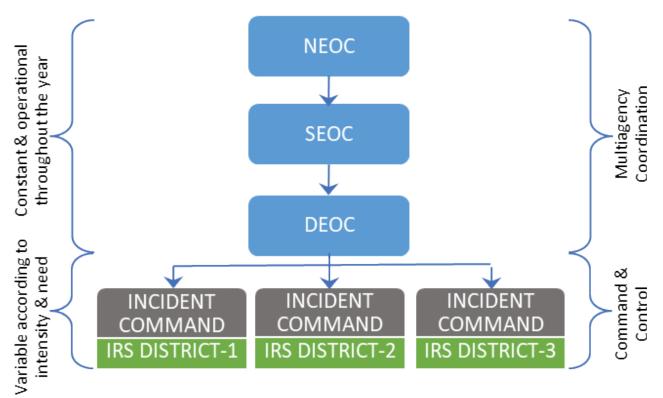


Figure 02: Organisational Structure Between EOC & IRS

Following critical requirements of the IC can be fulfilled by the EOC:

- 1. A common operating picture: critical during large or complex incidents where multiple jurisdictions or multiple response agencies are involved.
- 2. Policy direction

- 3. Communication support: critical for achieving last-mile connectivity.
- 4. Resource management: includes people, equipment and supplies required for response.
- 5. Strategic planning
- 6. Legal & financial support

#### 2.2. PROVISIONS SUPPORTING THE ESTABLISHMENT OF EOCs

Some of the key provisions and recommendations at the global and national level supporting the establishment of an EOC for strengthening the DRM mechanism at the sub-national level are discussed below.

The Sendai Framework for Disaster Risk Reduction (SFDRR) emphasizes enhancing disaster preparedness and capacities for effective response. Effective disaster response requires the continued functioning of infrastructure and services that support emergency planning and response. It is supported by strong cooperation and coordination amongst the key stakeholders of DRM including government departments, authorities at different levels, private agencies, voluntary organizations, etc. Such critical functions and multi-stakeholder linkages are supported by the EOC. This also necessitates strengthening and investing in risk and emergency communication systems, multi-hazards early warning systems, and telecommunications systems together with well trained and skilled human resources.

In addition to disaster response and related coordination, the EOC also plays a critical role in supporting various actions, targets and recommendations envisaged in the SFDRR. These include supporting the decision-makers by the provision of appropriate disaster risk information, data, maps; supporting access to real time reliable datasets; providing a platform to diverse stakeholders, practitioners, and experts to dialogue and manage disaster risks; facilitating the inter-agency coordination & liaising; supporting collection, allocation, and management of emergency resources etc.

Similarly, at the national level, the need for EOC is implicitly underscored in various provisions of the Disaster Management Act, 2005. The DM Act mandates having in place adequate communications systems, early warning systems along with setting up a suitable mechanism for dissemination of critical information to public. It also envisages management of relief and rescue material at the sub national level and ensuring effective coordination during disasters. These are among the various critical functions that an EOC performs.

The National Policy on Disaster Management 2009<sup>(2)</sup> explicitly talks about strengthening and establishing the EOCs at various levels. The policy lays down that such EOCs should be duly equipped with "contemporary technologies and communication facilities" which should be maintained and regularly upgraded. In addition to this, the Policy emphasizes the immense role of local authorities including the Urban Local Bodies (ULBs) in enhancing the preparedness and capacities of the districts

<sup>&</sup>lt;sup>2</sup> Section 5: Disaster Prevention, Mitigation and Preparedness, National Policy on Disaster Management 2009 <sup>3</sup> Building Disaster Resilience–Responsibility Framework, National Disaster Management Plan 2019

and state, especially during the response, relief, and rescue activities. The EOCs at sub-national level i.e. the SEOC, DEOC or TEOC have a paramount role to play in this regard. As part of building disaster resilience and investing in various structural measures for Disaster Risk Reduction (DRR), the NDMP 2019<sup>(3)</sup> recommends the establishment of EOC at the sub-national level as medium-term measure and has recognized the responsibilities of the respective Disaster Management Department, State Disaster Management Authorities (SDMAs), and ULBs for the same.

The Hon'ble Prime Minister's 10-points Agenda for Disaster Risk Reduction (DRR) promotes localization of disaster risk reduction and calls for "leveraging technology to enhance the efficiency of DRM efforts". It advocates the adequate use of different technologies and their applications for strengthening the early warning systems for multiple hazards. It also stresses the effective utilization of social media and mobile-based technologies for DRR. The EOC is a facility that supports all such functions at different levels.

#### 2.3. INSTITUTIONAL MECHANISM FOR ESTABLISHMENT OF EOCs

The EOCs (SEOC/ DEOC) are set-up as a part of the Disaster Management Plan (NDMP/ SDMP/ DDMP). For the establishment of an EOC or upgrading an existing one, the respective Disaster Management Authority (SDMA/ DDMA) shall constitute a review committee comprising of members from various concerned departments (e.g. Revenue, Public works, Water, Agriculture, Finance etc), technical experts and civil society representatives.

The key functions of the review committee so formulated are:

- 1. Undertaking the risk assessment of the existing control room or EOC, if the same needs to be upgraded, and submit an actionable report with key gaps, bottlenecks, and suitable recommendations to address and overcome them.
- 2. In case the EOC needs to be established as a green-field project, it should identify a suitable site after considering the guidelines along with the hazard and risk profile of the city.
- 3. It should understand the local contexts of the city including demographic profile, populationat-risk, population density, most effective ways of risk communication considering the literacy, digital and internet penetration in the city, etc. and develop a report for supporting the contextualized implementation of the existing guidelines (if any) for establishing the city EOC.
- 4. Based on the above, it shall lay down technical and financial proposals detailing the site requirement, proposed site (if any), key functions, resources, and facilities along with the budget/ financial plan for the establishment of EOC to the Disaster Management Authority.
- 5. On approval, it may also support the administration in planning and identifying the suitable financial channels along with alternate funding mechanisms such as Public-Private Partnership (PPP), Corporate Social Responsibility (CSR), etc. for construction and procurement of necessary facilities and services.
- 6. If necessary, it can formulate different sub-committees to perform various dedicated functions. Such sub-committees may also include a Project Implementation Unit (PIU) and a

Monitoring & Evaluation (M&E) sub-committee for ground implementation and overseeing the execution of the establishment of the EOC.

# 2.4. FINANCIAL ARRANGEMENTS FOR THE ESTABLISHMENT & FUNCTIONING OF EOCs

Based on the recommendations of the XV Finance Commission 2021-26<sup>(4)</sup>, 10% of the State Disaster Response Funds (SDRF) are to be allocated towards capacity building. The recommendations further lay down that the preparedness and capacity building grants should be utilized for undertaking training and capacity building activities, purchase of emergency equipment, and emergency response facilities for enhancing the preparedness to respond effectively. In the backdrop of this, some part of the capacity building component of the SDRF can be earmarked for the establishment, strengthening, and maintenance of the EOCs at State, District and Tehsil/block levels, by the respective SDMAs. A convergence between various developmental schemes and projects at the city level such as the Smart City Mission that may support part or all of the necessary components for the establishment and functioning of the state or district EOCs, can be explored. Besides, alternative sources of funding/ investment feasible at the state/ district level such as PPP models, CSR, outsourced functioning, etc, should also be taken in consideration.

<sup>&</sup>lt;sup>4</sup> Chapter 8: Disaster Risk Management in XV Finance Commission Report

**SECTION 1** 

# **SECTION 1: STANDARD OPERATING PROCEDURES FOR EOCs**

The SOP for EOCs, describes the functions, operational methodology, various processes and coordination mechanism within the EOC and for the EOC with other national and sub-national participants in the effective management of an emergency. The SOP also provides guidelines on correlative linkages between different EOC sections and other response mechanisms of IRS and ESFs. The SOP must be read in conjunction with the DMPs, concerned IRPs, departmental SOPs and other related documents.

As the SOP for EOCs will be different during normal and emergency times, the EOC functions are categorised under "Functions during Normalcy" and "Functions during Emergency". These are explored in detail under subsection 4 of the document.

#### **3. CORE PRINCIPLES OF EOC MANAGEMENT**

Following are some core principles for the management of EOCs. Efforts should be made to imbibe these principles throughout the process of establishing and managing the EOCs viz a viz human resource management, information management, resource management, laying down the EOC Operational Manual, SOPs, planning, emergency management, scaling of operations, etc.

#### i. Adaptive Flexibility:

The EOC must adapt to incident-specific requirements, with the ability to scale activation levels based on the situation. It should sustain operations for extended durations during emergencies without interruption. The space should accommodate all hazards, ensuring efficient use of resources, with adaptable facilities, personnel, and equipment.

#### ii. Line of Command:

EOCs should operate under a unified command to avoid confusion and duplication, especially during emergencies. To ensure smooth coordination, enhancing accountability and better flow of information, there should be an established hierarchy of command whereby streamlined orders are passed from highest to lowest levels and the reverse order of reporting is followed from the lowest to the highest. In case of scaling up for better response and mitigation, the chain of command should be capable of a smooth handover to the next appropriate command.

#### iii. Manageable Span of Control:

As the functioning of EOC during major disasters involves the deployment of a large number of human resources, only a limited number of personnel/ elements can be effectively managed directly by a single supervisor. It is, therefore, important for the EOC to have an evenly allocated work structure to prevent organizational ineffectiveness of the EOC and fatigue of the supervising positions.

#### vi. Sustainability & Security:

The EOC should be able to sustain its operations without any hinderance for extendable periods during an emergency situation i.e. have enough structural integrity to protect the facility, its occupants, and communications equipment and systems. It should also be sufficiently secure against any potential risks and protect operations from the unauthorized disclosure of sensitive information.

#### v. Interoperability:

The EOCs should share common principles of operations, exchange routine and time sensitive information (incident related data, available resources, documents etc), best practices and capacity building exercises etc. with other EOCs, control rooms & concerned authorities.

#### 4. KEY FUNCTIONS OF EMERGENCY OPERATIONS CENTRES

#### 4.1. FUNCTIONS DURING NORMALCY

During normal times, the EOCs shall enhance preparedness; ensure that they are well equipped; maintain equipment in operational condition; maintain and update all critical databases, maps and resources inventories; collect, update and analyse data and disseminate information; and perform such other functions, as may be directed by the respective governing authority.

The normal time functions of an EOC can be broadly divided into five categories

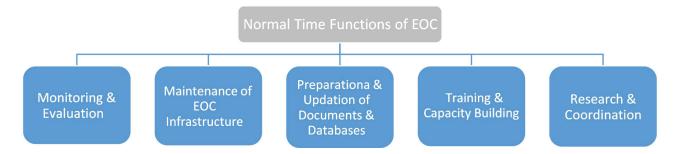


Figure 03: Categorization of Normal Time EOC Functions

The EOCs should adapt these functions as per their case specific capabilities and requirements. EOCs in high vulnerability regions should focus principally on "Monitoring & Evaluation", "Maintenance of EOC Infrastructure" and "Preparation & Updation of Documents & Databases" functions.

#### 4.1.1. State Emergency Operations Centre (SEOC)

#### Monitoring & Evaluation

- 1. Collection and round-the-clock monitoring & assessment of relevant data that can eventually lead to an emergency situation e.g. rainfall, temperature, other hydro-meteorological data, seismic data, crowd management situations, public health concerns etc.
- 2. Issuing warnings to administrative agencies and if necessary to public, based on predefined thresholds of environmental variables (rainfall, water level, seismological inputs, wave height etc.) and specific warnings from Indian Meteorological Department (IMD), Central

Water Commission (CWC), Geological Survey of India (GSI), Indian National Centre for Ocean Information Services (INCOIS), National Centre for Earth Science Studies (NCESS), National Emergency Operations Centre (NEOC) etc.

- 3. Withdrawal of any such warnings that eventually transpire in "no significant consequence".
- 4. Organising post-disaster evaluation and documentation of the event and submitting the report to SDMA.
- 5. Receiving appropriate proposals on preparedness, risk reduction and mitigation measures from various state departments/agencies and place the same for consideration of the SDMA.
- 6. Ensuring that all toll-free emergency numbers in the State for Police, Fire and Medical support etc. have a backup at the EOC for timely response and action. For e.g., in case of a road accident, in addition to the police, the information should also reach the EOC, the nearest fire station and the nearest healthcare facility to gear up to attend to any casualties and to the emergency medical service for the mobilisation of ambulance service to reach the spot.

#### \* Maintenance of EOC Infrastructure

- 7. Conceptualising and implementing the Early Warning Systems (EWS) relevant to the HVRA profile of the respective state. SEOC is also responsible for maintenance of these systems.
- 8. Ensuring effective communication and w eb based / online Decision Support System (DSS) is in place in the EOC and connected with District, Sub-Division, Tehsil/Block level IRTs for support.
- 9. Ensuring proper functioning and maintenance of all alternate communication systems and equipment at all times.
- 10. Ensuring proper functioning and maintenance of all facilities and instruments in the EOC at all times.

#### Preparation & Updation of Documents & Databases

- 11. Preparation/ regular updation of the State Disaster Management Plan (SDMP), while ensuring that the SDMP is in coherence with the departmental plans of concerned nodal departments/ agencies.
  - Revision and updation of all contact details in the SDMP.
  - Serve as a data bank to all line departments and the Planning Department with respect to risks and vulnerabilities and ensure that due consideration is given to mitigation strategies in the planning process.
- 12. Conduction/ updation of the respective hazard, vulnerability and risk assessment (HVRA) profile of the state reiteratively.
- 13. Through appropriate statutory instruments, ensuring preparation & regular updation of Disaster Management Plans (DMP) of all jurisdictional districts and sub-district. The SEOC is also responsible for the effective operationalisation of these DMPs.
- 14. Updation of the Indian Disaster Resource Network (IDRN), Corporate Disaster Resource Network (CDRN), India Disaster Knowledge Network (IDKN) and the National Disaster Management Information System (NDMIS), as and when the State/District/Sub-district DMPs are revised.

- 15. Establishing and maintaining a library of both hard and soft copies of all relevant documents & critical databases like the SDMP, DDMPs, incident specific SOPs, maps, climate data, demographic data, socio-economic, land-use planning, infrastructural data, resource inventory, contact details etc.
- 16. Establishing and updating inventories of relevant resources, resource persons and services available with various agencies and institutions (public/private) to ensure their timely disposal during emergency.
- 17. Establishing and maintaining a detailed "past disaster database" of the state.
- 18. Developing standard operating procedures (SOP) for internal & intra-agency coordination at state level (help from competent organizations can be sought).
- 19. Receiving reports on district and sub-district level disaster events and submit the same to SDMA and NDMA.

#### Training & Capacity Building

- 20. Organising capacity building exercises of various stakeholders & personnel and maintaining a detailed inventory of trained human resources.
- 21. Preparing a periodic mock drill activity plan and schedules in consultation with concerned departments and DEOCs. It should be ensured that at least one mock drill is conducted for each type of vulnerability in every six months.
- 22. Monitoring preparedness measures undertaken at the district and sub-district levels.

#### Research & Coordination

- 23. Advising in undertaking any steps for disaster risk reduction as deemed appropriate given the concurrent status of environmental variables and early warnings, if any, received from appropriate agencies.
- 24. Providing assistance to the government in suitably allocating financial and hardware resources available for disaster management in the state.
- 25. Organising timely meetings of SEC and SDMA for appropriate administrative decision making related to disaster management in the state.
- 26. Conveying policy guidelines and changes (if any) in the legal and official procedures, eligibility criteria with respect to relief and compensation, to subordinate levels and relevant stakeholders.
- 27. Informing District EOCs and control rooms about the changes (if any) in legal and official procedures with respect to loss of life, injuries, livestock, crop, houses, to be adopted (death certificates, identification procedure, etc.).
- 28. Conducting specific investigations on matters related to disaster risk reduction voluntarily or based on direction from appropriate competent authorities and furnish specific recommendations for disaster risk reduction to the Government for implementation.
- 29. Foster research collaboration and avail funding for research works from national and international organizations, universities and funding agencies.

The EOCs in low vulnerability regions are recommended to emphasise on "training & capacity building" and "research and coordination" functions. Such EOCs can also provide support to other EOCs with these functions. EOCs in higher vulnerability regions can take their assistance in "preparation & updation of documents & databases" objectives from time to time.

#### **4.1.2. District Emergency Operations Centre (DEOC)**

- 1. Collection and round-the-clock monitoring & assessment of relevant district & sub-district level data that can eventually lead to an emergency situation e.g. rainfall, temperature, other hydro-meteorological data, seismic data, crowd management situations, public health concerns etc.
- 2. Communication of early warnings issued by competent agencies to the appropriate district level authorities of Police, Fire & Rescue Services, Health, PWD, Irrigation and State Electricity Boards and to Tahasildars and Village Officers of the hazard prone villages in the district as issued by SEOC.
- 3. Ensuring the continued maintenance of all emergency communication systems and equipment.
- 4. Communication of specific directions issued by competent agencies to appropriate levels in the district and sub-district levels.
- 5. Preparation/ regular updation of the District Disaster Management Plan (DDMP) in line with the departmental plans of concerned departments and SDMP.
- 6. Monitoring the preparation and timely updation of district level departmental plans of nodal departments.
- 7. Monitoring the preparation and timely updation of DMPs at sub-district level i.e. block level, panchayath level and urban area level.
- 8. Developing standard operating procedures (SOP) for internal & intra-agency coordination at district and sub-district level (help from SEOC or competent organizations can be sought).
- 9. Ensuring updation of district level resources inventory.
- 10. The DEOC is also responsible for getting all such records prepared by itself, in the SEOC database/ library, updated.

#### 4.1.3. Tehsil/ Block Emergency Operations Centre (TEOC)

The TEOC is a more localised emergency operations centre that ensures last mile connectivity with the higher level EOCs. The basic functions of a TEOC are as follows:

- 1. It is essentially a control room established for monitoring and dissemination of information.
- 2. Any intimation of an emergency from public, is verified through the TEOC.

#### 4.2. FUNCTIONS DURING EMERGENCY

During emergencies, the primary function of the EOCs is to provide a platform for all decisionmakers and representatives of concerned line departments/agencies to work in coordination while facilitating the decision-making process with readily available data and information for the most efficient incident management. However, the emergency time functions of an EOC can be further classified into:

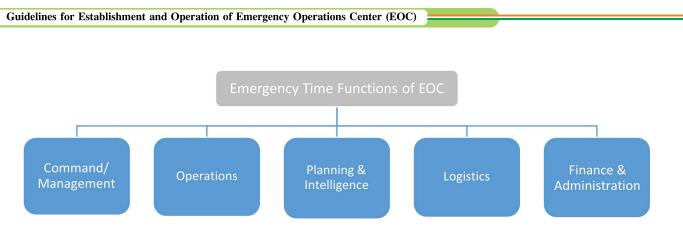


Figure 04: Categorization of Emergency Time EOC Functions

# These functions shall be organised and staffed into different Sections/Desks with different ICTs reporting to its respective section/ desk. The functions of each Section/Desk are further discussed in detail under sub- section 6 of these guidelines.

#### Command/ Management:

During an emergency, the EOC shall be responsible for directing, ordering, and/or controlling resources by virtue of explicit legal, agency or delegated authority. It will be responsible for facilitation of overall policy, coordination and support of the incident.

#### \* Operations:

The EOC will coordinate tactical response for all field operations directly applicable to or in support of the incident, in accordance with the developed Incident Action Plan. It shall coordinate all jurisdictional operations (SEOC at state level and DEOC at district & sub-district levels) to efficiently support the response plan/ mechanism in accordance with the Incident Action Plan.

#### Planning & Intelligence:

The EOC shall be responsible for the collection, evaluation and documentation of all the incident related data/ information. It shall also supervise the use of such data/ information about the development of the incident conforming to the jurisdictional capabilities.

#### Logistics:

The EOC shall be responsible for arranging/ allocating facilities, services, personnel, equipment and tracking the status of resources and materials for effective response and mitigation of the incident.

#### Finance & Administration:

The EOC shall be responsible for coordinating and supporting administrative and fiscal aspects pertaining to a well-structured management of the incident i.e. all financial and cost analysis aspects of the incident, and/or any administrative aspects that were not dealt with under other functions.

#### 4.3. ACTIVATION OF EOCs

On receipt of a warning, response process should begin as soon as it becomes apparent that a disastrous event is forthcoming and lasts until the disaster is officially declared to be over. Until the eventuality of the warning is decided upon, the EOC will operate in the preparedness mode.

Thereafter, it should get upgraded to the emergency time mode. Concerned line ministries and departments are informed to post their representatives at the EOC on a round-the-clock basis with immediate effect. The extent of EOC activation will depend on the scale of threat, as understood and deemed fit by the Responsible Officer.

#### 4.3.1. Classification of Disaster Situations and EOC Activation

Disaster situations are categorised into three 'levels': L1, L2, and L3, based on the approach that disaster management and its planning at various tiers must take into account, the vulnerability of disaster-affected area, and the capacity of the authorities to deal with the situation<sup>(5)</sup>. The period of normalcy i.e. L0, should be utilized for disaster risk reduction.

Level L0	Normal times	The EOCs must utilise this time for close monitoring, documentation, prevention, mitigation and preparatory activities.
Level L1	This level of disaster that can be managed within the capabilities and resources at the district level. However, the state authorities will remain in readiness to provide assistance if needed.	and preparatory mode, ready to extend support to the concerned DEOCs. DEOCs
Level L2	L2 signifies the disaster situations that require assistance and active mobilization of resources at the state level and deployment of state level agencies for disaster management. The central agencies must remain vigilant for immediate deployment if required by the state. The state nodal officers for disaster management of the respective nodal department shall ensure adequate response through the SEOC. The District Responsible Officer (RO) may decide whether to raise the response to a particular event to the State and treat it as an L2 event subject to the acceptance of request by the RO of the State.	depending upon the criticality of the situation. In case the DEOCs fall short in effective management of the situation, the SEOC shall provide support.
Level L3	L3 disaster situations arise from large-scale disasters where districts and the state may not have the capacity to respond adequately and require assistance from the central government for reinstating the state and district machinery.	The SEOC is activated as deemed fit by the RO. The concerned DEOCs and TEOCs are activated to full strength and function under the command of SEOC.

<sup>&</sup>lt;sup>5</sup> The High-Power Committee Report on Disaster Management 2001 (The Pant Committee Report)

#### 4.3.2. Sequence of Actions at:

- 1. LEVEL-L1: The Level 1 disaster situation would be conveyed to the DIC of the respective district and its neighbouring districts either through DEOC or any other mode of communication. The First Information Report, followed by the Initial Assessment Report, shall be prepared by the DEOC and be sent to SEOC and NDMA.
- 2. LEVEL-L2 and L3: On receipt of information from the NEOC/ DEOC, Early Warning Agencies or any other reliable sources, the SEOC would be activated by the SDMA. The activated EOC will issue alerts/warning to all designated authorities at the State level, DIPR, concerned Districts for Public Information, to Radio / Television / Press. It collects all the relevant information and apprises the status to the designated decision-making authorities. The First Information Report, followed by the Initial Assessment Report, shall be prepared by the DEOC and be sent to SEOC, NEOC and NDMA.

In case the EOC has already begun to function voluntarily, taking self-cognizance of an emerging crisis situation, then the reports must also contain summary reports from each IRT and

their immediate requirements.

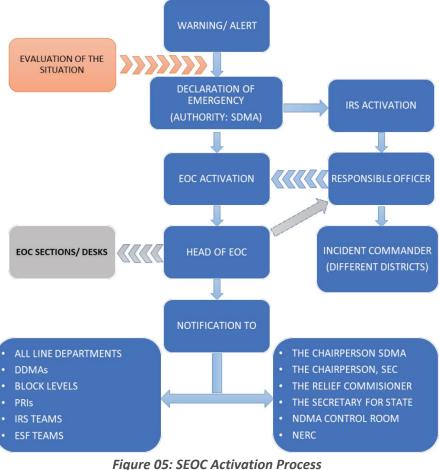
# 4.3.3. EOC Activation Process

Following sequence of actions shall be undertaken, towards EOC activation:

- Response is triggered when an authenticated early warning/ alert or information on occurrence of disaster is received at the EOC (NEOC, SEOC or DEOC as the case may be).
- 2. On declaration of an emergency by the Disaster Management Authority (SDMA or DDMA), the IRS plan is activated.
- 3. As per the respective IRS plan, the designated officer shall

*The First Information Report should summarise the following (Annexure 03):* 

- Severity of the disaster.
- Action being taken.
- Available District resources and coping capacity.
- Need assessment for relief along with quantities.
- Logistics for delivering relief.
- Assessment on future development including new risks.
- FIR should be sent within prescribed time limit of occurrence of calamity as per the standard format.



assume the role of the Responsible Officer and Incident Commander (L1- district and L2/L3- state).

Private sector and volunteer organizations may be used to provide information, data and resources to cope with the situation.

- The concerned DMA activates its corresponding EOC. However, the extent of EOC activation shall be decided by the RO.
  - 5. The EOC will take stock of the emerging situation and assist the RO in planning response and mitigation objectives. These objectives shall be established in consultation with various line departments.
  - 6. The EOC will expedite the mobilisation of respective line department's resources, manpower and expertise along with appropriate delegated authorities for the on-scene IRT(s).
  - 7. EOC will keep the RO informed of the changing situation and support extended.
  - 8. The operations of EOC shall be supported by respective nodal officers (in addition to the inherent staff of SEOC) from line departments and other government agencies. Once the EOC is activated and information is passed on to the concerned departments, the designated nodal officers should report to the EOC within the prescribed time limit.

Once the SEOC is activated, all the concerned DEOCs and sub-district EOCs will primarily assume the role of supporting SEOC in on-ground response and mitigation efforts.

- 9. As soon as the EOC is activated, it shall activate its subordinate level administrative machinery to respond to the situation with available manpower and resources.
  - SEOC ⇒ DEOCs

1.	Chairperson, SDMA
2.	Commissioner and Secretary (Relief Commissioner), Revenue and Disaster
	Management

3. Secretary for state government

- 4. Deputy Commissioner of the affected region (if any)
- 5. All concerned line departments
- 6. NDMA Control Room
- 7. National Emergency Response Centre (NERC), Ministry of Home Affairs, GOI.
- 10. The SEOC shall bring the said information to the notice of the following through suitable communication channels or as deemed appropriate (telephone, email, VHF or fax):
- 11. Immediate access to the disaster site through various means of communications such as mobiles, VSAT, wireless communication and hotline, shall be attempted.
- 12. Notifications are issued to all DDMA's / block levels/ PRIs, nodal departments, IRS team and all other designated Departments in the state/ district.
- 13. Early warnings issued by competent agencies will be verified and cross checked against past

history of occurrence by the EOC before issuing it to the media for public dissemination. The alert/ warning shall be released through the DIPR to Radio, Television and Press.

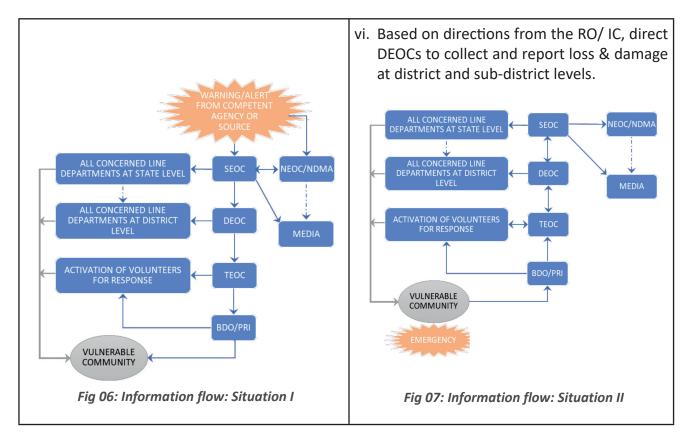
14. Warning messages should be user friendly. The warning protocols shall be designed in simple and local languages that are easily understandable to a common man.

#### 4.3.4. Functions of an Activated EOC

Following functions/ actions shall be undertaken by the EOC once it is activated:

- 15. Depending upon the type of trigger mechanism, there can be two types of situations:
  - a) Situation I Where early warning signals are available
  - b) Situation II- Where disaster occurs without early warning

Situation I	Situation II
Early Warning signs are available	Disaster occurs without early warning
<ul> <li>The First and most important task shall be of informing the community likely to be affected by the disaster through a warning system and undertake response activities (including evacuation, if need be). To avoid any miscommunication, only one officer shall be assigned the duty to issue alerts/ warnings.</li> </ul>	In disaster situations where no early warning signals are available, the trigger (after verification) shall initiate immediate rescue and relief operations and set the response mechanism, in process, as quickly as possible. The following procedure shall be followed in such situations:
<ul> <li>(Note: Indiscriminate warnings may result in non-responsiveness of the people).</li> <li>ii. A comprehensive Standing Order, listing all necessary pre-emptive measures based on the warning, will be prepared at the State level with inputs and support from Districts and sub-district levels.</li> <li>iii. Thereafter, follow up action shall be undertaken as envisaged under the incident specific response plan.</li> </ul>	<ul> <li>i. Inform the RO &amp; IC (designated officers and all first responders, of the event.</li> <li>ii. Seek further information and relevant data from appropriate government departments/ agencies (e.g. IMD, INCOIS, CWC and NCS etc) as well as DEOC and TEOCs.</li> <li>iii. It will be the responsibility of the DEOCs to communicate emergency and disaster information via telephone, FAX, SMS or email to SEOC so as to trigger interdepartmental coordination and inform and avail the services of departmental nodal officers.</li> <li>iv. The EOC shall collect a preliminary assessment report of loss &amp; damage primarily through police as well as volunteers and public informers (help-lines).</li> <li>v. The EOC, shall initiate SOP for response and relief activities including clearing access to</li> </ul>



- 16. The EOC, in consultation with the concerned authorities, will set-up an Incident command post for quick decision-making process.
- 17. At the site of the disaster, the senior most uniformed officer of the responding forces will be the Onsite Incident Commander (OIC). The OIC will report to the Incident Commander directly. The OIC shall have the delegated powers<sup>(6)</sup> in the respective area of operation. The OIC shall report to the DEOC at prescribed intervals and receive orders/communication through the DIC.
- 18. The DEOC shall update the SEOC about the status of activities at prescribed intervals, take orders from the SEOC and communicate them to the OIC and other response teams.
- 19. The RO shall hold formal communications with neighbouring states in case the impact of the event is spread across multiple states or assistance is required from neighbouring states.

#### **SITUATION REPORT**

A situation report provides an update of relief operation at regular intervals. These reports are crucial for planning out response actions to the affected areas. The situation reports must contain the following information:

- Disaster status- Names and number of affected districts, affected population, no. of villages, blocks, PRIs and ULBs etc
- Casualties-Types of casualties, First Aid
- Communication and infrastructure status
- Operational status of airport, port, railways, national highways and state roads and other nodal points
- Status of flow of relief materials- Food and materials (through air droppings, surface transport i.e. rail. road & ship). Medical and health
- Arrivals/Departure of teams

<sup>&</sup>lt;sup>6</sup> Section 34 of the DM Act, 2005

- 20. The EOC (SEOC, DEOCs & TEOCs) should collect inputs on changing disaster situation from various sources such as radio and TV news channels, videos from disaster locations, emails and voice messages received from DEOCs/ incident command post/ control rooms and persons engaged in rescue and relief operation. The DEOC shall prepare daily situation reports<sup>(7)</sup> for updating response measures, to the next higher level of command, till situation normalizes.
- 21. Disaster occurrence could result in disruption of government functions and, therefore, all levels of local government and their departments should develop and maintain procedures to ensure continuity of their administrative functions.
- 22. EOCs, both SEOC and concerned DEOCs are responsible to keep complete documentation of pre and post disaster response activities. Compilation should be done throughout disaster response activities and to be submitted to the respective DMA for safe keeping and future actions, if any. Documentation is important to help in post disaster enquiry commissions set up, if any and for analysis and corrections to improve response to future disasters.

#### 4.4. STAND-DOWN PHASE (DEACTIVATION OF EOC)

Once the emergency situation has passed, the EOC, with the approval of the IC, must initiate the Stand-Down phase i.e. withdrawal of warning/alert. The best process for withdrawal of warning, is to scale back functions over a period of time.

The responsible authorities (the Information & Media Officer/ DIPR) shall engage with relevant agencies e.g. media (radio, TV, newspaper etc), mobile operators (flash messages) and official internet channels etc, to ensure that the community is clearly advised when the threat has eased or ended.

The Stand Down phase can be defined as that stage when the emergency operations, with its associated activities and responsibilities can be terminated and when recovery and rehabilitation activities can be implemented under normal procedures.

- 1. If the situation is under control (as deemed appropriate by the IC), the EOC with the approval of IC, must initiate the deactivation mechanism in a phased manner while maintaining coordination with the participating agencies.
- 2. The EOC shall send out deactivation notification to all concerned authorities.
- 3. The EOC shall intimate each agency to discontinue emergency response operations when advised that their assistance is no longer required or when their statutory responsibilities have been fulfilled.
- 4. The EOC shall document the resources used during the preparedness and response activities.
- 5. The EOC shall organise a debriefing meeting with all the team leaders, which should be conducted within 10 days following the decision of deactivation, to evaluate the response and mitigation measures taken during the course of emergency.
- The debriefing report shall be compiled by the EOC and be submitted to the state authorities, MHA and NDMA.

<sup>7</sup>National Disaster Response Plan, 2001

7. The debriefing report should essentially include after-action reports, which are valuable in communicating operational deficiencies and lessons learnt at state, district, regional and national levels as well as cooperating agencies and jurisdictions.

#### 4.5. PRINCIPLES & PROCEDURES FOR

#### 4.5.1. Communications Management

A thorough understanding of communications protocols and procedures on the part of all EOC emergency management personnel who may use various communications systems during an emergency, is necessary. Following communication principles should be followed in the EOC:

- 1. All communication, inter-agency and intra-agency in the EOC, should be precise, concise, and clear.
- 2. All messages sent, should be acknowledged by the receiver.
- 3. Senders should be authenticated in certain types of emergencies (e.g. riots and other social disturbances) to guard against deliberate interference with emergency response efforts.
- 4. All communication whether outward or inward, must be logged, online/ offline.

#### 4.5.2. Information Management

One of the key functions of the EOC is to collect, collate, analyse and disseminate the continuous flow of incoming information. Information management (IM) in EOC, therefore, supports effective decision making and thorough record keeping.

The Information Management procedures are broadly described below:

- Incoming messages (email/fax/phone/verbal), are received in the Helpline Room and logged in the Incoming Communication Master Log. The Radio / Telephone/Fax / Email Operator(s) has to ensure immediate notification to Head of EOC in case of any URGENT messages.
- 2. Incoming messages to the Sections heads/ representatives directly shall also be recorded in the Master Log
- 3. All Incoming Messages details shall be forwarded to the concerned section/ desk.
- 4. The section/ desk head will determine the appropriate action to be taken. In cases where actions will entail the commitment of funds, the approval of the RO must be sought.
- 5. In cases where displays are to be updated, all information for both the manual and electronic displays should be done simultaneously.
- 6. The originator of the message will be informed of the Action Taken and the outgoing message shall be recorded in the Master Log.
- 7. If any action is anticipated by the addressee and no feedback is forthcoming, messages dispatched need to be followed up with addressee.
- 8. Once the sequence of messages pertaining to the same issue/ case ends, it should be marked "closed" in the log.

#### 4.5.3. Resource Management

- Resource management is one of the major challenges of effective disaster management. During normal times, resources are procured and placed as per the envisaged threats and availability of resources. The following points should be noted in this regard:
  - The EOC coordinates with various stakeholders to determine what resources are needed to achieve the incident objectives to perform tactical response actions.
  - The EOC is the location that receives resource requests, finds a source to fill the resource request, enables the procurement of such resources and tracks the resource until it is delivered to the destination.
- During an incident both incident and EOC staff make initial assessment, then continually identify, validate and refine resource requirements. Afterwards they either activate or request those

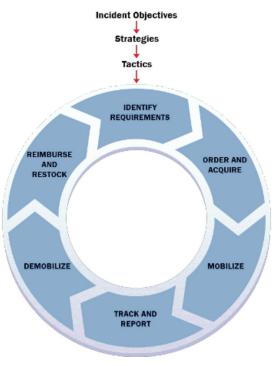
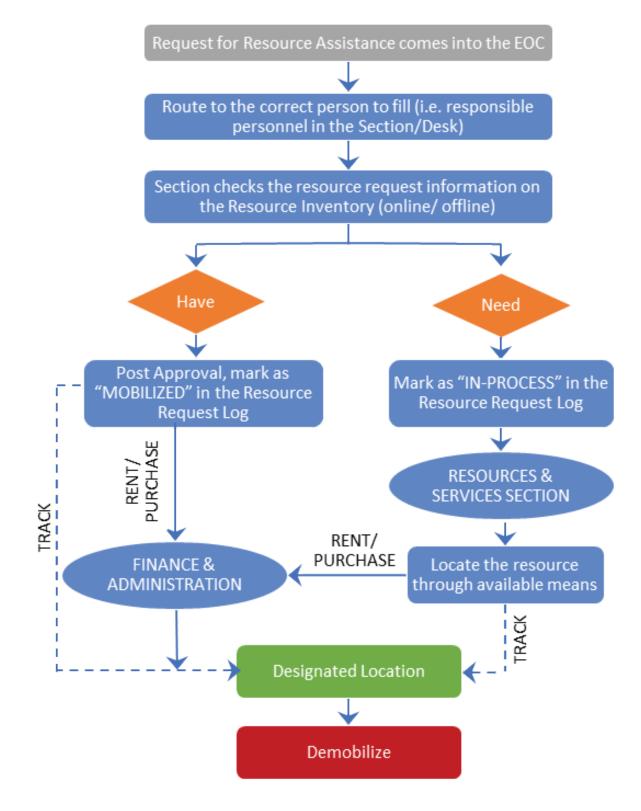


Fig 08: Resource Management Cycle

resources. This process involves identifying the type and quantity of resources needed, the location where resources should be sent, and who will receive and use the resources.

- 3. Hence, resource inventories are essential elements of EOC operations as they enable quick retrieval of vital information regarding availability and sources of rescue and relief material and personnel during times of emergency. Inventories must include the following basic elements, and other locally relevant information:
  - Contact details of all personnel and organisations concerned with emergency management in the jurisdiction.
  - List with specifications and availability procedures, of all equipment that may be useful for responding to an emergency. This will include communication equipment, transport vehicles, earth moving equipment, cranes, tools etc. that are available with agencies within the jurisdiction.
  - List with specifications and rate schedules, of relief material that can be sourced from local aid agencies and markets. This will include dry rations, tents and beddings, clothing, utensils, first-aid items and other basic necessity items.
  - All the details in the inventory should be up-to-date. The inventories must be updated every 03 months to avoid any lapses.



Flow- chart 01: Resource Mobilisation in the EOC

### 5. HUMAN RESOURCES REQUIREMENTS

The EOC staffing requirements shall depend on the time of operation. During the normal times (level L0), the EOC functions will be dispensed by dedicated core staff while during emergency times (level L1/L2/L3), the EOC functions will be performed by more specialized staff with specific core competencies relevant to the IRS/ESFs.

The EOC staff, whether normal times or emergency times, should be experienced in disaster management aspects in the country as well as globally. The EOC core staff should be exclusive to EOC functions only i.e. they should not have any additional charges other than their EOC responsibilities.

### 5.1. DURING NORMAL TIMES

Following set of personnel is recommended for EOC core staff:

- <u>Head of EOC</u>: The EOC must be headed by a senior government official (appropriate to the state/ district IRS) with highly proficient background in disaster management and other allied subject matters. He/ She will function at SEOC under the overall command and control of head of State Disaster Management Department and at District EOC under the District RO. He will be responsible for the overall coordination and decision making at the EOC. As per the discretion and administrative capabilities of the state, a deputy head of EOC is also recommended at the SEOC level.
- 2. <u>Hazard & Risk Analyst (HRA)</u>: The HRA should be experienced in analysing and quantifying any impending risk. The designation is mandated at SEOC level only. The HRA will be responsible for all jurisdictional districts.
- **3.** Data Analysts for Early Warning and Evaluation of Situation : They will be an assistance level position to the HRA. They will be responsible for monitoring and initial evaluation of situation and dissemination of early warning for potential hazards. Data Analysts should also be proficient in GIS, real-time data processing and early warning dissemination tools. All SEOCs and DEOCs in high vulnerability regions are strongly recommended to have these positions in their centres.
- 4. <u>Communication Officer</u>: The Communication officer will ensure that communication lines between various disaster management agencies, responders, and government bodies are functioning efficiently. At the SEOC he will be assisted by radio/ telecom operator who should be proficient in handling communication equipment, including satellite phones, HAM radios, HF/VHF/UHF Communication equipments and other emergency telecommunication networks.
- 5. <u>System Administrator & Services Engineer</u> : A system administrator should be available at SEOC level to handle any issues with computers, equipment, communication systems and servers etc in the EOC. A Services Engineer shall take care of all other technical issues pertaining to building services. At the SEOC level, it is advisable to have separate personnel for these two designations. However, at the DEOC level, the two posts can be merged.

- 6. <u>Finance & Accounts</u> : The incumbent should be competent in managing all financial aspects & maintaining all such records, of the SEOC and the subordinate DEOCs & TEOCs. This position can be jointly held with the SDMA or DDMA.
- 7. <u>Computer Operators</u> : UDCs/ LDCs level staff to assist the Head of EOC besides supporting documentation and data entry. The post of a Receptionist can be merged with this designation.

DESIGNATION	SEOC	DEOC	TEOC
Head of EOC	01	01	-
Deputy Head of EOC	01 (discretionary)	-	-
Hazard & Risk Analyst (HRA)	01	-	-
Data Analysts	02	01 (high vulnerability districts)	-
Communication Officer	01	-	-
Radio/ telecom operator	01	01	-
System Administrators	01	01	-
Services Engineers	01 (recommended)	10	-
Finance/ Accounts	02	01	01
Computer Operators	02	01	01
Helpline operators	03	01	01
Multi-tasking staff	03	01	01
Office Attendant	01	01	-
Driver	01	01	-
Security	01	01 (discretionary)	01 (discretionary)

Table 01: Suggested Regular Staff in EOCs

# **5.2. DURING EMERGENCY TIMES**

During the emergency times, all the concerned line departments will staff the EOC sections/ desks (described in sub-section 6 of the guidelines). Depending upon the administrative setup each EOC shall take nominations from these departments for each section/ desk. The suggested departments for staffing each section/ desk are as follows:

SECTION/D	ESK	SEOC	DEOC	
PLANNING	Lead	State Department of Home/ State Revenue Department/ SDMA	DM OFFICE/ DDMA	
	Members	Head of EOC, HRA, other EOC staff, Head of Logistics, Technical Advisors (if any), Ho & Stationary/ DIPR/ SPO, State Transport,	me, Director Printing	
OPERATIONS	Lead	State Department of Home/ State Revenue Department/ SDMA	DDMA/ Police / Fire & Emergency	
	Members	Revenue, Home, Police, Fire & Emergency, Agriculture & Food, Planning, Civil Defence, Home Guards etc State Transport/ State Revenue RTO/ Office of		
TRANSPORTATION BRANCH	Lead	State Transport/ State Revenue Department	RTO/ Office of Revenue	
	Members	ers Revenue, Home, Police, Agriculture & Food, Water, Transport, Traffic Control etc		
LOGISTICS	Lead	State Department of Home/ StateDM OfficeRevenue DepartmentRevenue		
RESOURCES & SERVICES BRANCH	Lead	State Department of Home/ State Revenue Department/ SDMA	Office of Revenue/ Land Revenue/ Police/ DDMA	
	Members	Revenue, Home, Police, Civil Supplies, Agr Water, Planning, PWD, Transport, Telecom		
MEDICAL BRANCH	Lead	State Department of Health	District/ Civil Hospital	
	Members	Health/ Mother & Child welfare/ Agricultu Emergency	ure & Food/ Fire &	
FINANCE BRANCH	Lead	State Revenue Department / Accounts & Treasuries	Finance & Revenue/ Land Revenue	
	Members	mbers Revenue, Finance, Accounts & Treasuries		
ADMINISTRATION	Lead	Head of EOC Head of EOC		
	Members	EOC core staff, Office of		

Table 02: Suggested Staff in EOCs during Emergency times

# 6. SECTIONS/ DESK MANAGEMENT IN AN ACTIVATED EOC

- 1. All the major functions in the EOC will be distributed among different sections/desks to ensure accountability, proper information, assimilation and record keeping. In these guidelines, the structure proposed for EOC organisation during emergencies is that of IRS-BASED STRUCTURE for the following reasons:
  - As the IRS structure is notified, the nominated officials are well aware of their responsibilities during an emergency.
  - Also, by operating in the context of the notified IRS structure, there will be unanimity in the duties of the nominated officials, hence reducing replication of efforts.

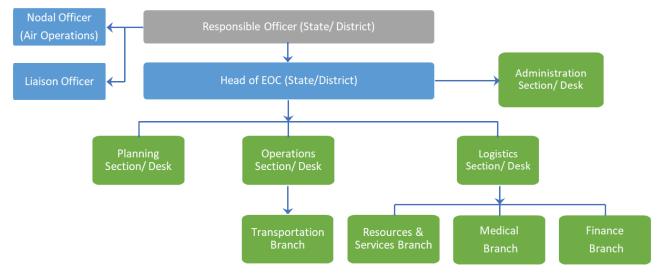


Fig 09: Sections/Desks in an Activated EOC

2. The sections/desks will be staffed by officials (as per the IRS structure of the state/ district) representing/ coordinating for all concerned line departments with authority to quickly mobilise their resources including the ESF teams and IRTs<sup>(8)</sup>. This will also facilitate easy coordination and reporting mechanism both vertically and laterally.

At the state level, the EOC shall comprise functional sections while at the district level, the sections can be sized down to functional desks. The personnel strength of each section/desk shall depend on the scale of incident and the administrative capabilities of the state/ district.

- SEOC  $\implies$  Functional Sections
- DEOC  $\implies$  Functional Desks

#### <u>Responsible Officer (RO) & Incident</u> <u>Commander (IC)</u>

The RO and the IC can either be the same officer or different, depending on the administrative capabilities of that state, as decided upon in the IRS. If the RO is different from the IC in the state, the IC shall report to the RO.

Hence, both designations of RO and IC are mentioned in the document.

<sup>&</sup>lt;sup>8</sup>NDMA Guidelines: Incident Response System - 2010

## 6.1. RESPONSIBILITIES & FUNCTIONS OF PLANNING SECTION/ DESK

The planning section is responsible for collection, evaluation and display of incident information, formulation of Emergency Response Objectives (ERO), preparation of the Incident Action Plan (IAP) & Demobilisation Plan and other necessary incident related documentation. Following are functions of the planning section:

- After thorough assessment of the situation from available incident information, planning section will formulate the Emergency Response Objectives and thereby preparing the IAP. The EROs & the IAP<sup>(9)</sup> will be approved by the RO/ IC and will be prepared in consultation with the Head of EOC, HRA and other sections. The EROs & IAP shall be revised/ updated as per the situation unfolds.
- 2. Ensure that decisions taken and directions issued in case of sudden disasters prior to the activation of planning section, must be incorporated in the IAP.
- 3. Determine the need for any specialised resources for the incident management.
- 4. Provide periodic projections on incident potential and report to the RO/ IC and Head of EOC of any significant changes that take place in the incident status.
- 5. Preparation and implementation of Incident Demobilisation Plan.
- Ensuring ready availability of all the relevant Data and Information pertaining to:
- 1. All the planning information including the SDMP, DDMPs, DMPs of various line departments etc.
- 2. Disaster specific data and SOPs.

### 3. Geographical maps, GIS and other IT support to analyse the on-ground situation.

- 4. Disaster site maps and indications on extent to which other areas may be affected, etc.
- 5. Information regarding approach, alternate routes, water sources, layout of essential services which may be affected, etc.
- 6. All other necessary contingency plans and data.
- 7. Important telephone numbers, database on available resources, list of key persons etc.
- 8. Sourcing relevant data/ information as required by the EOC, in general.

#### Incident Action Plan

The IAP should contain objectives reflecting the overall incident strategy and specific tactical actions and supporting information i.e. incident objectives, organisation assignment list, incident communication plan, demobilisation plan, traffic plan, safety plan, medical plan and incident map etc. The major steps for preparing IAP are as follows;

- a. Initial information and assessment of the damage and threat;
- b. Assessment of resources required;
- c. Formation of incident objectives and conducting strategy meetings;
- d. Operations briefing;
- e. Implementation of IAP; f. Review of the IAP; and
- g. Formulation of incident objectives for the next operational period, if required;

<sup>&</sup>lt;sup>9</sup>NDMA Guidelines: Incident Response System - 2010

### Monitoring

- 1. Monitor and review various media reports regarding the incident that may facilitate incident planning.
- 2. Monitoring and coordination for weather/disaster site conditions and disaster warnings through various channels e.g.
  - a. websites of:

India Meteorological Department (IMD)	Earthquakes, Cyclones, Heat wave, Cold wave
Central Water Commission (CWC)	Floods
Geological Survey of India (GSI)	Landslides
India National Centre for Oceanic Information Services (INCOIS)	Tsunami
Central Drought Relief Commissioner (CDRC) Crop Weather Watch Group (CWWG)	Drought
Regional Specialized Meteorological Centre (RSMC) Tropical Cyclone Warning Centres (TCWC) for different regions	Cyclones
Snow and Avalanche Study Establishment (SASE)	Snow & Avalanches
Others	

- b. News Channels: TV and Radio
- c. Social media
- Reporting
  - 1. Receiving the First Information Report (FIR) from the DEOC.
  - 2. Regularly updating the EOC concerning all the relief operations and developments.
  - 3. Receiving and documenting all information as demanded by the RO, IC or Head of EOC.
  - 4. Reporting to the RO, IC or Head of EOC on deployment and reinforcements of staff and resources.
  - 5. Identifying follow-up actions and forwarding the information to relevant EOC section or branch.
  - 6. Informing the subordinate levels about the changes, if any, in legal and official procedures, eligibility criteria with respect to relief and compensation for loss of life, injuries, livestock, crop, houses, required to be adopted.

### 6.2. RESPONSIBILITIES & FUNCTIONS OF OPERATIONS SECTION/ DESK

The Operations section/ desk will be responsible for operationalising response support (on-site), procurement listing and reporting. As movement of relief supplies and resources need constant coordination and tracking, a subsection for transportation will also function under operations section for better management support. Following are the functions of operations section/ desk:

- Operationalising Response Support
- 1. Monitoring field level rescue and evacuation operations.
- 2. Monitoring salvage operations.
- 3. Supervising organisation and distribution of relief supplies including water and cooked food.
- 4. Overseeing disposal of dead.
- 5. Setting up and managing transit camps in accordance to the standards.<sup>(10)</sup>
- 6. Requisition of accommodation, transport and other necessary equipment for IRTs.
- 7. Informing the DEOC, TEOC, ESFs and IRTs about sanctions for various relief materials.
- 8. Keeping the RO informed about the state of law and order.
- Procurement Listing
- 1. Making list of procurement items (as per the requirements arising from the field), whether on purchase, hire or requisition, for relief supplies not available at the state/ district/ subdistrict levels and forwarding them to Logistics Section for perusal.

### 6.2.1. RESPONSIBILITIES & FUNCTIONS OF TRANSPORTATION BRANCH

The Transportation Branch will be responsible for collection, movement and onsite disbursal of all relief supplies and equipment. In addition, it shall also oversee movement of manpower as per directions from RO/ IC or operations and services section (with approval from RO/ IC). Following are the functions of the transportation branch:

- 1. Preparation of Transportation Plan for reinforcement needs including manpower and deployment of interdepartmental and inter-district resources as per information received from subordinate EOCs/ control rooms.
- 2. Organizing transportation for rescue party, evacuated people, medical teams and injured/ sick people.
- 3. Maintaining adequate supply of necessary transportation means and equipment, at all times.

<sup>&</sup>lt;sup>10</sup> Guidelines on Temporary Shelters for Disaster-Affected Families-2019 & Guidelines on Minimum Standards of Relief-2016

- 4. Ensuring receipt, safe storage and movement of relief supplies and materials from airports, roads, railways or water transportation and supervising the associated formalities.
- 5. Maintaining records of receipt, storage, movement and onsite disbursal of all relief materials and equipment.
- 6. Coordinating with private transport associations for emergency requirements.
- 7. Coordinating with private heavy equipment owners and operators for emergency requirements.
- 8. Directing supplies distributed by NGOs and other organizations including private donors on ground.

# 6.3. RESPONSIBILITIES & FUNCTIONS OF LOGISTICS SECTION

The Logistics Section is responsible for overall liaison and providing facilities, services, materials, equipment and other resources in support of the incident response. It is subdivided into three subsections i.e. the Resources & Services Branch, the Medical Branch and the Finance Branch for finer segregation of responsibilities. Following are functions of the logistics section:

- 1. Planning & providing logistic support to all incident response efforts including development of a plan to meet the logistic requirements of the IAP. The plan should be constantly updated to accommodate the anticipated logistic requirements.
- 2. Constantly review the Communication Plan, Medical Plan and Traffic Plan to meet the changing requirements of the situation.
- 3. Assessing the requirement of additional resources and initiating procurement.
- 4. Keeping the RO, IC and head of EOC informed on related financial issues.
- 5. Making provisional request for sanction of the Imprest Fund, in case of requirement.
- 6. Providing logistic support for the approved Incident Demobilisation Plan (IDP) and ensuring release of resources in conformity with the IDP.
- 7. Ensuring proper documentation and payment of the hired/ requisitioned resources.
- 8. The logistics section shall also prepare cost analysis of the total response activities and shall file the report in the incidence closure report.

## 6.3.1. RESPONSIBILITIES & FUNCTIONS OF RESOURCES & SERVICES BRANCH

The Resources & Services branch will be responsible for liaisoning and coordination of rescue and relief operations and ensuring availability of sufficient material resources at disposal, at all times, during the emergency. Following are the functions of resources & services branch:

- Assessing resource requirements for search and rescue as per information from the controlrooms and initiating response by forwarding such information to the Operations Section.
- Resourcing material/services & providing assistance to the operations section, wherever necessary for the following:

- 1. Relief camps (in accordance with the standards laid down)
- 2. Cattle camps
- 3. Relief supplies to Relief Camps or to Incident Command Post
- 4. Supplies of fodder and cattle-feed to cattle camps
- 5. Supply of seeds, agriculture inputs and services
- 6. Law and order (e.g., prevent looting and theft)
- 7. Ensuring ready availability of adequate material resources at the disposal of the IC and OIC, at all times.
- 8. Ensuring ready availability of adequate human resources and equipment/ tools at the disposal of the IC and OIC, at all times.
- 9. Providing communication facilities, making communication plan and ensuring that all communication equipment is in working condition.
- 10. Coordinating with respective departments for restoration of damaged infrastructure like:
  - Roads
  - Power
  - Water
  - Telephone
  - Public buildings
  - Bridges
  - Canals/Dams/Reservoirs
  - Other structures of public utility
- 11. Coordinating with respective departments for construction of facilities like:
  - Shelters with sanitation & recreation facilities
  - Temporary structures for storage
  - Educational facilities
  - Medical facilities
  - Postal facilities
  - Helipads
- 12. Coordinating with NGOs & private partners for support and community participation through:
  - Identification and coordination of NGOs for relief activities.
  - Identification of NGOs to serve on committees, task forces and volunteers.
  - Assigning well-defined areas of operation for various private partners & NGOs.
  - Assigning specific response functions to specialized NGOs.

- Reporting upon procurement and disbursement of relief materials received through government and non-government channels.
- 13. *Reporting and documenting the procurement and disbursement of the relief material received from all sources.*

## 6.3.2. RESPONSIBILITIES & FUNCTIONS OF MEDICAL BRANCH

The Medical Branch will be responsible for organisation, coordination, monitoring and supervision pertaining to all medical services and amenities, during the emergency. Following are the functions of the health branch:

- 1. Organizing immediate response in the form of mobile medical teams comprising doctors, specialists, nurses and other support staff, from within the state (and outside if the need be).
- 2. Coordinating with adjoining districts for uninterrupted sourcing of:
  - Medical relief for the injured including medicines, equipment and personnel.
  - Number of ambulances required and hospitals where they could be sent (public and private).
  - Medical equipment and medicines required.
  - Special information required regarding treatment e.g. pandemics/ epidemics etc.
  - Blood.
- 3. Providing post disaster clinical care, mental health care, medical rehabilitation and follow up.
- 4. Monitoring and providing specialized consultation in:
  - Treatment of injured and sick
  - Disposal of dead bodies
  - Disposal of carcasses
  - Preventive medicine
  - Prevention and management of communicable diseases and epidemic prevention
  - Reports on food, water supplies, sanitation and disposal of waste and coordinate the services of investigation laboratories for support services
- 5. Maintaining records of all medical services, equipment and personnel available and utilized during the situation.
- 6. Supervising maintenance of standards in:
  - Transit and relief camps for living, cooking arrangements, sanitation, water supply, disposal of waste, water stagnation and health services.
  - Storage of ration and other relief supplies.

## 6.3.3. RESPONSIBILITIES & FUNCTIONS OF FINANCE BRANCH

The Finance Branch will be responsible for overall interdepartmental/intradepartmental coordination of budgets, requisitions & payments to facilitate speedy procurement and proper accounting following financial procedures and rules. Following are the functions of the finance branch:

- 1. Assessing the relief, search and rescue and cash compensation requirements.
- 2. Co-ordinating financial matters for establishment of relief camps.
- 3. Maintenance of cash and disbursements receipts, issue of relief materials.
- 4. Realisation of T.A & D.A of relief duty staff, daily wages, cash and credit vouchers.
- 5. Realisation and recording gratuitous payments and compensation paid, etc.
- 6. Issuing of all cash and material receipts.
- 7. Reimbursement of all expenses approved.
- 8. Issue of cash vouchers for petrol and diesel.
- 9. Preparation of financial closing report of the incident.
- 10. Other miscellaneous financial matters pertaining to emergency management.

### 6.4. RESPONSIBILITIES & FUNCTIONS OF ADMINISTRATION SECTION/ DESK

The Administration section/ desk will be responsible for facilitating interdepartmental/ intradepartmental coordination, compiling incident closing reports and general administration in the EOC. It shall also serve as a data bank for response mechanism i.e. it shall be responsible for organisation, dissemination and record keeping of all communications and data. The Head of EOC will supervise the section directly and the EOC core staff will function under this section. It will also manage the EOC Help-line function. Following are the functions of the administration section/ desk:

- 1. Record Keeping of inter-departmental and intra-departmental messages
  - Receive and send messages on behalf of the RO/ IC/ Head of EOC.
  - Documenting and record keeping of all in-messages and out messages.
  - Collect and process information received and forwarding it to the relevant section/desk in the EOC
- 2. Aiding dissemination of information
  - With the approval of RO/ IC, it shall brief/ regularly update the designated Information & Media officer, for dissemination of incident related information to media (TV, radio, print and social) and community.
  - It is advisable that the media centre for information sharing, is not set up within the EOC to avoid unnecessary chaos or breach of security.
  - It shall also document and maintain record of all such information.

- 3. Administration
  - Issuing alerts and warnings through various means of communications e.g. bulk SMS, public announcements, hooter alarms and sirens etc from the EOC.
  - The core staff of the EOC will function under this section unless directed otherwise.
  - The administration will ensure EOC's business continuity i.e. all the EOC functions, during emergency times, are carried out smoothly without any hindrance e.g. uninterrupted power supply in the EOC, all communication systems, equipment and vehicles should work properly, the internet connectivity is not broken, the EOC is equipped with sufficient supply of food, water, stationary, fuel etc.
  - Noting down the decisions taken and directions issued in case of sudden disasters when the IRT has not been activated and handing it over to the RO/ IC for its incorporation in the IAP.
  - Preparation of duty schedule for the EOC section/ desk personnel. The duty schedule should be shared with all the concerned people and must be displayed in the EOC.
  - At the end of the emergency, the administration will collect all reports and records from rest of the sections/ desks and compile the closing report of the incident.
- 4. EOC Help-line operation
  - Receiving in-coming distress calls and complaints and forwarding the concern to the relevant section/ personnel.
  - Maintaining a log book to record all the information coming through the help-line numbers.

# 6.5. ROLE & RESPONSIBILITIES OF HEAD OF EOC

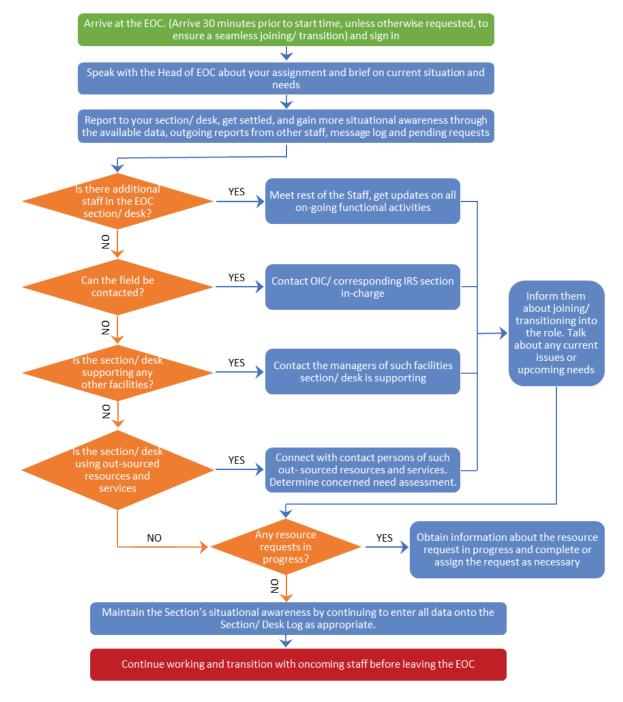
The Head of EOC is the nodal officer for overall functioning and coordination in the EOC. As this is a permanent position, it is expected that the head of EOC is the most aware of the situation, affected region, history of past emergencies, available resources and their requisition options etc. Hence, he/ she is a critical link between the RO/ IC and the EOC sections/ desks. Following are the responsibilities of the Head of EOC:

- 1. Facilitating the overall functioning of the EOC and ensuring that all the sections work in tandem without conflict.
- 2. Assists and advise the RO/ IC and contribute in the formulation of EROs, IAP and IDP.
- 3. Overseeing and advising in preparation of other related plans e.g. transportation plan, medical plan, communication plan etc
- 4. Ensuring that actions taken before the IRS is initiated, are accounted for and included in the IAP.
- 5. Ensuring ready availability of all documents (Maps, DMPs and SOPs etc) and databases from the EOC library.
- 6. Ensuring business continuity and self-sustenance in the EOC for extended periods during emergency.
- 7. Coordinates logistics of VIP and visitor orientations and briefings.
- 8. Perform any other duties assigned by the RO.

EOC	PLANNING	<ol> <li>Formulation of Emergency Response Objectives</li> <li>Preparation and updation of IAP</li> </ol>
SECTIONS/		3. Preparation & implementation of IDP
DESKS		4. Ensuring ready availability of all the relevant Data and Information
DESKS		5. Monitoring
		6. Reporting
	OPERATIONS	1. Operationalising Response Support
		2. Procurement Listing
		1. Preparation of Transportation Plan
	TRANSPORTATION	<ol><li>Organizing transportation for affected people &amp; resources.</li></ol>
		3. Maintaining adequate supply of necessary transportation means and
	BRANCH	equipment,
		<ol> <li>Ensuring receipt, safe storage and movement of relief supplies and materials.</li> </ol>
		5. Records of receipt, storage, movement and onsite disbursal of all
		relief materials.
		<ol><li>Coordinating with private transport associations &amp; heavy equipment owners.</li></ol>
		7. Directing supplies distributed by donors on ground
	LOGISTICS	1. Planning & providing logistic support to all incident response efforts
		2. Review of all the concerned logistic plans.
		3. Assessing the requirement of additional resources.
		4. Updating the RO, IC and head of EOC on financial issues.
		5. Provisional request for sanction of the Imprest Fund.
		6. Logistic support for the IDP.
		7. Documentation and payment.
		8. Cost analysis of the total response activities.
		1. Assessing search and rescue requirements as per information from
	RESOURCES & SERVICES	the control rooms and initiating response by forwarding such
	BRANCH	information to the Operations Section.
		<ol><li>Resourcing material/services &amp; providing assistance to the operations section, wherever necessary for relief operations.</li></ol>
		3. Ensuring ready availability of adequate material resources at the
		disposal of the IC and OIC, at all times.
		4. Coordinating with respective departments for restoration of
		damaged infrastructure
		5. Coordinating with respective departments for construction of
		facilities.
		6. Coordinating with NGOs & private partners for support and
		community participation.
		7. Reporting and documenting the procurement and disbursement of
		the relief material received from all sources.
		1. Organizing immediate response in the form of mobile medical teams
	MEDICAL BRANCH	comprising doctors, specialists, nurses and other support staff, from
		within the state (and outside if the need be).
		2. Coordinating with adjoining districts for uninterrupted sourcing of
		medical relief items.
		3. Providing post disaster clinical care, mental health care, medical
		rehabilitation and follow up.
		1. Interdepartmental/ intradepartmental coordination of budgets,
	FINANCE BRANCH	requisitions & payments.
		<ol> <li>Preparation of financial closing report of the incident</li> <li>Issuing alorts and warnings from the EOC</li> </ol>
		3. Issuing alerts and warnings from the EOC.
		<ol> <li>ensuring all emergency time EOC functions are carried out smoothly without any hindrance.</li> </ol>
		5. Incident Closure Report
		6. Receiving and recording all in-coming distress calls and complaints
	ADMINISTRATION	1. Record keeping of inter & intra departmental messages.
		<ol> <li>Aiding dissemination of Information.</li> <li>Administration.</li> </ol>
		3. Administration. 4. EOC Help-line Operations.

## 7. WORK FLOW FOR OFFICIALS AT EOC

Following is flow-chart depicting general work flow for officials in the EOC during the emergency times. The EOCs shall adapt this flow chart specific to their individual mechanism.



Flow-chart 02: General Work flow for Officials in EOC

**SECTION 2** 

# SECTION 2: ESTABLISHMENT OF EOCs

# 8. PHYSICAL INFRASTRUCTURE

EOC is that critical infrastructure which supports various emergency and life-saving functions during disasters while aiding restoration and continuity of essential services by prompt response and mitigation. Thus, it is of paramount importance that EOC infrastructure and services are themselves not affected during the disasters. Therefore, matters like site selection, architectural design & building structure, building services etc should be decided upon with due diligence.

The site selection and construction of an EOC must abide by the applicable developmental laws, building codes e.g. NBC and local building bye-laws, environmental protection considerations etc. For saving time and money, authorities should contemplate adapting an existing structure that could serve as an EOC before considering new construction. Upgrading an existing EOC can also save considerable time and money, provided that it fulfils the other prerequisites of site, structure and space.

# 8.1. SITE & LOCATION PREREQUISITES

Based on the following factors, the EOC location should be chosen:

- 1. The biggest consideration in an EOC site selection is avoiding potential hazards. Therefore, before establishing an EOC, an HRVA should be conducted to ensure that the facility can withstand the impacts of potential hazards including smaller and more localised risks.
- Although, the EOC should ideally be located centrally or near the primary administrative offices, the traffic should be limited in the area and the routine congestion should not affect EOC accessibility or operations, especially during emergency situations. A multi-road access to the EOC location should be preferred.
- 3. The EOC should be located in an area where it can be secured with ease by securing site perimeter, perimeter barriers and fences, control gates and other means of securing site perimeters.
- 4. Also, the EOC site should have the scope of providing adequate and secure parking space. Planners should ensure that the site can accommodate more than the number of vehicles anticipated during full activation.
- 5. The EOC location should have strong and consistent communication network i.e. Internet, Satellite communication and radio transmission and reception etc. This is particularly important in remote areas with significant relief in the landscape.

### 8.2. BUILDING PREMISES PREREQUISITES

The following aspects, should be considered while design and construction of the EOC:

- 1. After undertaking risk-informed site identification, the EOC should undertake various structural and nonstructural mitigation measures to ensure disasterresilient design and construction i.e. addressing structural integrity, wind resistance, seismic resistance, flood resistance, and fire safety of the building.
- 2. Some examples of such techniques can be:
  - Employing advanced engineering techniques, such as base isolation or energy dissipation systems, bracing to enhance seismic resilience.

Whether an existing premises is identified or an entirely new construction is decided upon, an architectural consultant, building services consultants (structural, electrical, plumbing, HVAC) and an ICT consultant must be engaged in the evaluation and planning process for a well-integrated EOC design and layout.

- Designing buildings and structures to resist strong winds like integrating wind-resistant roofing, impact resistant windows and reinforced connections between the roof, walls and foundation.
- Incorporating flood-resistant design principles like raising buildings above the base flood elevation, use flood-resistant materials for construction, install flood vents to equalize hydrostatic pressure and design proper drainage systems.
- Using fire-resistant materials and construction techniques to reduce the risk of fire-related damage like using non-combustible roofing materials, fire-resistant cladding and proper fire-rated compartmentalization.
- 3. The design and construction of the EOC premises should be in accordance with the NBC, the zoning regulations, local building bye-laws, fire norms and other relevant construction policies of the area.
- 4. The design and construction of the EOC premises should encourage and inspire responsibility towards environment and climate change.
- 5. The scope and provision for Functional Continuity i.e. self-containment of power supply, water supply, sanitary facilities, heating, ventilation, air-conditioning, food service and rations etc should be available in the building premises.

### 8.3. FUNCTIONAL SPACES IN THE EOC

EOC facilities can range from single conference rooms designated for EOC functions, to stand alone facility with many separate spaces dedicated to various functions and activities occurring in an activated EOC. Therefore, the spatial design or layout of an EOC is central to its efficient operations. A properly designed EOC serves as an effective facility for coordinating emergency response.

The EOC layout should be designed with the following considerations:

- 1. The layout should be based on the maximum number of personnel, integrating equipment, communication capabilities, flexibility, noise abatement and foot traffic etc.
- 2. The area of EOC and all its functional areas, should be decided on the basis of staffing structure of the EOC during the Emergency times as this will determine the maximum strength of personnel and equipment requirement in the EOC.

- 3. If the EOC is located in a multi-use building, the common utilities and areas of the building, must be given weightage for EOC layout e.g. the conference rooms, meeting rooms, common toilets, parking space or electrical backup in the building, can be shared for EOC usage as well, provided appropriate access control precautions exist for functional areas.
- 4. Although the EOC should be an aesthetically presentable and organised space, building byelaws, fire norms, structural integrity and other building services should never be compromised.

## FUNCTIONAL AREAS IN AN EOC:

The EOC should emerge as a specialised area, following standard specifications for ease of operations. The EOC must

For roughly estimating the minimum floor area requirement of an EOC, a thumb rule of 50 sqft per person (peak staff strength during emergency times) can be applied. However, the permanent staff strength should also be kept in consideration before finalising the EOC area requirement.

For example, if the peak time staff strength is established as 30, then the approximate area requirement can be taken as 50x30 i.e.1500 sqft.

have prescribed spaces for all operators along with state-of the-art equipment and technology.

- 1. Office for Head of EOC: The head of the EOC should have a separate specified office space.
  - At the SEOC level, it should ideally be equipped with facilities at par with a Scientist "E" (level-13). It may include an executive table with chairs, file storage, seating for small informal discussions, flat TV screen with audio visual presentation capacities, Fax machine, Printer and scanners and advance communication capacity etc. An optimal sized personal restroom should be attached to this office.
  - At the DEOC level, it should be ideally equipped with facilities at par with a Scientist "D" (level-12). It may include a scaled down form of furniture, equipment and communication capabilities in lesser space. This office can be a cubicle also.
- 2. Office for HRA/ Deputy Head of EOC:
  - At the SEOC level, it is recommended that a separate office or work space should be allocated for the HRA/ Deputy Head of EOC, wherever applicable. (Refer sub-section 5)
- 3. Incident Steering Room/ Operations Room: The Incident Steering Room or the Operations Room is the nerve centre of the entire EOC. It is a large meeting area designed to facilitate operational decision making. It should be centrally located in the EOC. Extensive presentation, communication and data processing aids for key personnel are maintained in the operations room. It should be large enough to accommodate the maximum strength of the personnel, equipment and communication capacities, needed in the event of an emergency.
  - At the SEOC level, the Incident steering Room should have the configuration suitable to accommodate all the "EOC Sections" (emergency time functions).
  - At the DEOC level, the Incident steering Room should be large enough to accommodate all the "EOC Desks" (emergency time functions). In small DEOCs where it is the only room, it should have enough equipment space, file storage space and display space.

The suggestive layouts and equipment for the Incident Steering Room, are separately discussed in sub-section 9.5.

- 4. Conference room/ Meeting Room: A meeting room or a conference room are to be utilised for coordination meetings or press briefings.
  - SEOC level: the Meeting Room should have a seating capacity of 10 people (minimum). It should be equipped with a display screen and projection system, white boards, fax and video conferencing facility.
  - DEOC level: the Meeting Room should have a seating capacity of 06 people (minimum). It should be equipped with a display screen and projection system, white board, fax and video conferencing facility.
- 5. Other Administrative Offices: For the other EOC core staff, additional office space should be provided, depending on the number of personnel and scope for expansion.
  - SEOC level: office space for minimum 05 persons should be allocated.
  - DEOC level: as per space availability.
- 6. Helpline Room: The Helpline Room houses all helpline operators to receive distress calls.
  - SEOC level: since it is anticipated to be a space with high noise, it is recommended to be located separately. However, if there is a space constraint, it can be merged with the Incident Steering Room provided the noise is controlled.
  - DEOC level: as the number of helpline operators is generally less, the helpline Room does not need to be located separately.
- 7. Communications Room: The Communications Room accommodates all the emergency communication equipment and the space required to operate it.
- 8. Dormitories: As the EOCs will have personnel on duty 24x7 (especially during emergency times), space for resting and freshening up, must be provided.
  - SEOC level: dormitory space for a minimum of 06 persons should be included.
  - DEOC level: dormitory space for a minimum of 02 person should be included.
- 9. Toilets: Separate male and female toilets should be provided. The number of toilets will depend on the EOC staff strength. Proper sanitation facilities should be provided at all EOCs.
- 10. Server and UPS room: The UPS room provides space for power backup of critical equipment in the event of power loss. The data servers can also be accommodated in the UPS room as per the safety standards. The specifications of the Server and UPS room will depend on the decided on the need assessment of the facility.
- 11. Equipment/Storage room: This is an ancillary room which is recommended but not mandatory.
  - SEOC level: Recommended
  - DEOC level: not required. Can be merged with the UPS room.
- 12. Kitchen/ Pantry: a well-equipped kitchen/ pantry should be located in the EOC. It should be well stocked with food and water supply during the emergency functions. A medical kit containing basic medical instruments e.g. thermometer, oximeter, BP instrument, sugar testing machine etc with common OTC medicines, should also be stored here.

- 13. Library: some space for library should be allocated in the facility. The library can also optionally work as a recreational area
  - SEOC level: Recommended
  - DEOC level: recommended without specially allocated space
- 14. Parking space: the EOCs must have ample parking space to accommodate the maximum number of anticipated incoming vehicles during emergency times.
- 15. Space for DG set: a DG set should be provisioned, additionally for power backup. The size of the space will depend upon the size of the DG set. The power backup should have a combination of both UPS (with solar charging facility) alongwith the DG sets.

The following table summarises the functional prerequisites in the EOCs at the SEOC & DEOC levels with their suggested minimum sizes.

S. No.	Functional Space	Suggested size (minimum)	DEOC
1.	Head of EOC Office	SEOC: 100 sqft	Equipped at par with Scientist "E" level
		DEOC: 80 sqft	Equipped at par with Scientist "D" level
2.	HRA/ Dep. Head of EOC office	SEOC: 60 sqft	
		DEOC: not required	
3.	Incident Steering Room (Operations	SEOC: 1000sqft	Ideally the length and breadth of the room should be in the ratio of
	Room)	DEOC: 400 sqft	2: 3 to 1: 1
4.	Conference Room / Meeting Room	SEOC: 200 sqft	Seating capacity of 10 persons
		DEOC: 120 sqft	Seating capacity of 06 persons
5.	Other Administrative	SEOC: 60 sqft	Minimum 05 pax capacity at SEOC level
	Offices	DEOC: as/space availabilty	
6.	Helpline Room	SEOC: 50 sqft	can be merged with the Incident
		DEOC: not required	Steering Room with adequate noise control.
7.	Communications Room	SEOC: 100 sqft	Area needs to be determined as/ specifications of suggested
		DEOC: 60 sqft or as/ space availability	communication equipments in the EOC

8.	Dormitories	SEOC: 100 sqft	For minimum 06 persons
		DEOC: 50 sqft	For minimum 02 person
9.	Toilets	As per the bye-laws	
10.	Server & UPS room	As applicable	The server & UPS rooms can be combined or separate as per space availability and specifications
11.	Equipment/	SEOC: recommended	Ancillary space. Not mandatory
	Storage Room	DEOC: not required	
12.	Kitchen/ Pantry	SEOC: 40 sqft	
		DEOC: counter space	In DEOC, a small counter/desk space can be allocated to operate electric appliances e.g. oven, kettle etc
13.	Library	SEOC: 200 sqft	In DEOC, a cubicle/ corner can be
		DEOC: recommended	- provisioned
14.	Parking space		Will depend on the staff strength
15.	Space for DG set		Will depend on the load calculations of the building
16.	Space for Fuel Storage		As/ hazardous substances storage regulations

Table 04: Suggested minimum sizes for EOC Functional Areas

# 8.4. DESIGN PRINCIPLES FOR AN EFFECTIVE EOC LAYOUT

An effective EOC design should be collaborative and technology driven, based on following principles that promote efficiency and flexibility:

- The Incident Steering Room (Operations Room) is the principle functional space of the EOC. Therefore, it should be centrally placed in the EOC, next to the entrance foyer. However, to avoid chaos and noise during emergency times, the access to this room should not be directly from the entrance foyer.
- An entrance foyer/ lobby acts as a buffer space between visitors and the functions of EOC. Access beyond the EOC entrance foyer should ideally, be controlled. The EOC reception desk should be located in the entrance foyer.
- As mentioned earlier, the Helpline Room is recommended to be located separately but next to the Incident Steering Room.

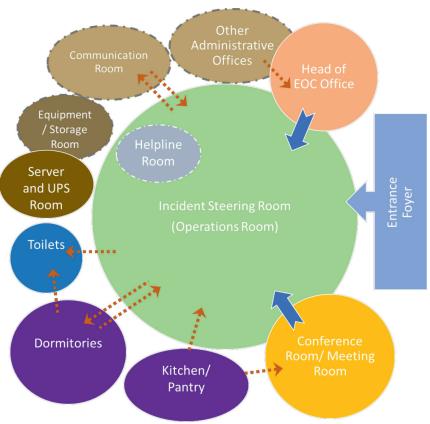


Figure 11: Block Diagram for EOC layout

However, if there is a space constraint, it can be merged with the Incident Steering Room provided the noise is controlled.

- 4. The Head of EOC office should ideally be located next to the Incident Steering Room. This will provide the scope for expansion of the Incident Steering Room, if need be.
- 5. The other Administrative Offices e.g. the office of Deputy Head of EOC, office of HRA and TE, accounts etc should be close/ next to the office of EOC Head. During emergency time operations, this office space with the EOC core staff should be able to function without hinderance.
- 6. The Conference Room should be located near the entrance as it is a visitors area to minimise interference in the EOC operations. However, this room can also be used for expansion of emergency operations (if required).
- 7. At the peak of EOC operations during an emergency, the EOC is an exceptionally busy space. To avoid any further chaos or security threat during such operations, it is advisable that the media briefings should not be conducted in the EOC.

- 8. The Dormitories and utility areas (Kitchen/ Pantry, Toilets and storage spaces) should be isolated from the general hustle of EOC.
- 9. In the event of EOC expansion to office of EOC Head and Conference Room, it must be kept in purview that people and agencies that frequently need to coordinate should be near each other in the EOC's arrangement.

# 8.5. DESIGN LAYOUT OF INCIDENT STEERING ROOM (OPERATIONS ROOM)

As the Incident Steering Room is the primary functional space in an EOC, its design and layout are of utmost importance. It should be ergonomically designed, keeping the emergency time functions in focus. It can be designed in four basic layouts: mission control, the boardroom, marketplace and island.

### 8.5.1. Design directive:

Following considerations should guide the layout of the Incident Steering Room:

- a. Regardless of the chosen room design, clear sightlines should be taken into consideration to ensure all staff members are able to see necessary visuals all the time.
- b. It is recommended that the Incident Steering Room should not be narrow. The proportion of length x breadth should be around 3: 2 (if length is 30 ft, the breadth should ideally be around 20 ft) which shall prove ideal in terms of seating as well as sightlines.
- c. No structural elements (pillars or beams or overhangs) or architectural design elements should be placed in such a manner that they interfere with the sightlines, movement, communication or any other functions performed in the room.
- d. There should be clear visibility between staff members who frequently work together. Sometimes eye contact and hand signals are used effectively to communicate when both members are on phones or typing. Make sure that structures such as beams do not impede visibility.
- e. If possible, the layout should address spacing that allows for each staff member to work efficiently and with as little noise interference as possible.
- f. Easy access to food, water, facilities. Ensure that the staff can easily and quietly access facilities when needed, without interfering with other members or operations.

### 8.5.2. Suggested Layouts:

- a. <u>Mission control</u>: This layout approximates a lecture hall, with staff seated in rows or semicircles facing large visual displays. The staff members communicate primarily through incident management software. This layout works well for technical tasks but may limit collaboration and interaction among staff.
- b. <u>Boardroom</u>: This is the classic layout in which agency representatives work around a Ushaped or an O- shaped table, with the main visual display in the front of the room. Support staff sit behind the main participants, and additional visual displays line the walls behind them. This layout emphasizes collaboration and coordination.

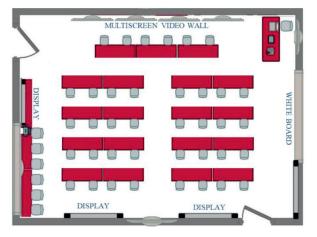


Figure 12: Layout- Mission Control (Linear Rows)

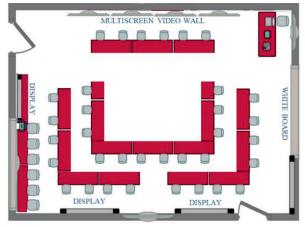


Figure 14: Layout- Boardroom type

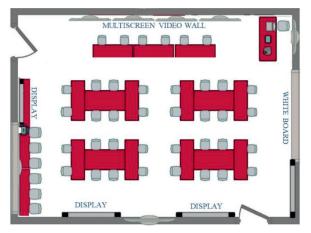


Figure 16: Layout-Island Type

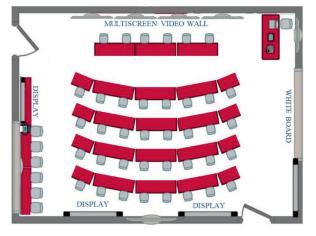


Figure 13: Layout- Mission Control (Arc Type)

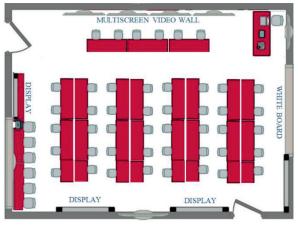


Figure 15: Layout- Marketplace Type

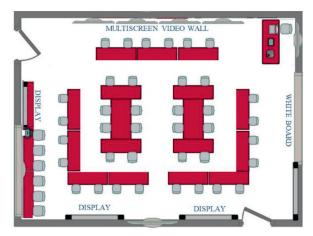


Figure 17: Layout- Mixed Type

- c. <u>Marketplace</u>: The staff members sit in separate, section-specific groups that emphasize collaboration among specialists. Staff members then need to coordinate across groups. It provides the opportunity for more specialised deliberations.
- d. <u>Island:</u> In this layout, key leaders sit at a main table, with additional staff seated at interactive groups. It is basically, an extension of the market place layout. This arrangement emphasizes the section specific specialisation with various other members.
- e. <u>Mixed:</u> As per the requirement and availability of space in the EOC, a combination of abovementioned layouts can also be adapted. The objective should be facilitating effective functioning and efficient space utilisation.

### 8.5.3. Equipment and capabilities:

- a. The Incident Steering Room is a technology intensive room. It depends heavily on communications and presentation systems. It should be periodically upgraded and equipped with the newest and most befitting technological options.
- b. It should be equipped with large flat screen displays for effective visual presentations and their deliberations.
- c. Some additional screens should also be installed in the room for stand-alone information display.
- d. The Incident Steering Room should have ample number of computers for maximum emergency time strength.
- e. It should have high speed internet connectivity and video conferencing facilities.
- f. A projector system is also recommended in the room.
- g. There should be enough wall/ vertical display for all relevant maps, data, notices and schedule updates in the room. All such vital information should be on display in the room. The duty charts including staff on duty should be displayed permanently/ conspicuously. Further, all manual, SOPs, Action Plans, Telephone Directory are to be placed on table for easy access to official/staff on duty.
- h. White boards should be placed strategically (movable whiteboards recommended) for each desk to illustrate their own pointers.
- i. Some additional ports and sockets should be provided in the room for operating personal laptops and other agency specific equipment.
- j. Properly placing technology and support work stations (i.e. telephones, copiers, radios) will assist the staff members in their efforts to concentrate on their positions with limited noise distractions.
- k. The Incident Steering Room should have ample storage space for documents and files. In the absence of a library in the EOC, all such necessary data (both hard copies and soft copies) e.g. maps, manuals, SOPs, Action Plans, Telephone Directories etc should be stockpiled in the room and must be easily accessible.

### Reference images of various types of layouts for Incidence Steering Room



Image 01: Mission Control Layout (Linear Rows)



Image 02: Mission Control Layout (Arc type)



Image 03: Boardroom Layout



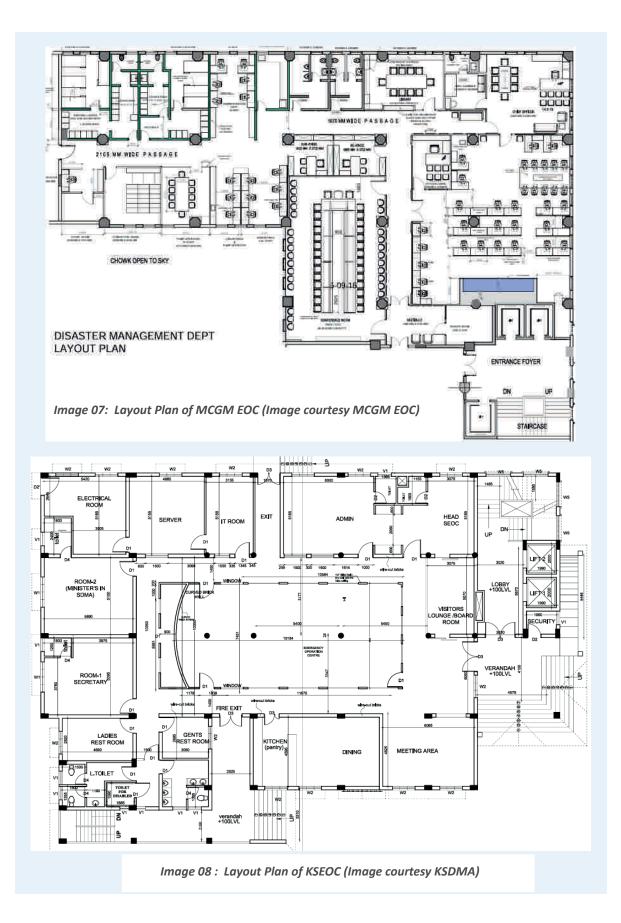
Image 04: Marketplace Layout



Image 05: Island type Layout



Image 06: Typical TEOC



# 9. ICT INFRASTRUCTURE AND EQUIPMENT REQUIREMENTS

The EOC is a data monitoring, evaluation & fusion centre. It must have the required information through a fail-safe communication system, web-based connectivity and an ideal IT solution for DSS with integrated databases. Therefore, it should have high end Geographic Information Systems and Satellite Image Processing facilities, satellite-based communication, satellite phones and multi-channel terrestrial communications systems and high-speed broadband internet connectivity.

There should be a proper plan so that all are able to connect with each other in case of large scale disasters or failure of the local communication systems<sup>(11)</sup>. Therefore, the planner should consider using mirrored servers or telephone switchovers for data backup & safety. Also, not all EOCs have the same communications requirements. Planners should tailor the communications infrastructure to support both internal and external functional needs, integrated with other emergency management elements

	EQUIPMENT/ CAPABILITY	SEOC	DEOC	TEOC
Desktop Computer System				
1.	Office of Head of EOC	01		
2.	HRA/ Dep. Head of EOC office	01		
3.	Incident Steering Room (Operations Room)	20		
4.	Conference Room/ Meeting Room	01		
5.	Other Administrative Offices	05	10	02
6.	Entrance Foyer	01		
7.	Helpline Room	01		
8.	Dormitories	-		
9.	Server and UPS room	01		
10.	Library	01		
Note: Some extra electrical & networking sockets should be provided in all spaces for connecting laptops & other peripheral equipment				

<sup>&</sup>lt;sup>11</sup> NDMA Guidelines: Incident Response System 2010

Television Screen					
1.	Office of Head of EOC	01			
2.	HRA/ Dep. Head of EOC office	01			
	Incident Steering Room (Operations Room)	02	03	01	
	Conference Room/ Meeting Room	01			
	Entrance Foyer	01			
Landli	ne Telephone & Fax (PRI)				
1.	Office of Head of EOC	01 (with fax)	01 (with fax)		
2.	HRA/ Dep. Head of EOC office	01			
	Incident Steering Room (Operations Room)	10 (with 01 fax)		02 (with 01 fax)	
	Conference Room/ Meeting Room	01			
	Other Administrative Offices	05			
	Entrance Foyer	01 (with fax)			
	Helpline Room	As/sanction	As/sanction		
	Dormitories	01			
	Server and UPS room	01	-		
	Library				
Wi-fi I	Printer & Copier				
1.	Office of Head of EOC	01			
2.	HRA/ Dep. Head of EOC office	01			
	Incident Steering Room (Operations Room)	02	01	01	
	Conference Room/ Meeting Room	-			
	Other Administrative Offices	01			

	Entrance Foyer	01		
	Helpline Room	-		
	Dormitories	-		
	Server & UPS room	-		
	Library	01		
Proje	ctor			
	Incident Steering Room (Operations Room)	01	-	-
	Conference Room/ Meeting Room			
Multi	screen Video Wall			
	Incident Steering Room (Operations Room)	01	01 recommended	-
	Conference Room/ Meeting Room	01 recommended		
Video	Conferencing Facility			
1.	Office of Head of EOC	yes		
2.	HRA/ Dep. Head of EOC office	yes		
	Incident Steering Room (Operations Room)	yes		
	Conference Room/ Meeting Room	yes		
	Other Administrative Offices	-	yes	yes
	Entrance Foyer	-		
	Helpline Room	-		
	Dormitories	-		
	Server & UPS room	-		
	Library	-		

FOLLOWING FACILITIES AND EQUIPMENT MUST BE AVAILABLE IN THE EOC ON NEED ASSESSMENT BASIS				
	UAVs/ Drones			
	Location based messaging system			
	Video amplifiers, distributors and sv	vitching units		
	Voice recorder for telephone lines			
Alter	nate Communication Equipment			
	VHF/ HF			
	INMARSAT handheld phone			
	INMARSAT BGAN data terminals			
	IP telephones with display			
	TDMA shared Hub VSAT			
	SCPC VSAT			
	Portable VSAT with integrated wireless radio base station			
	Radio over IP (RoIP)			
	HAM radio			
	Handheld GPS unit			
	Megaphone			
Vetw	ork Infrastructure (Dedicated line for	Data Communic	ation)	
	High speed broadband internet with Wi-fi enabled connectivity (minimum100Mbps)	yes	yes	yes
	Fiber optic enabled router/ Layer 3 switch/ Multiple WAN port router to provide communication links switchover	As applicable	As applicable	As applicable
	Data Servers	1+1 redundant units		

	Wi-fi hotspot set-up	Multiple	Minimum 01	01
	SMS & social media based alert systems	yes	yes	
	Automated EWS with hardware & software	yes		
	CCTV with VDR	yes	yes	yes
Others	Others			
	UPS with minimum one hour back up battery capacity			
	Diesel generator			
	Fire Extinguishers			
	Search Lights, Torches, LED Flashlights			
	Fully equipped ERV Vehicle-mounted with HF, VHF, and a satellite telephone for deployment in the affected area to provide immediate connectivity with the EOC and ICPs			

 Table 05: ICT Infrastructure & Equipment Requirements

A state of art, online/ web-based DSS with embedded information & data inputs (preferably automated) is one of the most imperative requirements of an effective EOC with the following components<sup>(12)</sup>.

- Standardization of command structure with the details of the earmarked and trained personnel in IRS.
- Proactive planning facilities
- Comprehensive resource management system
- Geographic Information System (GIS) and land use planning
- Modelling capability for predicting casualties and resources for large scale incidents, including CBRN emergencies

States are recommended to facilitate the design and utilisation of such a platform.

<sup>&</sup>lt;sup>12</sup> NDMA Guidelines: Incident Response System 2010

### **10. BACKUP EOC**

It is always desirable that an alternate or Backup EOC is also established. The Backup EOC should be almost, a mirror image of the primary EOC and serve as a back-up to handle any eventuality, should the main EOC be rendered non-operational due to any accident, disaster or any other reason. The main EOC may be established at the nodal agency, which is responsible for emergency management in the state, since it is the focal agency. The backup EOC may be at another location and be used during non-disaster times as a training centre for main EOC operations. The Backup EOC should be equipped to perform the same basic capabilities as the primary EOC, but may not require the complete set of features. However, the following points must still be considered:

- 1. The Backup EOC should consider the same site selection criteria as the primary EOC. The Backup EOC should be capable of accommodating the same security levels as the primary EOC.
- 2. A separate Risk Analysis should be performed for the Backup EOC. This assessment will determine the level of protection required for this EOC, which may be different from the primary EOC location. The Risk Analysis should consider the different asset value of the alternate facility and the likelihood of the alternate location being impacted by the same incident in determining the level of protection and acceptable level of risk for the alternate location.
- 3. The requirements for structural, building envelope, interior construction, mechanical systems, electrical systems, water sources, life safety, shock mounting, security and communications distribution may be adjusted to reflect the level of threat severity level and functional capability as determined necessary for the Backup EOC.
- 4. The Backup EOC should be capable of performing the same communications functions as the primary EOC.

### **11. MOBILE COMMAND CENTRES**

Mobile Command Centres provide a possibility for uninterrupted monitoring and mitigation during an emergency, either as an option for the inoperational primary or backup EOC or in situations where temporary or localized field operations are required. One or multiple Mobile Command Centres can be associated with an EOC.

The Mobile Command Centre should have the following capabilities:

 It should be equipped with basic communications equipment, computers and video display systems to provide similar support as the primary EOC. Mobile Command Centres are vehicles with prepackaged equipment that can be moved or located to wherever required in response to an emergency incident.

Such a mobile unit equipped with monitoring and communication capabilities, greatly enhances an EOC's ability to relocate without seriously degrading its coordination and control functions.

- 2. It should be of sufficient size to accommodate the equipment and personnel.
- 3. The equipment on the Mobile Command Centre should be interoperable with EOC systems in fixed facilities.
- 4. The Mobile Command Centre should be maintained in a state of readiness. It should be selfpropelled or transportable without special equipment, and be capable of traveling over public roadways, including un-improved roadway surfaces.



Image 09: Mobile Command Centre



Image 10: Inside of a Mobile Command Centre

# 12. INCIDENT COMMAND POST (ICP)

The Incident Command Post is the physical location of the tactical-level, on-scene incident command and management. The ICP can be located with other incident facilities like Incident Base. For the initial location of the ICP, the nature of the incident, whether it is growing or moving and whether the ICP location will be suitable in size and safe for the expected duration of the incident, should be taken into consideration. Larger and more complex incidents will require larger ICP.

The ICP can be located in a vehicle/ trailer (like a mobile command centre) or tent. It should however have adequate space to accommodate equipment and personnel, lighting, effective communication systems and other such facilities so that one can function effectively.

General guidelines for Establishing the ICP<sup>(13)</sup>:

- a. Position away from the general noise and confusion associated with the incident;
- b. Position outside the present and potential hazard zone;
- c. Position within view of the incident, when appropriate;
- d. Have the ability to expand as the incident grows;
- e. Have the ability to provide security and to control access to the ICP as necessary;
- f. Should have distinctive banner or sign to identify location;

<sup>&</sup>lt;sup>13</sup> National Disaster Management Guidelines: Incident Response System-2010



## ANNEXURE- I

## SUGGESTED DOCUMENT STRUCTURE OF SOP FOR EOCs

The SOP for each EOC should cater to its distinct operational demands. The document should contain all the relevant information that will be required for swift and quick response during emergencies and normalcy which may include:

1.	Introduction and location (Brief description of the state or district, its HRVA profile including anticipated secondary hazards, EOC mandate, location of primary and backup EOC)
2	EOC floor plans & back-up EOC floor plans
3.	Organisational setup of EOC (It must contain clear directions for staffing during emergencies also)
4.	Functions of EOC (Must enlist functions during normalcy and emergency with responsibilities of each designation involved)
5.	Early warning systems and incident specific SOPs
6.	IRS Notification
	ESF Plans (with clearly mentioned designations, roles & responsibilities & nodal departments)
7.	Procedures for Information handling & resource management
8.	List of facilities and equipment available in the EOC, including the ICT infrastructure
9.	Procedures for operating and maintaining the EOC equipment
10.	Procedures for operating and maintaining the EWS
11.	Contact details of all concerned personnels and line departments
12.	Details of all subordinate EOCs & control rooms
13.	List of latest editions of various DMPs, resource inventories, datasets and documents etc
14.	Annexures (Include all relevant formats like information reports, log books, request and requisition etc)

# ANNEXURE- II

# LIST OF DOCUMENTS TO BE MAINTAINED IN THE EOCs

1.	MA	MAPS						
	i.	Political Map of the jurisdiction						
	ii.	Physical Map of the jurisdiction						
	iii.	Topographical Map of the jurisdiction						
	iv.	Maps of Disaster prone areas in the jurisdiction						
	v.	Demographic Map of the jurisdiction						
	vi.	Any other relevant thematic maps						
2	SOP	s						
	i.	SOP of the EOC						
	ii.	SOP for EWS						
	iii.	SOP for declaration of emergency						
	iv.	SOP for mobile command centres						
	v.	SOP for functional continuity of EOCs during emergency (must include list of items needed for self-sustained operations in the EOC for 03 to 07 days as per the case specific requirements)						
3.	PLA	NS						
	i.	National Disaster Management Plan 2016 & 2019						
	ii.	Disaster Management Plan of the State						
	iii.	Disaster Management Plan of the District						
	iv.	Disaster/ Crisis Management Plans of various line departments						
4.	DAT	A						
	i.	HVRA profile of the Jurisdiction						
	ii.	Records of past disasters						
	iii.	Demographic data of the jurisdiction						
	iv.	Climate data of the jurisdiction						
	V.	Land-use planning data of the jurisdiction						
	vi.	Infrastructural data of the jurisdiction						
	vii.	Resource inventories						

### ANNEXURE- III

# **SAMPLE EMERGENCY SUPPORT FUNCTION PLAN**

ESF	Purpose & Scope	Primary Agency	Support Agency
ESF # 1 Transportation	Transportation provides support by assisting governmental entities, voluntary organizations, non- governmental organizations, and the private sector in the management of transportation systems and infrastructure during response to actual or potential incidents.	State Transport Department, Road Transport Corporation, Railways, Directorate of Shipping	Private operators, Armed Forces, Private Airlines & Shipping/ Ferry operators
ESF # 2 Communications	Communications supports the restoration of communication infrastructure, coordinates communications support to response efforts, facilitates the delivery of information to emergency management officials, decision makers and assists in the stabilisation and re-establishment of systems and applications during incidents.	State Telecom Department	Police Wireless Department, Private Telecom Service providers, MTNL, BSNL, HAM & Community Radio Operators, Armed Forces
ESF# 3 Public Works	Public Works and Engineering coordinates and organizes the resources of the Government to facilitate the delivery of multiple core capabilities in the disaster impact zone.	State PWD	State Electricity Department, Water Supply & Irrigation Department, State Road Development Corporation, NHAI
ESF #4 Fire Services	Fire Services Department provides Govt support for the detection and suppression of fires resulting from, or occurring coincidentally with, an all-hazard incident requiring a coordinated response for assistance.	Sate Fire & Rescue Services Department	SDRF, Central Agencies, Armed Forces, PSUs, Industry

ESF #5 Information Management	Collection, analysis, processing, and dissemination of information about a potential or actual incident	EOCs, Police (Wireless & ERSS) Control Rooms of State & Central Agencies & line Departments	Armed Forces, Industry, Ports & Airports, State IT & Communication Department
ESF #6 Mass Care & Emergency Assistance	Temporary Housing, Emergency Assistance and Human Services coordinates and provides life-sustaining resources, essential services to people in impact zone, relief camps & shelters.	Revenue Department, Local Bodies, PRI, Police	NGOs, Community & Self-help Groups, HG&CD, NCC & NSS
ESF # 7 Logistics, Food & Civil Supplies	Logistics integrates whole community logistics incident planning and support for timely and efficient delivery of supplies, equipment, services, and facilities. It also facilitates comprehensive logistics planning, technical assistance, training, education, exercise, incident response, and sustainment	State Food & Civil Supplies Department, Revenue Department	PWD, Electricity Department, Department of Agriculture, Animal Husbandry, NGOs, Private contract suppliers
ESF #8 Public Health and Medical Services	It provides the mechanism for assistance to supplement local resources in response to a disaster, emergency, or incident that may lead to a public health, medical, or human service emergency, including those that have international implications.	State Medical and Health Services Department	Armed Forces, Private Hospitals & Institutions and service providers
ESF #9 Search and Rescue (SAR)	It deploys govt. SAR resources to provide lifesaving assistance during actual or potential disaster incident.	State Fire & Rescue Services, State Disaster Response Force, EOCs	Police, Armed Forces, NDRF, CAPFs & other Central Agencies, NCC & NSS, Aapada Mitras

ESF #10 Oil and Hazardous Materials Response	It provides Govt. support in response to an actual or potential discharge, spill and/ or release of oil or hazardous or noxious substances and materials when it happens.	Fire Services, State Pollution Control Board, DISH, Dept of Industries/ Factories & Boilers, District & Local Administration	Armed Forces, Private contractors & waste management service providers, Central agencies & institutions
ESF #11 Energy	It provides support to entities, by coordinating government and the private sector capabilities, services, technical assistance, and engineering expertise during disasters and incidents that require a coordinated response.	State Power Corporations, Electricity Department	Private power generation and distribution companies, Oil & Gas marketing companies
	The term "energy" includes producing, storing, refining, transporting, generating, transmitting, conserving, building, distributing, maintaining, and controlling energy systems and system components. It includes power & fuel supply, distribution network.		
ESF #12 Public Safety and Security	Law & order assistance to people, Govt., organizations overwhelmed by the results of an actual or anticipated natural/manmade disaster	State Police	Civil Defence & Home Guards, NGOs, NCC, NSS, CAPFs
ESF # 13 Emergency Shelter & Housing	Temporary shelter to affected people in relief camps, shelters, community halls etc.	Revenue Department. Local Governing Bodies, Education Department, Department of Social & Family Welfare, Child Development	NGOs, Self-help & community groups, private Institutions and welfare organisations

ESF #14 Critical Infrastructure	It supports the coordination of cross-sector operations of essential and utility services, including stabilization of key supply chains and community lifelines, among infrastructure regulators and operators and businesses.	State and Central Govt entities, PSUs, essential services & public utility providers in public & private sectors.	Central Agencies, Armed Forces, CAPFs
ESF # 15 Water Supply & Sanitation	Provision of water supply to affected population & relief camps, shelters etc. Sanitation & waste removal & disposal services	Local Governing Bodies, PWD, Water Supply Department	Private contractors & service providers
ESF # 16 NGOs & Volunteer Support	Mobilisation of NGOs, volunteers and facilitating relief material, services & donations, support to disaster response & relief operations.	State Social Welfare Department, Local Governing Bodies, District & Local Administration	Revenue, Education, Public Affairs Department, NGOs

### ANNEXURE- IV

## FORMAT - FIRST INFORMATION REPORT

(To be sent to SEOC, Director DM without delay during early hours of disaster occurrence based on whatever information available)

To Officer-in-Charge State EOC Director State Disaster Management

**Incident Details** 

- 1. Nature of incidence
- 2. Date & time of occurrence
- 3. Location & area of impact
- 4. Number of fatalities, injuries, missing, traped
- Disruption/impact to community lifelines and critical supply chains (Transport, Road, Rail & Air connectivity, Power, Communications, Food, Water & Sanitation, Safety & Security, Health & Medical)
- 6. Description of "At-Risk Population"
- 7. Description of first response actions and resources available on-site
- 8. Damage to property
- 9. Impact on critical infrastructure
- 10. Impact on hazardous material (HAZMAT) facilities, lingering or potential hazards
- 11. Lifesaving and life-sustaining needs including need for mass care, emergency assistance, medical aid & temporary shelter, search & rescue teams
- 12. Any other relevant information

Officer-in-Charge District EOC/Incident Commander Copy to : District Responsible Officer (District Collector)

### **ANNEXURE- V**

# FORMAT: SITUATION REPORT

### (To be filled in by the Village/Block Officer)

Name of the Taluk :

Date of Report:

S.No.	Damages	Quantum of	Damage/Nos	Action Taken
1.	Loss of Human Lives	Men		
		Women		
		Children		
2.	No. of Injured	Men		
		Women		
		Children		
3.	Housing Damage			
	Fully Damaged	Pucca		
		Kutcha		
	Partially Damaged	Pucca		
		Kutcha		
	Severely Damaged	Pucca		
		Kutcha		
4.	Damaged / Destroyed Huts			
5.	Areas Impacted			
6.	No. of People evacuated / to be evacuated			
7.	No. of Relief Camps opened			
8.	No. of Food Packets served / distributed			

9.	Damage of Trees		
10.	Damage of Electric Poles / Lines		
11.	Damage to Roads		
12.	Damage to other infrastructure e.g. Channels / Tanks / Bunds/ Embankments		
13.	Damage to Drinking Water Supply		
14.	Damage to Govt. Buildings		
15.	Crop Damage (if applicable)		
16.	Loss of Live Stocks (including mulch animals, goats, horses, poultry etc.)		
17.	No. of Livelihood peripherals damaged		

(Signature)

Name:

Designation:

(With inputs from Standard Operating Procedure, SEOC, Meghalaya- 2020)

### **ANNEXURE- VI**

## FORMAT FOR RESOURCES INVENTORY

S.No.	Men/Material/equipment/Services Description/specification	Qty in Nos	Qty in Wt./ Vol.	Availability Location
	Manpower			
	Services			
	Material & Stores			
	Equipment			
	Specilised Responce Teams			

(Courtesy: Handbook of SOP for EOC Himachal Pradesh- 2016)

### **ANNEXURE- VII**

### **REQUISITION FORM FOR ARMY AID BY CIVIL AUTHORITIES**

(NATURAL CALAMITIES)

Reference No. : Calamities

- 1. From :
- 2. To:
- 3. For Information -
- 4. Date and time origination of demand -
- 5. Situation as at area \_\_\_\_\_\_ an \_\_\_\_\_ due rising of rigor \_\_\_\_\_\_ due rising of rigor \_\_\_\_\_\_ civilians marooned. Own evacuation resources insufficient meet requirement. In view continuous heavy, rains in upper regions, more areas may be affected marooning another \_\_\_\_\_\_ civilians of \_\_\_\_\_\_ region.
- 6. Type of extent of aid required for
  - (i) Equipment and personal, to evacuate marooned civil.
  - (ii) Medical assistance for approximately \_\_\_\_\_\_ civilians.
  - (iii) Tentage for \_\_\_\_\_\_ families if available.
- 7. Likely duration and period of aid required

for \_\_\_\_\_\_ days with effect from \_\_\_\_\_\_

(present situation permitting)

- 8. Officer in charge Army aid to contact.
- 9. Name of civil Liaison Officer detailed.

Mr. \_\_\_\_\_ (Telephone No.) \_\_\_\_\_

10. Arrangement made by civil authorities to guide Army aid to place of operations.

Mr. \_\_\_\_\_ will meet Army aid part at \_\_\_\_\_ On receipt of information from Army authorities)

- 11. Special Instructions.
- (i) School building at \_\_\_\_\_\_ being made available to hourse personnel and also for medical arrangements.
- (ii) Sufficient stocks of required medicines in the present contingency being made available to treat effected civilians population.
- (iii) Road Bridge at \_\_\_\_\_\_ is unserviceable.
- 12. Please acknowledge.

Signature

Office Seal

## **ANNEXURE - VIII**

# **REQUISITION FORM FOR AIR FORCE**

Data Field	Details
State	
Department of the State	
Date/ Time of operation	
Type of operation	
From	
То	
Name & Designation of the Liaison Officer	
Type of Emergency	
Opinion of Authority	
Justification as to why alternate option is not feasible	
In-flight medical requirement (if any)	
Bill to be forwarded to	

#### Signature

**Official Seal** 

## ANNEXURE - IX

# **MISCELLANEOUS FORMATS**

#### • EOC COMPLAINT REGISTER FORMAT

Complaint No	Date & Time	Phone No	Name & Address	Description of the call	Informed to	Status	Action taken	Latitude	longitude

#### • VSAT LOGBOOK

S. no.	Date & Time	Hub no.	Location name	Information of the calls	Status	Action taken

#### • VHF LOGBOOK

S. No.	Date	Time	From whom message is received	Message		Informed to	Sign
				In	out	whom	

#### • EOC TURN DUTY STAFF DAILY LOG BOOK

S. No.	Name & Designation	Detail of Message	Reamarks

(Format courtesy Puducherry EOC)

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