



STANDARD OPERATING PROCEDURE ON *Conduct of Mock Exercises*

National Disaster Response Force
Government of India

*“You have to learn the rules
of the game. And then you
have to play better than
anyone else.”*

Albert Einstein

Foreword

O P Singh, IPS
Director General, NDRF



The test of disaster response plans of Disaster Management Authorities can virtually be done on occurrence of real disaster. But it is not prudent to wait for real disaster to happen which results into astronomical loss of lives and economy for testing the actual disaster management plans. Pragmatically, theory can be taught in a class room setting but in order to really test and train the theory in praxis, simulations are indispensable ways to give disaster responders a taste of the real disaster. Mock Exercise provides virtually the only means, short of an actual incident, of measuring the state of readiness and of testing the effectiveness of an emergency response Plan.

The Govt. of India has an efficient system for responding to both natural and man-made disasters including CBRN emergencies through different Emergency Support Functions (ESFs). NDRF in the capacity of lead agency in the field of specialized disaster response is also committed to make India resilient towards disasters. NDRF have been carrying out Mock Exercises in collaboration with a range of institutions that all have a major role to play in terms of disaster response.

The aim of bringing this SOP on “Conduct of Mock Exercises” is to lay down the guidelines for conducting mock exercises by NDRF in the utmost professional manners with objectivity.

I am sure that this SOP on “Conduct of Mock Exercises” will be able to live up to the expectations of the field formations of NDRF. I wish to express my foremost appreciation for bringing out this SOP for the purpose of making disaster management more effective and efficient.

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Acronym

No.	ACRONYM	
i.	BMS	Base Medical Station
ii.	BoO	Base of Operation
iii.	CBRN	Chemical Biological Radiological & Nuclear
iv.	DCG	District Crisis Group
v.	DG	Director General
vi.	DIG	Deputy Inspector General
vii.	EOC	Emergency Operation Centre
viii.	ESF	Emergency Support Function
ix.	IRO	Incident Responsible Officer
x.	IRS	Incident Response System
xi.	MAH	Multi Accident Hazard
xii.	NDRF	National Disaster Response Force
xiii.	NGO	Non-Governmental Organisation
xiv.	OAE	Other Administrative Expenditure
xv.	ORs	Other Ranks
xvi.	OSOCC	On Site Operation Co-ordination Centre
xvii.	RDC	Reception Departure Centre
xviii.	RTO	Regional Transport Officer
xix.	SAR	Search and Rescue
xx.	SDMA	State Disaster Management Authority
xxi.	SOP	Standard Operating Procedure
xxii.	SOs	Sub-Ordinate Officers
xxiii.	SSP	Senior Superintendent of Police
xxiv.	SWOT	Strength Weakness Opportunity & Threat
xxv.	TTEx	Table Top Exercise

STANDARD OPERATING PROCEDURE ON CONDUCT OF MOCK EXERCISES

1. INTRODUCTION

India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6% of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to CBRN emergencies and other man-made disasters.



Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, and development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.

The Govt. of India has an efficient system for responding to both natural and man-made disasters through different ESFs. NDRF in the capacity of lead agency in the field of specialized disaster response is also committed to make India resilient towards disasters. India can be made a 'safe heaven' to live in by generating awareness and imparting training to the communities on disaster management issues at all levels by conducting regular Mock Exercises. Mock Exercise provides virtually the only means, short of an actual incident, of measuring the state of readiness and of testing the effectiveness of an emergency response Plan.

It is therefore, highly desirable that NDRF should carry out regular Mock Exercises with Schools, Colleges, Educational Institutions, Hospitals, High Rise Buildings, Residents' Welfare Associations, Government & Non-Government Offices, Railways, Multi-Accidental Hazards Installations, Airports and other stakeholders related to possible likely disasters of the area to ensure that concerned officials and local people are fully conversant about

their disaster management plan for effective preparedness and response when there is real disaster. This practice would certainly be helpful in reducing the disaster impacts on lives and properties.

2. AIM

The aim of bringing this document is to lay down the guidelines for conducting mock exercises by NDRF in the utmost professional manners with objectivity.

3. OBJECTIVES

The broad objectives of the Mock Exercise are as given below:

- a. To review Disaster Management Plans
- b. To evaluate the Disaster Response Plan
- c. To identify the efficacy of SOPs
- d. To highlight the roles and responsibilities of various Stakeholders
- e. Enhance coordination among Emergency Support Functions of various stakeholders
- f. To generate public awareness by involvement of Local Government, NGOs and Public
- g. To identify the gaps in resources, manpower, communications and in any other field
- h. To enhance the ability to respond faster



4. PURPOSE

This SOP shall be a living document. The purpose of this SOP is to establish the procedure for conducting the Mock Exercise. The SOP shall provide guidance and assigns responsibility to the concerned officials of NDRF to execute their professional actions in all parameters for purposeful conduct of the Mock Exercise.

5. SCOPE

- a. To define a “Standard Operating Procedure” for successful planning and execution of Mock Exercise with the objectivity.
- b. The SOP applies to all elements of the disaster managers of the NDRF (especially Bn) and the SAR Team of a Bn responsible for preparation and execution of purposeful conduct of the Mock Exercise.
- c. The SOP is a guideline and shall be reviewed periodically.

6. RESPONSIBILITIES

- a. It shall be the responsibility of the all the components heads of the SAR Team as well as all members of the SAR Team who shall be responsible for preparing and execution of mock exercise to ensure that all aspects of this SOP are adhered to in the letter & spirit.
- b. **Battalions:** It shall be the responsibility of the Unit Commandant to prepare, plan and execute for the conduct of the Mock Exercises in his AOR. The Team should participate as stakeholder and Bn HQ elements may be given the responsibility for coordinating and planning of Mock Exercise.
- c. **Sectors:** Concerned Sector DIG shall be responsible to monitor the successful organization of the Mock Exercises as per approval of the Director General.

7. METHODOLOGY

In order to plan and execute the Mock Exercise in the utmost professional manners by each Battalion, following methodology has to be adopted:

- a. Selection of suitable officers & SAR team members who shall be actively participating in the Mock Exercise.
- b. Selection of required equipment, tools and stores.
- c. Conduct of Mock Exercises should be monitored and evaluated through selected professional.
- d. IRS shall be applied and all ESFs shall be made functional where required. Proper coordination with all stakeholders should be ensured at every stage of planning and execution of the Mock Exercise.
- e. Team should be capable of having adequate provisions to deal with:
 - i. Conduct of each member of NDRF should be proper.
 - ii. Safety and security of each person taking part in the Mock Exercise shall be doubly ensured.
 - iii. Adequate pamphlets, leaflets and signages should be made use of.

8. CONDUCT OF MOCK EXERCISE

- a. **Unit Commandant shall plan to conduct the Mock Exercises in two ways as below:**
 - i. **'IN-HOUSE' Mock Exercise:** The Mock Exercise which is carried out within the purview of the organizing agency/organization/institution/industry/department/Multi-Accident Hazards Installations etc., without involving any outside agencies for any sort of response, apart from being observers. NDRF needs to plan & conduct 'In-House' Mock Exercises involving only the unit personnel and its resources.



ii **‘OUT-HOUSE’ Mock Exercise:**

The Mock Exercise which is carried out in a larger way at a particular community, involving all the ESFs, within the local, district or State jurisdiction, in order to assess their response mechanism and to update the SOPs of all the agencies. The



designated officials of the EOC and IRS system of the concerned Sub-Division/ District level as per the DM Act-2005 shall be entrusted to execute their respective roles in the Mock Exercise. All such agencies responding to disastrous situation shall take orders from the designated IRO (Incident Responsible Officer). Participation of the local NGOs should also be ensured. Therefore, Unit Commandant NDRF might plan and execute ‘Out-House’ Mock Exercises involving all relevant stakeholders.

b. Various Steps for Conduct of Mock Exercise

Conduct of any mock exercise needs to be planned and executed into three phases as per the details given below:

- i. **STEP-I Coordinating Conference:** The purpose of coordinating conference is to delineate objectives of Mock Exercise, Scope of Exercise, Selection of the target group for Mock Exercise (e.g. District/Industry etc.), deciding the date and venue for Table Top and Mock Exercise, identifying the involvement of participants and Media for coverage. This step is required to be taken at least 25-30 days before to actual conduct of the Mock Exercise. The disaster management plan of the particular disaster for which Mock Exercise is planned shall be taken and studied.
- ii. **STEP-II Table Top Exercise (TTEx):** The Table Top Exercise is a very useful training tool. Table Top Exercise (TTEx) is a precursor to Mock Exercise, wherein worst case scenarios are simulated. The tabletop is largely a discussion guided by a



facilitator (or sometimes two facilitators who share responsibilities). Its purpose is to solve problems as a group. One or two evaluators may be selected to observe proceedings and progress toward the objectives. The success of a table top exercise is determined by feedback from participants and the impact this feedback has on the evaluation and revision of policies, plans, and procedures. In many respects, a table top exercise is like a problem-solving or brainstorming session. Unlike a functional exercise, problems are tackled one at a time and talked through without stress.

Therefore, Unit Commandant or Officer responsible for conducting TTE shall be selecting the suitable professional at least one month prior to the 'D' Day of TTE.

During the TTE, thorough discussion and deliberation shall be done starting from the scenario until the final evaluation. This could be analysed by SWOT (Strengths, Weaknesses, Opportunities & Threats) mapping. Role and responsibilities of each individual, team members, agencies/stakeholders shall be clearly defined which shall be assessed during the actual drill.

Example: Let us assume that a TTE pertaining to Industry is to be conducted. In this case, initially scenarios are painted at the operational level of the industry for 'on site' plan. The operational staff, supervisory staff and the management respond to various injects. When the 'on-site' plan is decided 'off-site' plan for dealing with the disaster situation by the civil administration i.e. District Magistrate who is Chairman of DCG needs to be formulated for which, the injects are targeted at the Collector/DC and other Stakeholders at District level like Director Industry, SSP, District Health Officer, Fire Officer, Public Services Heads, Communication, Civil Defence, Home Guard, Red Cross, RTO, NGOs Public Relations etc. Responses are elicited and detailed discussion takes place. Details of Coordination and Safety are discussed, gaps are identified and remedial measures taken before conduct of actual Mock Exercise.

iii. **STEP-III Actual Mock Exercise:** This is the 'D' day of the entire exercise which aims to bring together each and every participant to apply what they have learned to a practical context and to develop an cooperative, large scale, inter agency response to emergencies. The actual conduct of Mock Exercise has three phases:

aa. **Alarm Phase:** A planned scenario should be created that may even match to the closest real situation in the particular structure of community. As soon as the scenario is set and 'disaster' is struck, the first response is to alert and warn individuals or the target community for swift evacuation. In order to alert or warn individuals or a community of an emergent situation, alarm is raised by giving burly warning signals and officials of the EOC of the Sub-Division/District/State should be alerted and time should be noted.



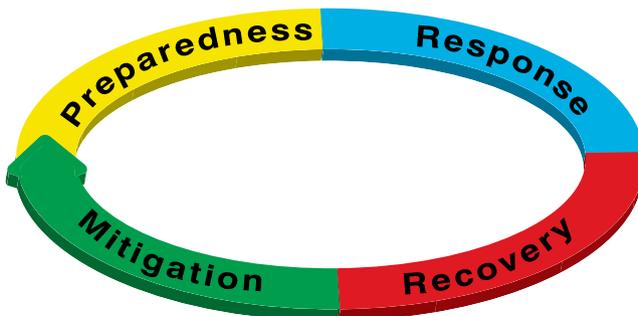
ab. **Response Phase:** This phase begins with the first response made after receiving warning signals until the situation is under control. The initial response begins with individuals saving themselves and others and making an emergency exit, evacuating the disaster victims to the designated area.

Responses from the individuals or emergency support agencies would follow. Firefighting to be done in case of fire incident, cordoning off the area to be done in case of building collapse or any such incident for the smooth search and rescue operations or for any responses that is necessitated. Response phase also includes search and rescue operations within the target structure after evacuation, providing first-aid to the injured by the trained MFR, shifting the victims the nearest medical centre/hospital, head counting/attendance to be done/taken, helping the saved ones to reach their destinations/home safely, etc. During the response phase all the components of IRS should function as per desired standard. In the operational strategy & planning, the effective use of Evacuation Team, Fire Fighting Team, Site Safety/Security Team, Medical Teams, Ambulance Services, Media Management Team, Communication Team etc. should be ensured.

ac. **Evaluation Phase:** Monitoring and evaluating the entire Mock Exercise is a must. During this phase, a de-briefing session of the stakeholders involved in carrying out the Mock Exercise is to be organised to deliberately evaluate the strengths and weaknesses, problems and solutions that may be rectified in the future exercises. Evaluation phase will lead to initiate updation and constructive incorporation of suggestions and recommendations

received during the de-briefing session into the already prepared Disaster Management Plan of the particular community, especially for future reference and implementation. Unit Commandant needs to prepare evaluation format as per the sample feedback form attached along with this SOP at Appdx 'A' according to the Disaster Management Plan. Documentation, along with photographs and videos of the exercise, will be an asset to effectively organize future exercises and assess fruitfulness.

- c. **While conducts of Mock Exercise; following points are required to be kept in mind:**
- i. Incident Response System (IRS) of Local Govt. should be made applicable in the response mechanism.
 - ii. Emergency Operation Centre (EOC) of the Local Govt. should be made functional.
 - iii. Concept of OSOCC (On Site Operational Coordination Centre) and RDC (Reception and Departure Centre) shall be made applicable.
 - iv. Proper functioning of Base of Operation, Staging Area, BMS (Base Medical Station) etc. should be made functional.
 - v. Causality/injury of any kind shall not be accepted. Fail-safe safety and security measures are required to be adopted in letter and spirit to avoid any injury to the any person including own personnel. Each individual should be taught and persistently briefed that the first responsibility is for his/her own personal safety, before enacting/playing their designated role during Mock Exercise. Everyone should be conscious and well acquainted with their individual response plan. In the past there have been few fatal incidents while conducting Mock Exercises by few departments. All equipment/tools/ropes etc. shall be full functional before the start of the Mock Exercise.
 - vi. Medical component of the NDRF team should be fully equipped and accompanied by at least one Medical Officer.



- vii. The creation of scenario should be based upon the geographical location and probable hazard and vulnerability of the target area or community is exposed to anywhere from an earthquake scenario, fire, flood, multi-casualty accidents, cyclone, tsunami, landslide etc. While conducting drills different situation and injects should be given by the NDRF Commander to the target community to expose them to enhance their knowledge and skills to respond effectively to each situation.
- viii. Selection of most suitable site for the Mock Exercise should be ensured.
- ix. All efforts shall be made to implement the disaster management plan of the Local Govt. by the NDRF personnel as well as by all stakeholders who are participating in the Mock Exercise.
- x. Adequate banners and signages shall be displayed where required for attracting large participation/witnessing of large population.
- xi. Adequate independent observers shall be nominated for monitoring and assessing the conduct of the exercise. The format attached at Appd-'B' should be used by the observers.
- xii. Self-assessment by the stakeholder should be done at the last by all the stakeholders who have participated in the mock exercise.

d. Actions required to be taken by the Battalions & Sectors:

Each unit to prepare a tentative annual mock exercise plan for a financial year in consultation with State/District Administration by 28th Feb. each year and submit it to HQ NDRF for approval of the Director General. Each Unit to plan minimum 12 Mock Exercises in a year related to the natural disasters. Out of which 6 Mock Exercises involving stakeholders and local people and 6 Mock Exercises shall be planned & executed involving only Unit personnel. Following actions are expected:

- i. Out of the planned Mock Exercises to be conducted by the each Unit, one Mock Exercise each of natural disaster on half yearly basis shall be of Sector level in which a delegate comprising (one officer DC or above, two SOs including one SI(JE) and 4 ORs) from each Units of the Sector shall be participating. The presence of Sector DIG shall be compulsory for such Mock Exercises.
- ii. CBRN Teams coys/team of each Battalion should be tasked to carry out Mock Exercise (In-House) on CBRN incidents including one Off Site Mock Exercise each with the MAH installations on quarterly basis.
- iii. Approved Mock Exercise plan shall be timely communicated to the States/UTs/ concerned districts and SDMA by Unit.
- iv. Required manpower inclusive of instructional staff, equipment, vehicles and stores for successful conduct of Mock Exercise shall be earmarked and taken to location in a well-planned manner.

- v. Each Unit shall be allowed to spend budget amounting up to the fixed limit Rs. 25000/- (Rupees twenty five thousands only) for conduct on one Mock Exercise involving stakeholders out of budget head OAE. The Cost Assessment involving expenditure is broadly defined and standardized as per the details given below:-

Sr. No.	Details of Standardization	Amount	Remarks
i.	Pre-conference expenditure involving Printing, Communication, Signage expenses etc.	Rs. 5,000/-	Maximum prescribed limits of spending amount shall not be exceeded.
ii.	Distribution of Pamphlets, Leaflets, PPEs etc.	Rs. 15,000/-	
iii.	Hospitality	Rs. 5,000/-	
Total Provision Rs. 25,000/-			

- Each unit shall make optimum use of withheld resources to minimize the expenditure while conducting the Mock Exercise.
- vi. DIG of the concerned sector shall be monitoring the conduct of the Mock Exercise and ensure these are conducted professionally and purposefully.
- vii. Any change in schedule of Mock Exercise shall be approved by the concerned Deputy Inspector General, NDRF.
- viii. After every Mock Exercise unit would submit a report with a specific mention of gaps in disaster preparedness on various parameters such as infrastructure, equipment, on ground preparations, awareness of people etc. as identified during Table Top Exercise and Mock Exercise within 15 days of conduct of Mock Exercise with the comments of the concerned DIG.

e. Actions to be taken by the Training Branch, HQ NDRF:

- i. Each and every feedback report of Mock Exercise received with the comments of the concerned DIG shall be submitted to the Director General, NDRF for his perusal and approval.
- ii. After approval from the DG, the noted gaps mentioned in the report shall be forwarded to the concerned Unit with information to the concerned DIG for further communication to respective Districts/State Disaster Management Authorities (SDMA) for future course of action.
- iii. Training Branch, HQ NDRF shall be maintaining records of each Mock Exercise. Common gaps as identified in various places shall be collated and will form basis of future guidelines and action plans.

- iv. Deliverables received from Unit in form of video coverage of Mock Exercise/ Presentations/Reports etc. shall be utilized by Trg Branch HQ NDRF for Knowledge Management and Awareness Generation resource by keeping those things on NDRF website.

f. Actions by Adm Branch, HQ NDRF:

- i. Each Unit shall be sanctioned an amount of budget 1.5 lacs out of budget head 'OAE' @ Rs. 25,000/- for conducting a Mock Exercise along with the stakeholders in a financial year.
- ii. The bills of the actual expenditures which should be Rs. 25,000/- or below for the conduct of each Mock Exercise shall be submitted after observing all the codal formalities by the concerned unit within one month.

9. CONCLUSION

Mock Exercises have proved to be a useful tool to test the preparedness against any type of disaster. Correct methods of conducting mock exercises will go a long way in improving the preparedness in the community against all types of perceived disasters. We cannot prevent hazards from happening, but can surely prevent them from becoming disasters and when they do happen, to minimise their effect in terms of loss of human lives and damage to infrastructure, by taking preventive and mitigation measures. Hence, NDRF might use this vital tool called 'Mock Exercise' in training and educating the community and the Local Govt. to prepare them in dealing with the perceived disasters.

Format for Self Assessment

1. Name of the Organisation/Department _____

2. Type of Support Function. (Eg. Medical, Relief, Search & Rescue) _____

3. Name of Team Leader _____

4. Designation in the Exercise and in Parent Organisation _____

5. Time, Source and Contents of First Message about Incident received and Communication Mode _____

6. Action taken by the Team Leader in Response to Critical Situations, in Gist _____

7. Further Action Taken by the Recipients/Stakeholders _____

8. When did the Stakeholder/Representative Arrive at EOC/ICP _____

9. Manpower Resources Available and how much Manpower Carried to ICP _____

10. Equipment Material Carried _____

11. Vehicle brought (give types) _____

(a) For use of EOC/Rescue & Relief Work _____

(b) Self Use. _____

12. Difficulties Faced _____

13. Support Agencies Available _____

14. What was your Contribution in the Mock Drill? _____

15. Learning from Mock Drill _____

16. Suggestions for Improvement _____

17. Any other Information, you would like to Convey _____

Format for Report by Observer

1. Emergency Support Function (e.g. Search & Rescue, Medical) _____

2. Nodal Officer (Name) _____
3. Alternate Nodal Officer (Name) _____
4. Observer (Name) & Organization _____
5. What was the First Reaction of the Nodal Officer/Org on Receipt of Information

6. What was their Initial & Subsequent Assessment of the Situation/s. _____

7. Duties Undertaken by the Team Leader (Give Details of Duties) _____

8. Resources Available and Carried for the Specific Tasks _____

9. Was the organization able to carry out its assigned task? How would you assess their performance, 100% Success/75% Success/50% Success/25% Success
10. Observers Comments (Frank Opinion, Good Practice and Weakness/Shortcomings Noticed) _____



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