STANDARD OPERATING PROCEDURE

(SOP- 2020)

for

TELECOMMUNICATION SERVICES

for Responding to

DISASTERS

GOVERNMENT OF INDIA

MINISTRY OF COMMUNICATIONS

DEPARTMENT OF TELECOMMUNICATIONS

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Document History

Sr. no.	Document	Issued Date
1.	SOP-2015 for responding to Disasters	05.06.2015
2.	SOP-2017 for responding to disasters (Revision of SOP-2015)	17.03.2017
3.	SOP-2020 for responding to disasters (Revision of SOP-2017)	14.12.2020

CHAPTER 1

INTRODUCTION

The disasters may cause enormous loss of life and property. Even though the global average of number of disasters has been rising rapidly, improved warnings & mitigation programme and quick response have reduced significantly, the loss of human life. In the aftermath of a disaster, the telecommunication services are required on top priority and play a pivotal role in undertaking rescue, relief and rehabilitation measures. The role of Department of Telecommunications (DoT) is to act as a Lead/Primary agency for Emergency Support Function related to provision of telecommunication services by Telecom Service Providers and coordination with other Government agencies.

1.2. Disaster Management is broadly categorized into following 4 phases:

- Mitigation - includes any activity that prevents a disaster, reduces the chance of a disaster happening, or reduces the damaging effects of unavoidable disasters.

- Preparedness - includes plans or preparations made to save life or property, and to help the response and rescue service operations.

- Response - includes actions taken to save lives and prevent property damage, and to preserve the environment during emergencies or disasters. The response phase is the implementation of action plans.

- Recovery – includes actions that assist a community to return to a sense of normalcy after a disaster.

1.3. National Digital communication policy- 2018 has a clear objective to develop comprehensive plan for network preparedness, disaster response relief, restoration and reconstruction. National Digital Communications policy 2018 has following objectives with respect to disaster management mentioned in clause 3.4: *Developing a comprehensive plan for network preparedness, disaster response relief, restoration and reconstruction*

   a) Strengthening network resilience by:
      i. Framing and enforcing standard operating procedures to be followed during disasters and natural calamities, including sectoral guidelines for disaster response and recovery applicable to various service providers
      ii. Establishing institutional framework to promote monitoring of activities, rapid dissemination of early warning disaster notifications and better coordination and collaboration between relevant Ministries / Departments, including the National Disaster Management Authority of India

b) *Developing a Unified Emergency Response Mechanism, by:*

    i. *Creating an institutional framework with clearly defined roles and responsibilities, Standard Operating Procedures and technical guidelines*

    ii. *Incorporating obligations under the license terms and conditions for implementation of Next Generation 112 services in all areas, based on geo-location technologies, and provide online access to caller location and details to authorized central and state agencies*

    iii. *Enforcing obligations of service providers to share infrastructure, and ensure interoperability in emergency situations in a network-agnostic, operator-agnostic and technology-agnostic manner.*

c) *Enhancing the Public Protection and Disaster Relief (PPDR) plan for India by:*

    i. *Facilitating the establishment of a Pan-India network for Public Protection and Disaster Relief (PPDR)*

    ii. *Making necessary spectrum available for PPDR including by establishing INSAT satellite-based mobile communication systems*

    iii. *Implementing global and regional harmonized spectrum Plans for PPDR.*

1.4. These provisions made in preamble and strategies of NDCP-2018 have far reaching implications for the nation, being prone to natural disasters like floods, earth-quakes, tsunami, coastal cyclones, urban flooding, landslides etc. Therefore, putting in place processes and structures by developing a holistic, proactive, multi disaster oriented and technology driven strategy through a culture of prevention, mitigation and preparedness in the country will definitely help in better response and recovery.

Therefore, this document deals with Standard Operating Procedures (SOP) to be followed by various stake holders providing Telecommunication services in the country, for effective mitigation and recovery during disaster and emergency.

1.5. Mission

"To minimize the impacts of disasters on life, property, environment, and the economy through prompt provisioning and restoration of Telecommunication Services in the disaster affected areas."

1.6. Objectives

• Co-ordination of national actions to ensure the provision of telecommunication support to the centre, state and district administration.

    • Co-ordination of the requirement of temporary telecommunication services in the affected areas.

• Co-ordination for restoration of telecommunication services.

1.7. "Disaster Management Guidelines for Telecommunications" were issued by the Telecom Engineering Centre in Feb' 2008. These Guidelines, as amended from time to time, may also be referred for the technical details by various stake holders.

1.8. On occurrence of disasters, all stake holders make all out efforts to their own judgment for the restoration of damages caused to telecom network. However, in such times a coherent and coordinated approach among all stakeholders is the key to reap the full benefit of the efforts made for restoration of telecom networks in such emergent situations. It is, therefore, necessary to standardize the processes and actions that need to be taken.

1.9. Accordingly, in order to optimize the efforts of all stakeholders, "Standard Operating Procedure" (SOP) is required to be adopted covering all aspects of disaster management from mitigation to recovery to minimize loss due to disaster and to ensure efficient response.

1.10. For effective provisioning of emergency telecommunication services and restoration of normal telecommunication services, DoT will need support of following Ministries/ Departments/ Organizations:

(i)   Telecom Service Providers / Telecom Infrastructure Providers
(ii)   Department of Electronics and Information Technology
(iii)   Directorate of Communication and Police Wireless
(iv)   Ministry of Railways
(v)   National Disaster Response Force
(vi)   Ministry of Civil Aviation
(vii)   Ministry of Defence
(viii) Ministry of Power
(ix)   Ministry of Road Transport & Highways
(x)   Ministry of Petroleum & Natural Gas
(xi)   Power Grid Corporation of India Ltd.
(xii)   Department of Space
(xiii) Ministry of Information & Broadcasting
(xiv)   State and District Administration / Agencies
(xv)   Indian Meteorological Department
(xvi)   Ministry of Water Resources
(xvii) Ministry of Earth Sciences (INCOIS)

CHAPTER 2

INSTITUTIONAL STRUCTURE

2.1 In the aftermath of a disaster, the primary responsibility for organizing response and relief as well as recovery in disaster affected areas lies with the state government. However, sectoral institutional structures are needed to strengthen and supplement the efforts of rescue, relief and restoration.

2.2 The Disaster Management Act, 2005, lays down a three tier institutional structure for disaster management at the national, state and district levels in the form of NDMA, SDMA and DDMA. National Policy on Disaster Management (NPDM) has further specified the roles and responsibilities of various organizations for disaster response. Accordingly, to fulfil roles and responsibility of Department of Telecommunications, institutional structure has been set up in the following paragraphs.

2.3 Organizational Set-up for Telecommunications Sector

The Department of Telecommunications will render Emergency Support Functions (ESF) for telecommunication services, wherever Central intervention and support are needed by the State Governments. An effective organizational set-up for telecom services during disasters and emergencies at all levels viz. Central, State and District is very important for implementing and monitoring the disaster management plans.

2.3.1 NATIONAL LEVEL

National Telecom Disaster Co-ordination Committee (NTDCC):

At National or central level, all Disaster related activities will be coordinated and monitored by National Telecom Disaster Co-ordination Committee (NTDCC). The committee will be chaired by the Member (T), DOT and will have the following constitution:

- Member (Technology) - Chairman
- DG(T) / DDG (IT&S), DGT HQ
- DDG(AS), DOT HQ
- DDG(CS), DOT HQ
- Joint Wireless Advisor, WPC, DOT
- DDG (DM), DOT HQ – Member Convener
- Members from Telecom Service Providers (Public & Private)
- Representative from MHA/NDMA

It will issue guidelines from time to time as required for effective preparedness and response to disasters.

2.3.2 STATE LEVEL

State Telecom Disaster Co-ordination Committee (STDCC):

At State or telecom circle level, all Disaster related activities will be coordinated and monitored by State Telecom Disaster Co-ordination Committee (STDCC). The Committee will be chaired by the respective DDG (Technology) and will have members from:

(i)   All the Telecom Service Providers.
(ii) Representative from concerned disaster management unit of State Government.
(iii) Representative of concerned NDRF Battalion.

The Telecom Service Providers shall comply with the instructions of STDCC. The head of STDCC will also co-ordinate with State Government and State District Management Authority (SDMA), its concerned organizations and other agencies for support functions including transportation and allocation of petrol/diesel on priority to the TSPs.

Further, the STDCC, in consultation with District Collector, will earmark petrol pumps in the districts which will supply petrol/diesel on priority to TSPs.

2.3.3 DISTRICT LEVEL

In the telecom sector, the organizational set up of most of the Telecom Service Providers is at State / Telecom circle level. It is therefore expected that in the eventuality of a disaster, STDCC shall oversee the sectoral requirement for the rescue, relief and restoration by State / District. STDCC shall also promptly establish a camp office at the respective District HQ., if needed, for effective co-ordination and support with District administration and District Disaster Management Authority (DDMA) in disaster management activities. Such Camp office of STDCC shall be headed by the concerned DDG (Technology) or his nominated officer, as the case may be.

All the above Co-ordination committees shall meet at least once in 6 months to review the plans and activities related to disaster management.

CHAPTER 3

MITIGATION AND PREPAREDNESS

3.1   Telecommunication Systems/Networks

Robustness and preventive measures of the telecommunications systems are keys for their effective utilization during disaster. Telecom Service providers (TSPs) are required to implement the following measures in order to increase the robustness and prevent failures of their networks during disasters and emergencies.

3.1.1 Physical Infrastructure Safety

TSPs should follow norms and standards in building their physical infrastructure. In addition, the following practices help in the safety of the primary network elements and infrastructure:

- Telecommunication equipment should be installed at suitable locations in disaster prone areas to be able to withstand impacts of any disaster. e. g. in flood prone areas location of exchanges/ critical equipment to be preferably at higher altitude area to avoid inundation of water. The plinth should be kept high in coastal and flood prone areas.

- Wherever feasible, critical equipment should not be concentrated in one building.

- All buildings, towers and equipment sites should be equipped with adequate fire protection measures like detection and extinguishing systems etc.

- All buildings, towers and equipment site structure should comply with building bylaws prescribed for earthquake resistant building depending upon seismic zones.

- As far as possible, communication cables should be buried underground in ducts to reduce their vulnerability (it is also advisable to have all disaster management centers connected through underground cables).

3.1.2 Redundancy

It is well established that redundancy in traffic management is essential to the integrity and robustness of the telecom networks. Sufficient redundancy prevents total network failure due to a single point of failure.

TSPs should ensure that transmission links between main Network Elements and switching equipment are redundant through two distinct geographical paths. Some of the key aspects of a robust and resilient telecom network are:

- Alternative telecommunications links (such as SDH ring on optical fibre) between primary switches
- Connection of main switches and Network Elements through mesh and ring transmission networks
- Redundant microwave, aerial or underground links and other network elements such as switches etc. should be secured in alternative locations.
- In hilly and remote area satellite connectivity should be preferred.

3.1.3 Vulnerable and critical network components

- According to hazard profile of the area, TSPs will identify vulnerability of their respective telecom infrastructure and accordingly prepare plan for emergency situations. All the vulnerable critical network components should have sufficient redundancy including transmission links and power backups in terms of battery storage capacity and diesel / fuel availability.

- Low power consumption equipment should be preferred at all vulnerable / critical locations.

3.1.4 Backup of network elements

Provision of sufficient backups of network elements, gen-sets/batteries and fuel can prevent total failures from minor equipment damage. TSPs should ensure sufficient fuel, power and essential equipment backups. Some of the key actions recommended are:

- Provide an uninterrupted power supply (UPS) along with sufficient External Battery support to ensure that the power supply is not interrupted to the key equipment in the event of a main power supply failure.

- Ensure supply of fuel for back-up generators.

- Ensure availability of spares on site during emergency.

- Ensure enough spares in air conditioning equipment to serve the peak hour's load.

- Store backup spares and fuel in an accessible and secured area.

- Use alternate means of power like solar panel etc., wherever possible.

3.1.5 Overload Prevention Measures

Emergency situation often triggers overload of the network due to high traffic, anxiety calls and repeated call attempts. TSPs should ensure provision of an effective solution to prevent the crash of the network in such cases and develop effective congestion management processes which should be reviewed and tested periodically.

Public is also required to be made aware to use alternate mode of communications such as SMS or internet media whenever congestion in the voice calling in mobile network is experienced.

3.2 Preparedness for Handling Disasters

All TSPs shall prepare their Disaster Management Plan and submit the same to DoT HQ Nodal officer i.e. DDG (DM).

3.2.1 Nodal Officers:

TSPs shall identify Main and alternate Nodal officers at central level and at every telecom circle level and publicize their full contact details for coordination related to disaster management prominently on their website. Same shall also be informed to DoT HQ Nodal officer and respective LSA head.

3.2.2 Disaster Response Task Force (DRTF)

TSPs shall have a Disaster Response Task Force (DRTF) at State level. DRTF teams will be responsible for immediate provisioning of emergency communication and restoration of telecom services in disaster affected areas.

DRTF shall consist of teams of experts in the following areas:

- Transmission Team
- Switching Team
- Infrastructure Team
- Mobile Service Team
- Telecom relief Team (for opening PCOs, helpline response etc.)

All teams, shall have self-contained minimum infrastructure (e.g. Satellite terminal, system related spares & stores, tools & testers, portable gen-set, vehicles, arrangements for logistics support like food, water, tents, beds blankets etc). Additional resource requirements shall be augmented by TSPs as and when required.

3.2.3 Rapid Damage Assessment Team (RDAT)

In addition to DRTF, in case the disaster affected area is large or remote area, wherever required, TSPs shall also have the Rapid Damage Assessment Team (RDAT). RDAT shall work to determine the precise nature and extent of damage so that the planning for restoration of telecommunication services can be done in the efficient and effective manner. The initial focus of the RDAT will be to identify:

- Operational telecommunications assets available for use within the affected area;
- Damaged communication facilities.
- Telecommunications assets not within the affected area that may be brought physically or employed electronically to support the affected area.

Preliminary assessment shall be carried out immediately within 24 hours for planning the response.

RDAT shall consist of members from various telecom fields such as mobile communication, switching, transmission, civil, electrical experts etc. This team

shall also be well equipped with tools for quick assessment. RDAT must be a self-contained team having arrangements for logistic support like water, food [for at least 2 days], blankets, bed, satellite phone, mobile phone etc.

3.2.4 Resource Centre

Locations of the designated resource centres are to be identified at central and regional / Sate level (to be decided) for keeping the inventory taking into account the location of pre identified disaster prone areas. The inventory should include following:

- Satellite terminal (e.g. DSPT etc.)

- Satellite based Emergency Communication Terminals

- Portable/ air-transportable BTSs and satellite equipment for connecting to BSC/MSC

- OFC cable with restoration kit

- Tool kit

- Portable gen-sets/spare batteries etc.

At the resource centre locations, concerned responsible officers are required to be identified along with participation of nodal officer from the TSPs.

- In order to restore the mobile services disrupted due to damaged BTSs, TSPs should keep, as inventory, certain minimum number of portable BTSs and satellite equipment for connecting to BSC/MSC in case of disaster. Suggested number could be around 10 per TSP so that collectively sufficient numbers of portable BTSs with VSAT connectivity are available.

3.2.5 Memoranda of Understanding amongst TSPs

For restoration of Telecom services in emergencies and disaster conditions, TSPs may enter into Memoranda of Understanding (MoU) among themselves for sharing specialized resources and Intra-circle roaming for provisioning of services.

Priority user groups are to be identified, who might be involved in rescue, relief and restoration activities. These might include: different government agencies, police, Fire, Medical, civil defence, Red Cross, Army, financial institutions, NGOs, all officers and staffs engaged in restoration of telecommunication services, etc. Priority is to be given to these groups for provisioning of additional communication facilities and restoration of telecom services, if required, for quick and efficient rescue and relief operations.

3.2.6 Training and Drill

The quick & efficient response to disaster depends on availability of trained staff and inventory in immediate deployable condition. Periodic training ensures a continuous awareness of the additional demands which each individual might be confronted with in case of disaster. Also, it is necessary that the equipment meant for restoration should be kept in working condition. TSPs are required to conduct periodic mock-drills on a quarterly basis within their network and in coordination with other support agencies for testing the effectiveness of all the preparedness machinery including manpower and equipment. Further, TSPs shall also participate in the mock exercises conducted by NDMA/ State Govt./ District Administration as and when called for.

3.2.7 Directory

A directory of Nodal officers responsible for telecommunication services during disaster at various levels shall be prepared for National and State levels giving their names, addresses, telephone numbers, mobile numbers, email address, Fax numbers. Such directory will be widely circulated and updated annually. The current directory is at **Annexure –I & II.**

3.2.8 The preparedness measures taken by TSPs will be reviewed six-monthly.

CHAPTER 4

CONTROL ROOM (CR)

4.1 Emergency Control rooms will be set up at National and State levels with requisite facilities. The Control Rooms already in existence at these levels will be suitably upgraded.

4.1.1 DoT has already issued instructions for the implementation of 'Single Number Based Integrated Emergency Communication and Response System' for improving communication network during emergency/disasters. The single emergency number will be '112'. The existing emergency numbers 100, 101, 102 and 108 will be treated as secondary numbers and will be connected to the PSAP (Public Safety Answering Point) under the control of respective State/UT and are to be re-routed to '112'. A four digit help line number '1938' is to be made operational at Control Room of MHA for coordination.

4.2   Objectives of the Control Room

The Control Rooms at National and State levels will be the nerve centres for coordination and management of disasters. The objectives of the control rooms shall be to provide centralized direction and control of any or all of the following functions:

- Receive and process disaster alerts and warnings from nodal agencies and other sources and communicate the same to all designated authorities.
- Monitor emergency operations
- Facilitate Coordination among Ministries/Departments/Agencies.
- Requisitioning additional resources during the disaster phase
- Issuing disaster/incident specific information and instructions to all concerned;
- Consolidation, analysis, and dissemination of damage, loss and assessment data;
- Forwarding of consolidated reports to all designated authorities.

4.3   Location of Control Room

The control room will be set up at a suitable location and the building should be disaster resistant so as to withstand the impact of disasters and remain functional during the emergency phase.

CHAPTER 5

TRIGGER MECHANISM

5.1 This Trigger Mechanism prescribes the manner in which the disaster response system shall be activated after receiving early warning signals of a disaster happening or likely to happen or on receipt of information of an incident. Activities envisaged in this SOP under the response phase shall be initiated simultaneously without loss of time to minimize the loss and damage and mitigate the impact of disaster.

5.2 The objective of having a trigger mechanism for natural disasters is to have a suo-motto activation mechanism for spontaneous response to set in motion command, control and management of the situation.

There shall be two types of situation with different trigger mechanisms for natural disasters:

     (i)   Situation I – Where Early Warning signals are available
     (ii)   Situation II- Where Disaster occurs without early warning

5.2.1 Where Early Warning signals are available:

i.   At the National Level Nodal Agencies have been designated by MHA for generating/forecasting of events of natural disasters. Onset of disaster shall be indicated through forecasting by the Nodal Agencies.

ii.   NTDCC, STDCC shall be fully activated and activities envisaged in this SOP under the response phase shall be initiated simultaneously without loss of time to minimize the loss and damage due to impact of likely disaster.

iii.   National and State Control Centers shall be fully activated.

iv.   TSPs shall inform their customers via SMS / Cell Broadcast or recorded voice messages as per instructions of Government in the affected areas.

v.   TSPs shall keep all the required inventory and personnel in readiness.

vi.   TSPs shall take all pre-emptive measures (based on the nature of warning) as mentioned in this SOP or in any specific instructions/ orders issued by Government and report the same to SDTCC. SDTCC shall compile the details of such measures and report to NDTCC.

vii.   Advance briefing and deployment of teams may be ensured in case of early warning.

viii.   TSPs should take necessary permissions from local authorities, in advance, for transportation of spares.

5.2.2   Where Disaster occurs without early warning:

In disaster situations where no early warning signals are available, the primary objective of the trigger mechanism shall be to initiate immediate rescue and relief operations and set the process in as quickly as possible as per this SOP.

The following procedure shall be followed in such situations:

i.   State Control Room shall be fully activated for managing the incident.
ii.   National Control Room shall be informed. First Information Report shall be submitted to National Control Room.
iii.   DRTF and RDAT teams shall be deployed by TSPs.

CHAPTER 6

RESPONSE and RECOVERY

6.1 NATIONAL LEVEL

Following shall be the sequence of actions at the national level:

    i. Convening of NTDCC meeting to discuss and take stock of the situation arising due to disaster.

    ii. NTDCC shall also discuss the response of various agencies.

    iii. It may also depute a team of Officials to visit the affected areas for on the spot assessment of the situation and coordinate with STDCC, if required.

    iv. It shall monitor and review the situation on a regular basis.

    v. Central level Nodal officers of TSPs shall report to Convener, NTDCC, DoT, HQ, Delhi.

6.2 STATE LEVEL

Following shall be the sequence of actions at the State level:

    i. Where Disaster strikes with/ without early warning signals, TSPs shall immediately assess damage to their network and deploy Rapid Damage Assessment Team & Disaster Response Task Force Teams (DRTF) with required inventory to provide emergency communication to priority callers like State/District Emergency Operation Centers (EOCs), Police, NDRF, Fire, Medical, Civil Defence, Red Cross, Army, Financial Institutions, NGOs, all officers and staffs engaged in restoration of telecommunication services, etc.

    ii. If required portable / vehicle mounted / air-transportable BTSs / BSCs with backhaul on satellite media may be installed by TSPs.

    iii. Nodal officer of TSPs of affected telecom circle level shall report to concerned DDG (Technology), DoT (Chairman of STDCC) in that circle, for sharing information and coordination related matters.

    iv. LSA of DOT shall be the single nodal point in the disaster region where representatives of TSPs shall also be present to coordinate and oversee communication restoration efforts.

    v. A control room will be setup at the state HQ / nearest to affected area, as the case may be, and made operational under control of LSA of affected area.

    vi. The DDG (Technology) of concerned LSA shall act as interface between all TSPs and other support agencies including State Government for any coordination related issues.

vii. Meeting of STDCC shall be convened to review situations. STDCC shall report to NTDCC.

viii. TSPs shall make helpline numbers operational where the last location of the survivors or missing persons can be intimated to the relatives.

ix. Providing information through helpline numbers about the last location details or sharing of CDRs of the subscribers, in the disaster affected areas, with the state/ central agencies requires special regulatory permission. However, in case of occurrence of disaster, these permissions would be deemed automatically permitted for duration of 2 weeks.

x. TSPs shall share specialized resources and allow Intra-circle roaming as per MoU for provisioning of services to priority user groups and general public during disaster period.

xi. In order to have wider coverage from a single BTS, TSPs may radiate more radio power from the BTSs located in the disaster affected areas beyond the EMR limits prescribed for 15 days.

xii. TSPs shall broadcast messages at regular intervals, in consultation with STDCC/NTDCC, to all the subscribers in the affected areas through SMSs / Cell broadcast free of cost during disaster period based upon instructions of Nodal authorities as per DM act 2005 i.e. National Executive Committee(NEC)/National Crisis Management Committee(NCMC)/State Executive Committee(SEC). This shall provide details about:
    a) Details of TSPs helpline numbers.
    b) Details about rescue and relief activities of state government such as tentative schedule of food / water distribution / nearest shelter/ shelter camp etc. as per need of State agencies.

xiii. TSPs shall open sufficient number of PCOs, preferably free of cost, for use of general public in affected area.

xiv. TSPs shall also ensure that in the disaster affected areas, no subscriber shall be denied access to voice / SMS communication due to any commercial consideration, whatsoever, including non-payment / insufficient balance/recharge etc. This facility shall continue for at least 15 days.

xv. TSPs shall submit First Information Report as per **Annexure-III** and thereafter Daily Status Report about their network, help line and PCOs etc. as per **Annexure-IV** to concerned LSA unit on daily basis or as sought by DDG (Technology), Head of STDCC.

xvi. LSA shall submit the status report in respect of overall telecom facilities in affected area to DoT, HQ on daily basis or as sought by DoT, HQ.

xvii. The Control room under respective LSA shall remain operational 24X7 till the telecom services are restored to near normalcy or as per instructions from DoT, HQ.

xviii. For the circle wise list of TSPs, website of DoT may be referred.

xix. Every LSA shall have a Satellite Phone for proper coordination with State Govt. during disasters.

xx. HAM operators are allowed to operate anywhere in India except those locations restricted by GOI from time to time. Officer in Charge (disaster Management) at State or the District Magistrate of disaster affected district, as the case may be, should prescribe minimum level of officer for signing a message, to be passed on HAM network during disaster.

****

ABBREVIATIONS

AS   - Access Services

BSNL   - Bharat Sanchar Nigam Limited

BW   - Building Works

CS   - Carrier Services

DOT   - Department of Telecommunications

DRTF   - Disaster Response Task Force

DM   - Disaster Management

ESF   - Emergency Support Function

GOI   - Government of India

GSM   - Global System for Mobile communications

ICT   - Information and Communication Technology

MHA   - Ministry of Home Affairs

MTNL   - Mahanagar Telephone Nigam Limited

NCMC   - National Crisis Management Committee

NDMA   - National Disaster Management Authority

NEOC   - National Emergency Operation Centre

NPDM   - National Policy on Disaster Management

NTDCC   - National Telecom Disaster Co-ordination Committee

NTP   - National Telecom Policy

PMRTS   - Public Mobile Radio Trunk Service

PSU   - Public Sector Undertaking

RDAT   - Rapid Damage Assessment Team

SDH   - Synchronous Digital Hierarchy

SDMA   - State Disaster Management Authority

SMS   - Short Message Service

SOP   - Standard Operating Procedure

STDCC   - State Telecom Disaster Co-ordination Committee

LSA   - License Service Area

TSP   - Telecom Service Provider

UPS   - Uninterrupted Power Supply

WLL   - Wireless in Local Loop

Directory of Nodal officers responsible for telecommunication services during disaster

A. Contact Details of National Emergency Telecommunication Committee

Sl. No.	Particulars	Organization / Company	Contact details
1.	Secretary (T)	DoT	23719898
2.	Member (T)	DoT	23372307
3.	Member (S)	DoT	23714644
4.	Member (F)	DoT	23716161
5.	Add. Secretary(T)	DoT	23717300
6.	Advisor (O)	DoT	23714644
7.	Advisor (T)	DoT	23372307
8.	Advisor (WPC)	DoT	23755444

B. Contact Details of Nodal officers of DoT HQ and LSAs

Sl. No.	Name & Designation	Organization / Company	Contact details
1.	Shri Chandra Shekhar, DDG (DM)	DoT, HQ	011-23372702 (O), 8700878787 (M)
2.	Shri K. Raja Sekhar DDG (Technology)	Andhra Pradesh LSA	040-27722713 (O) 040- 27833322 (F) 9490000248 (M)
3.	Shri Sanjeev Peeka DDG (Technology)	Assam LSA	0361-2736999(O), 0361-2730788 (F), 9446455500 (M)
4.	Shri A.K. Sinha, DDG (Technology)	Bihar LSA	0612-2506139 (O), 0612-2506362 (F), 9470000500 (M)
5.	Y. K. Singh, DDG(Technology)	Delhi LSA	011-26469393 (O), 9868133266(M)
6.	Shri Roshan Lal Meena, DDG(Technology)	Gujrat LSA	9414001115 (M)

7.	Shri O.P.Manhas, DDG (Technology)	Haryana LSA	9868131123 (M)
8.	Shri Ranveer Singh, DDG (Technology)	Himachal Pradesh LSA	0177-2628500 (O), 0177-2622599 (F), 9414000124(M)
9.	Shri Radheshyam Parmar, DDG (Technology)	Jammu & Kashmir LSA	0191-2471117 (O), 9425001088 (M)
10.	Shri R K Dubey, DDG (Technology)	Karnataka LSA	080-26642626 (O), 080-26633010 (F), 9448010625 (M)
11.	Smt. V. Shobhna, DDG (Technology)	Kerala LSA	0484-2207255 (O), 0484-2203955 (F), 9910395165 (M)
12.	Shri R.K.Singh DDG(Technology)	Madhya Pradesh LSA	0755- 2555854 (O), 9868218150 (M)
13.	Shri V.K. Mathur DDG (Technology)	Maharashtra, LSA	020-26129988 (O), 020-26129966 (F), 9422301900 (M)
14.	Shri A K Jain, DDG (Technology)	Mumbai, LSA	022-28573530 (O), 022-28573535 (F), 9869033066 (M)
15.	Shri R R Mittar, DDG (Technology)	NE, Shillong LSA	9868137776 (M)
16.	Shri Basudev Mallick, DDG (Technology)	Odisha, LSA	0674-2544050(O) 9437066000 (M)
17.	Smt. Rekha Singh, DDG (Technology)	Punjab LSA	0172-2218094 (O), 9417210020 (M)
18.	Shri R G Yadav, DDG (Technology)	Rajasthan, LSA	0141-2712620(O), 9414001310 (M)
19.	Smt R Radha, DDG (Technology)	Tamilnadu, LSA	044-28251118 (O), 044-28251120 (F), 9443200606(M)
20.	Shri S. K. Mittal, DDG (Technology)	UP(E) LSA	0522-2725501 (O), 9868136621 (M)

21.	Shri Virendra Kumar, DDG(Technology)	UP(W) LSA	0121-2402266 (O), 0121-2402202(F), 9412200056 (M)
22.	Shri R K Sharma, DDG (Technology)	West Bengal LSA	033- 24402027 (O), 033-24402029 (F), 9667116790 (M)
23.	Shri R K Sharma, DDG (Technology)	Kolkata LSA	033- 24402027 (O), 033-24402029 (F), 9667116790 (M)

C. Contact Details of Control Room:

Sl. No.	Particulars	Organization / Company	Contact details
1.	MHA Control Room	MHA	011-23438252, 011-23438253, 011-23438254 (F)
2.	DoT Control Room	DOT	011-23372098 (Operational during disasters only)

Directory of Nodal officers of TSPs responsible for telecommunication services during disaster

Sl. No.	Name & Designation	Organization / Company	Contact details
1	Ms. Madhu Arora, PGM	BSNL	9868133388
2	Shri Tarun Chitkara	Airtel	9871106558
3	Shri Sandeep Kathuria	Vodafone-Idea	9811918500
4	Shri Mahipal Singh	Reliance Jio	9717899166
5	Shri O P Misra	MTNL	9868132819

Format for First Information Report on occurrence of Disaster

(To be sent to DoT, Government of India within maximum of 24 hours of occurrence of disaster)

From: State ------------------ Date of Report ---------------- Name of TSP -------------- -------

To,

The DDG(Technology), ……………………. Concerned State (fax: _____ ;
email :_____)
Director(DM), DOT (fax : _____ ; email :_____)
Convener, NTDCC, DOT (fax: _____; email: _____)

a. Nature of Disaster: _____
b. Date and time of occurrence: _____
c. Affected area (number and names of affected districts):_____
d. Initial Risk Assessment:

Sl. No.	Item	Present consequences	Future consequences	Worst case Scenario
1	Number of Priority users affected			
2	Number of subscribers affected			
3	Number of Exchanges affected			
4	Number of Towers(BTSs) affected			
5	Number of OFC/MW/Satellite links affected			
6	Any major switches affected			
7	Services affected			

e. Actions taken for restoration, alternate communication backups and opening of help lines in brief
f. Immediate resource assistance required from State / Central agencies:
g. Any other critical information: _____

h. Next information update time/date:_____

Name: Contact:
Signature   Time Report Logged:

TSPs Name:

Daily Status Report

State/ Circle: ------------------- Date : ---------------- Name of TSP:------------------------

To,

-------------------------------- (fax ------------------- Email _____)

- Mobile Services:

Sl. No.	Total no. of Towers	Total towers down	Total No. of BTSs	Total No. of BTSs non-functional	Percentage of BTS non-functional	No. of OFC link affected	CoW deployed

- Landline Services:

Sl. No.	Total no. of Exchanges	Total No. of Exchanges Down	Percentage of Exchanges Down

- Transmission Links:

Sl. No.	Media	Total no. of links affected	No. of links restored	No. of links yet to be restored	Remarks
1	OFC				
2	Microwave				
3	Satellite				

- Help Lines & Location Services:

No. of queries on help line till date	No. of queries answered	No. of queries related to location	No of queries answered related to location	No. of free public booths opened if any

- Any Assistance required from local administration:

Signature
Name: ………………
Contact: ………………
Time report logged: ………………

Name