पी.के. श्रीवास्तव
P.K. SRIVASTAVA

भारत सरकार Govt. of India
रेल मंत्रालय Ministry of Railways

महाप्रबंधक
दक्षिण मध्य रेलवे
रेल निलयम, सिकंदराबाद - 500 071
General Manager
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Rail Nilayam, Secunderabad - 500 071

MESSAGE

In order to ensure uninterrupted running of Passenger and Freight Traffic, it is necessary to have a well established system and procedures for timely activation to meet the emergency situations, especially in cases of natural and man-made disasters.

As per the recommendations of High-level Committee on Disaster Management in 2003, National Disaster Management Authority and DM Act 2005, preparation of the DM Plan became mandatory dovetailing various issues for achieving a co-ordinated result.

Accordingly, the Zonal Disaster Management Plan was initially prepared by the Headquarters Safety Organisation in the year 2011 and the same has been updated with latest information and instructions in this revised edition 2014. The main objective and aim of the Plan is to precisely channalise our efforts in the right direction at the time of any disaster. Quick and organised response is expected during such situations. The guidelines brought out in this plan will help in distributing works precisely to each Department of the Organisation and also help in planning and co-ordinating the action to meet the challenges effectively in an organized and effective manner.

I hope that this DM Plan will be handy to guide various Department Officials to be in preparedness along with the help of relevant connected agencies to meet the challenges faced during any emergencies.

Secunderabad
Date: 16.01.2014

16/1/14
P.K. Srivastava
General Manager

FOREWORD

Ever since the running of first train on Indian Railways in 1853 handling trains accidents has been a priority area for the Railways. Railway Organisation worked hand in hand with the Defense Authorities. Sharing of the Indian Railways' and Army Cranes in times of a train accident was an accepted system for handling disasters (rail accidents).

With the gradual growth of IR and its transition to transportation of passengers and goods, the Railways gradually built up its own relief and rescue infrastructure such as Cranes, ARTs, ARMVs. Till 2005, a disaster on the Railways in effect means a serious train accident; other disasters such as floods, earthquakes, cyclones, etc., were handled in an unorganised manner. Disaster preparedness of the Railways, mainly pertaining to handling train accidents, had been gone into by a High Level Committee (HLC) in the year 2003 whose recommendations, where relevant, have been kept in view in the preparation of this DM Plan.

The situation has further changed with the promulgation of the DM Act 2005. A disaster no longer means only a train accident, but its scope has become much wider to include other incidents, terrorism related activity and natural calamities etc., The Zonal Railways DM Plan has been prepared on the principles now incorporated in the Act of sharing resources of all Government Agencies along with Railways own resources available to handle serious train accidents, other mishaps, terrorism related crisis and natural calamities etc.,

The objective of this DM Plan is to make the system prompt, receptive and efficient enough to respond quickly in case of any disaster and to establish a disaster management culture and make all officials aware of their respective roles and responsibilities.

This revised edition contains latest information; such as resources available with Railways, details of NDRF and contact address of all the 10 Battalions, DM Act provisions related to NDMA, revised ex-gratia payments, management of cyclones / earthquakes / floods / landslides, Standard Operating Procedures, crowd control during festivals / melas, terrorist attacks on freight trains carrying inflammables, Crisis Management, DM Training and new modules, tunnel rescue management, NDMA guidelines for Incidence Response System, NDMA guidelines on training and capacity building of Civil Defense and sister orgnisation, etc.,

It is my sincere thought and belief that this plan will help co-ordinate our efforts better, in the hour of crisis.

S.P. Sahu
Chief Safety Officer

CHAPTER – I

INTRODUCTION

101 DEFINITION OF DISASTER MANAGEMENT AS PER NDMA

Disaster Management is a multi-faceted approach by a group of professionals with competence to address the diverse issue that will involve formulation of rules, regulations, preparation of guidelines and operating procedures, law making, enforcement, legislation, managing humanitarian aspects and traumatic situations, addressing complex socio-economic and technical issues. The techniques, therefore has to be based on knowledge and infrastructure by competent professional related to the task, terrain and activity therein.

In the course of time, Disaster Management approach had a paradigm shift, gained from the experience of the past, to a proactive and holistic approach to disasters to pre-empt them instead of post disaster responses. Disaster Management process is a developmental opportunity to improve the society and thereby reduce the risk factor to the society. The society is made capable to respond by themselves to achieve their goal by disaster preparedness so that society is not susceptible to disasters and the impact will be less.

Engineering construction activity is to be geared with sound practices, for growth and development with a legal framework and to enforce the rule of law, to help the disaster management preparedness by the authorities in the system.

With the gradual growth of IR and its transition to transportation of passengers and goods, the railway gradually built up its own infrastructure of cranes, ARTs, ARMVs. Till the beginning of 2005, a disaster on Railways in effect meant a serious train accident; other disasters such as floods, earthquakes, etc., were handles in a non coordinated manner. Disaster preparedness of the Railways, mainly pertaining to handling train accidents, had been gone into by the High-level Committee on DM in 2003 whose recommendations, where relevant are kept in view during the preparation of DM Plan.

102 DEFINITION OF 'DISASTER'

As per DM Act-2005, Disaster is defined as ***"means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, or damage to, or degradation of environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area".***

The term "Disaster" envelops a wide spectrum of occurrences or consequences leading to a mishap. Disaster is an unusual occurrence, which is characterized by sudden calamitous event, having loss of life, injury, great material damage, loss and distress.

Further, vide Railway Board letter No. 2003/Safety – (DM)/6/2/Pt. dated 06.01.2009, the definition of Railway Disaster and co-ordination of DM Plan was revised. Accordingly, the Railway Disaster is defined as:

"Railway Disaster is a serious train accident or an untoward event of grave nature, either on the railway premises or arising out of railway activity in that area, due to natural or man-made causes, that may lead to loss of many lives and/or grievous injuries to a large number of people, and/or severe disruption of traffic, necessitating large scale help from other Government / Non-government and Private Organisations."

Despite the earnest efforts taken to manage every disaster efficiently, in some train accidents involving heavy casualties, the relief and rescue operations could not be resolved satisfactorily. Accidents involving heavy casualties and in difficult terrain with steep gradients & number of bridges, tunnels, cuttings and also bad weather conditions, make the rescue and relief work more difficult and necessitates the assistance of specialised outside agencies in addition to Railways' own resources.

103 AUTHORITY TO DECLARE A DISASTER ON RAILWAYS (RLY BOARD'S LR.NO.2003/SAFETY/(DM)/6/2 PT. DATED 06.01.2009):

Railway Board has authorized GMs, AGMs or CSOs (when GM/AGM is not available) for declaring an untoward incident as Railway Disaster. With the adoption of the above definition of railway disaster, it needs to be appreciated that, a serious train accident may turn into a railway disaster, if not handled and managed properly and there may be many more Railway related events which may not even involve human lives but may turn into disasters for which necessary prevention and mitigation measures are to be taken by the Railways beforehand. Zonal Railways will ensure that prevention, mitigation, preparedness, rescue and relief related issues covering all types of disasters, particularly affecting railway system are addressed and their details are appropriately incorporated in their Disaster Management Plans.

The high level committee on Disaster Management analysed various aspects of the present Disaster Management system and has pointed out areas of deficiencies such as lack of precision, speed and co-ordination, non-availability of clear procedure to avail outside resources and non-availability of an updated databank on outside agencies resources etc. Some important measures suggested by High-Level Committee on Disaster Management are as under:

Till date Relief, Rescue and Restoration are primary objectives of DM Plan. By the introduction of DM Act 2005, the following areas are brought under the purview:

1. Prevention, Preparedness & Capacity Building
2. Preparation of databank
3. Streamlining the Logistics of Railways
4. Seeking assistance from State Government and involvement of Local Civilian Authorities
5. Effective Trauma Care
6. Proper Trigger Mechanism to ensure adequate medical care within "Golden Hour"
7. Divisional/Zonal Disaster Management Plans

8. Making use of Non-Railway Resources
9. Maintenance of ART/MRT to have failure proof service
10. Defining responsibilities of various staff / departments

In addition, DM Plan should also be a golden opportunity for developmental process, in which, quality and standard of construction process shall be based upon standard Civil Engineering procedures.

With a view to buildup appropriate capability to manage Disaster at Divisional & Zonal levels, clear instructions, defining the role of various Departments are required. This DM Plan issued by this Railway covers such instructions to organise an efficient Rescue, Relief & Restoration operation and lay down the basic framework for immediate action by every Railway Servant. It has been dove-tailed with information what so ever made available from respective State Governments / Armed Forces, etc. as also from Divisional DM Plans of SC, HYB, BZA, GNT, GTL & NED Divisions. Details of Hospitals, NGOs and Organisations having infrastructure facilities and resources available with Civil Authorities useful in Disaster Management are made available in this document.

104 SCOPE OF ZONAL DISASTER MANAGEMENT PLAN:

- Train Accidents
- Fire Accidents
- Cyclone/Storm
- Earth-quakes
- Floods and Breaches
- Landslides
- Bomb blasts/explosions and other anti-social / Terrorist activities
- Hazardous Gas (Emergencies/Calamities), which assumes the magnificence of a disaster as prescribed in the definition of disaster in Railway parlance.

Indian Railways is one of the largest Railway systems and is the principal mode of transport for both passengers and goods in the country.

With growing Passenger and Freight traffic, 'Safety' has become one of the principal concerns. The Safety of Railway operations is becoming all the more imperative in view of the Railways Endeavour to lift more Passengers and Freight traffic. The Railways are gearing themselves to meet the challenges posed by the escalating traffic needs. Accordingly, high priority is being given to various safety measures to ensure greater safety in rail travel and transportation of goods.

While every care is taken to ensure safety, disasters of rail accidents do occur due to internal and external factors on Railways.

105 STRENGTH OF IR:

In handling disasters, IR has a unique position of having self-resources when compared to other Departments of Government of India. These include;

1. Own advanced communication network.
2. Operating Control at all the three levels, i.e., National level, Zonal level and Divisional level.
3. TA camp units.
4. Uniformed force of RPF
5. Own and full-fledged medical infrastructure
6. Civil Defense Organisation
7. An army of Trackmen spread out in the entire network
8. Scouts and Guides for background support
9. Dedicated rescue / restoration and medical equipment on rails

106 SHORTCOMINGS OF RAILWAYS:

However, there are certain areas where Railways do not possess adequate resources such as;

1. Tunnel rescue equipment

2. Non-availability of trained divers for extrication of passenges when a train falls into the sea/river/lake, etc.,
3. Non-availability of cranes loaded on a ship / barge for lifting the coaches from waterbody.
4. Inability to handle CBRN (Chemical, Biological, Radiological and ?Nuclear) Disasters and major fire.
5. Limited resources to handle terrorist attack on trains, stations and other railway premises.

107 DISASTERS IN RAILWAYS ARE MAJORLY CAUSED AS A RESULT OF:

i. Human failure / equipment failure.
ii. Sabotage.
iii. Natural calamities.

Disasters in Railways result in heavy loss of lives, injuries, damage to property and affect the normal movement of trains.

i. Human / Equipment failure leads to:

a. Collisions.
b. Derailments.
c. Train marooned and derailment on bridges`
d. Tunnel collapse on a train
e. Derailment of a train carrying explosives and highly inflammable material.
f. Level crossing accidents at Manned/Unmanned Level Crossings.
g. Fire on Train.

ii. Sabotage involving disaster is on account of:

a. Act of terrorism and Bomb blasts.
b. Setting fire to train/Railway installations and Railway property.
c. Chemical disaster, biological, radiological and nuclear disasters.
d. Tampering with Railway fittings to cause accidents.
e. Placing of obstructions on track to cause disruption to traffic.

iii. Disasters owing to natural calamities are:

a. Earth quakes.
b. Land slides.
c. Cyclones/Floods.
d. Storm/Tornadoes.
e. Snow avalanches and
f. Tsunamis

108 NEED FOR DISASTER MANAGEMENT PLAN:

Various recommendations have been appointed by the IR to review the preparedness to handle a disaster. A high-level committee on DM was constituted in 2002 headed by the then MM Sri. S.Dhasharathy to review the DM on IR. This committee had mainly gone into DM system on IR related to train accidents and not into natural calamities. The committee had given 111 recommendations of which 99 are implemented and the remaining 12 are at various stages of implementation.

Another DM Review Committee was appointed in February 2007 headed by Sri. G. Narain, retired IPS Officer to audit the current preparedness of all types of disasters / hazards for prevention, mitigation, rescue, relief and rehabilitation. This committee had given 108 recommendations of which 67 were not accepted and from the remaining 41 accepted recommendations, 36 have already been implemented and 5 are under implementation stage.

Indian Railways do have an established system of disaster response. Swiftness in an accident primarily depends upon various components constituting the accident relief team being fully conversant with their areas of responsibility.

Success or failure of rescue operations in the event of major disaster depends upon the adequate resources both in terms of men and material and extensive teamwork and co - ordinated efforts. In this regard, Railways have set up a High-level Committee to review Disaster Management on Indian Railways. Based on the recommendations of the Committee, it has been felt necessary to have well documented DM Plan and upgrade

our resources to improve the capability to handle disasters and mitigate the hardships and sufferings of passengers.

109 NODAL DEPARTMENT FOR POLICY FORMULATION ON DISASTER MANAGEMENT ON INDIAN RAILWAYS:

The preparation of DM plans on IR and o the Zonal Railways in co-ordination with different Departments of the Railway, other Central / State Government Agencies, NGOs, Private Agencies, etc., has to be done by the **Safety Department** in the Railway Board, on the Zonal Railways and I Divisions.

The Hospital Management Plans and the Security arrangements (drills, etc.,) shall be prepared and coordinated by the **Medical and Security Departments** respectively.

The management of Floods, cyclones, earthquakes, landslide, etc., and preventive action to be taken for mitigation shall be coordinated by the **Civil Engineering Department**.

The rescue and restoration DM Plan including preparing plans and procurement of specialized equipment and rescue centric training of personnel has to be coordinated by the **Mechanical Department**.

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CHAPTER II

OBJECTIVES

201 THE OBJECTIVE OF THE DISASTER MANAGEMENT PLAN IS TO ACHIEVE:

- Instant Disaster Trigger Mechanism
- Rapid Access to reach the site of accident within **"GOLDEN HOUR and render Medical Care."** – using GIS, data bank to ensure quicker means to render medical help.
- Minimising disaster effects - using GIS, data bank, quicker means to call for all the data logistics and infrastructure to redress the human calamity.
- Saving lives by quick extrication of victims and effective on–site Medical Management.
- Stabilisation of condition by quick restoration.
- Expeditious extraction and shifting to rescue vehicle(s).
- Care and concern for the affected customers.
- Speedy transportation to hospital.
- Proper and timely dissemination of information to public in the aftermath of the Disaster.
- Defining responsibilities of various staff/departments.

202 KEY CONCEPTS:

1. Disaster
2. Disaster Management
3. Disaster Management Act 2005
4. Golden Hour
5. Trigger Mechanism
6. Incident Command Control System
7. NDRF
8. Triage – a) Site Triage & b) Hospital Triage
9. Psychological rehabilitation
10. National building Code-2005

203 GOLDEN HOUR CONCEPT

"If a critical trauma patient is not given definite medical care within one hour from the time of accident, chances of his ultimate recovery reduce drastically, even with the best of medical attention thereafter. This initial one hour period is generally known as The Golden Hour"

- Render definite medical care within Golden Hour.
- Stop bleeding and restore blood pressure within an hour.
- Persons under shock shall immediately be relieved of shock.
- Transport the casualties to the nearest hospital.

204 TRIGGER MECHANISM (EMERGENCY RESPONSE SYSTEM)

Trigger Mechanism has been conceptualised as an emergency quick response mechanism which, on energising would, spontaneously set the vehicle of management into motion on road to disaster management process. The underlying assumptions behind this concept is that the process and mechanism of responding have been planned earlier and response activities would start as soon as the information is received about a disaster or impending disaster by any point in the whole mechanism. To have an effective Trigger Mechanism, High Power Committee has identified functions for the Managers dealing disasters:

205 THE PROCESS OF PREPAREDNESS SHOULD BE WELL ORCHESTRATED AND MUST RESPOND INSTANT ON INFORMATION OF THE DISASTER.

1. Evolving an effective warning mechanism
2. Identifying activities and their levels
3. Identifying sub-activities under each activity/level of activity
4. Specifying authorities for each level of activity and sub-activity
5. Determine the response time for each activity.
6. Working out individual plans of each specified authority to achieve the activation as per the response time

7. Having quick response teams for each specified authority
8. Having alternative plans and contingency measure
9. Providing appropriate administrative and financial delegations to make the response mechanism functionally viable and
10. Undergoing preparedness drills.

206 INCIDENT COMMAND SYSTEM (ICS):

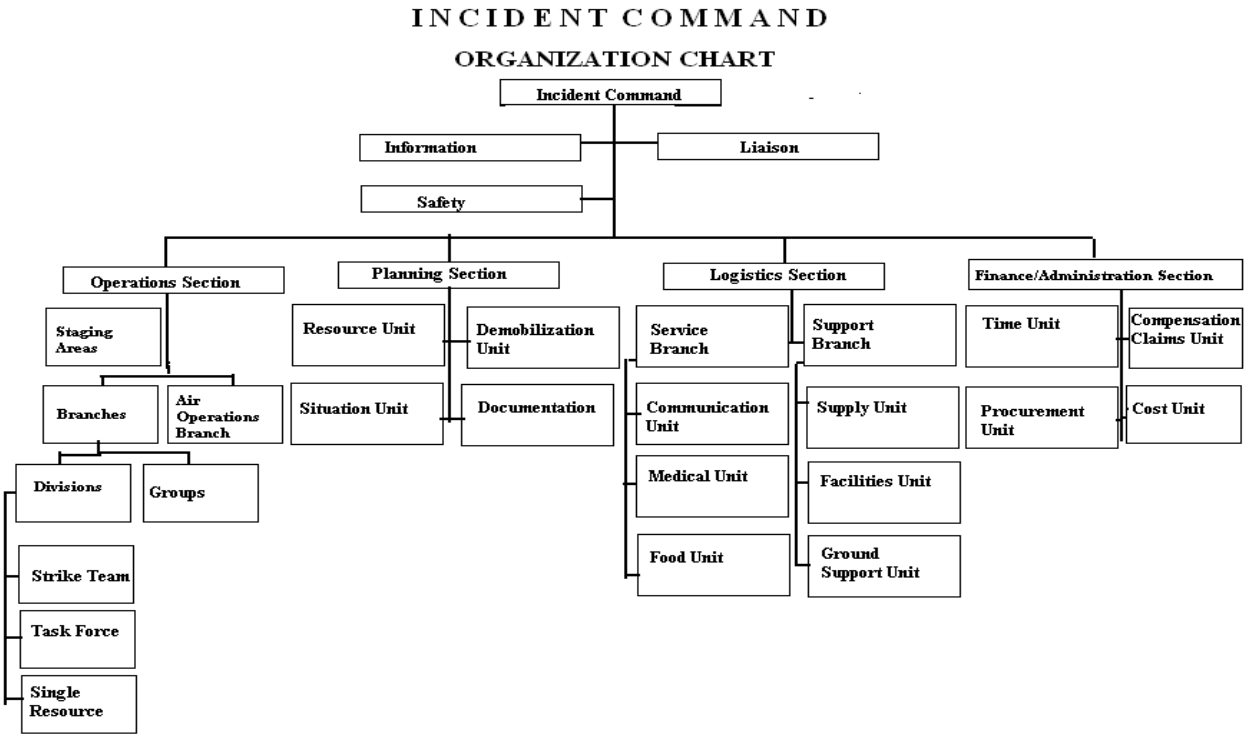
A. Introduction

The Incident Command System (ICS) is an on-scene, all-risk, flexible modular system adaptable to any scale of natural as well as man-made emergence/incidents. The ICS seeks to strengthen the existing disaster response management system by ensuring that the designated controlling/responsible authorities at different levels are backed by trained Incident Command Teams (ICTs), whose members have been trained in different facets of emergency/disaster response management. The ICS will not put in place any new hierarchy or supplement the existing system, but will only reinforce it. The members of the ICT will be jointly trained for deployment as a team. When an ICT is deployed for an incident, 'all-concerned' agencies of the Government will respond as per the assessment of the Team. This system therefore enables proper co-ordination amongst different agencies of the Government. The five command functions in the Incident Command System are as follows:

i) **Incident Command** – Has overall responsibility at the incident. Determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy.
ii) **Operations** – Develops tactical organisation and directs all resources to carry out the Incident Action Plan.
iii) **Planning** – Develops the Incident Action Plan to accomplish the objectives. Collects and evaluates information, and maintains status of assigned resources.
iv) **Logistics** – Provides resources and other services needed to support the organisation.

v) **Finance/Administration** – Monitors costs related to the incident, provides proper accounting, procurement, time recording, cost analysis, and overall fiscal guidance.

B. The composition of the ICT is depicted in the following organisational chart:



The ICS will comprise of two broad components, viz. Incident Response and System Institutionalisation. Incident Response will involve three elements: (a) Co-ordination, (b) Incident Command Teams and (c) Specialised Tactical Resources. The Co-ordination element will have the Headquarters Teams at the National, State and District levels. The Incident Command Teams will be responsible for on-scene management and formed at the district and state levels. As shown in the organisational chart, the following will be the eight core positions in the ICT.

i. Incident Commander
ii. Operations section
iii. Planning section

iv. Logistics section
v. Finance/Administration section
vi. Safety Officer
vii. Liaison Officer
viii. Information Officer

The Specialised Tactical Resources are being formed at the National or State levels having technical expertise in areas like handling hazardous material, carrying out search and rescue.

The System Institutionalisation component will have three elements of (a) Training (b) Certification & Qualification and (c) Publications. The activities under this component will ensure that suitable personnel are identified, trained and certified to perform their assigned responsibilities for Incident Response.

DISTRICT LEVEL INCIDENT RESPONSE

a. At the District level, there will be one District Headquarters Team with the primary function of assisting the District Collector in handling tasks like general co-ordination, distribution of relief materials, media management and the overall logistics.

b. In addition to the District Headquarters Team, there will be one or more District level Incident Command Teams (DICTs) which can be deployed at the site of a complex emergency/disaster. Suitable officers from the District Administration will be carefully selected and professionally trained for the different ICS positions in order to constitute the District-level Incident Command Teams. As and when required, these DICTs will be deployed at the site of an emergency/disaster for on-scene management. The teams will focus on the operational aspects of response management, duly supported by other functions in ICS, e.g. Planning, Logistics, Finance/Administration, etc. The officers drawn for this assignment will be carefully selected by the District Collector depending upon their fitness, ability and aptitude for any of the DICT positions and they will be professionally trained to fulfill their assigned roles.

Arrangements will also be made for ensuring their mobilization in a time-bound manner for their deployment to the trouble spot. Due consideration for the appropriate level of seniority will be given while constituting the teams. Although by and large, the team personnel may be selected from the General Administration/Revenue Department which traditionally handles disaster response in our country, the option to pick up willing and capable personnel from any other department for taking up specific positions in the DICT will be left open. For some positions, a suitable number of additional personnel will be trained as reserve for taking care of contingencies like transfers, promotions, etc.

c. For the position of the Incident Commander, a suitable officer of the tank of Additional District Magistrate will be preferred. The District level Incident Command Teams will function under the overall control of the Collector/District Magistrate. The State Governments can also deploy the DICTs to other districts depending upon the magnitude of the disaster.

207 NATIONAL DISASTER RESPONSE FORCE (NDRF)

The role and importance of community, under the leadership of the local authorities, Panchayat Raj institutions (PRIs) and Urban Local Bodies (ULBs) being the bedrock of the process of disaster response, is well recognized. For their immediate support, there are other important first responders like the Police, State Disaster Response Force (SDRFs), Fire and Medical Services. The NDRF will provide specialize response training whenever required. In serious situations, the resources of all NDRF Battalions (18 teams per Battalion) on as required basis, will be concentrated in the shortest possible time in the disaster affected areas. Other important responders will be the Civil Defence, Home Guards and Youth Orgnisations such as NCC, NSS and NYKS. The deployment of the Armed Forces will also be organized on as required basis. Establishments / raising of NDRF should progressively reduce deployment of the Armed Forces. However, Armed

Forces would be deployed only when the situation is beyond the coping capacity of the State Government and NDRF.

As per Disaster Management Act 2005, various Ministries and Departments under the Government of India should join hands for mutual assistance in case of a disaster. Assistance from local Government and non-government agencies is invariably required by the Railway Administration for prompt relief and rescue operation in case of major disasters affecting Railways. Assistance of NDRF could be of great help to the Railways in major railway disasters. These forces are located at 10 locations in the country for dealing with relief and rescue operations related to all types of disasters. Each Battalion has 6 Companies comprising of 3 teams each. Team comprises of 45 men of which 24 are for Search and Rescue and balance 21 for support functions. Shortlisted and trained staff are on deputation in NDRF.

NDRF HEADQUARTERS

Name & Designation	Contact Nos.	E.mail address & Mobile No.
Shri R.K. Bhatia, IPS Director General, East Block VII, R.K. Puram, New Delhi – 110066.	**Tele./FAX** 011-26715303	09871889244

CISF NDRF Battalion, Arakkonam has Tamil Nadu, Puducherry, Kerala and Andhra Pradesh (except Srikakulam and Vizianagaram Districts) in its areas of responsibility. The Battalion is headed by Senior Commandant, under the administrative/operational control of Inspector General (Adm.), CISF HQRs., New Delhi and Deputy Inspector General (DM), CISF HQRs., New Delhi..

Details of NDRF battalions are as under :-

S.No.	Name of the officer and designation and location of deployment	Telephone no.	Mobile no.	FAX No.
HQtrs	IPS/DG	011- 26712851 26161442	9910621515	26105912
1	Commandant 1st BN, NDRF, Partgoan PO Azara, Guwahati	0361- 2840027	9435545951	2740284
2	Commandant, 2nd BN, NDRF Digberia Camp PO Badu Road, Madhyamgram, Barasat Kolkata	033- 25264302 25264394	9434742836	25263077
3	Commandant, 3rd BN, NDRF PO Mundali, Cuttack, Odisha	0671- 2879710	9439103170 9437964571	2879710
4	Commandant, 4th BN NDRF PO Suraksha Campus Arakkkonam, Vellore District Tamilnadu	04177- 246269	9443105169	246594
5	Commandant, 5th BN NDRF PO Vishnupuri, Talegaon PPune, Maharashtra	02114- 231245	9423506765	231509
6	Commandant, 6th BN NDRF Chilora Road Gandhinagar	079-2320540	9428826445	23201551

7	Commandant, 7th BN NDRF Bibiwala Road Bhatinda, Punjab	0164-2246030	9417802032	2246570
8	Commandant, 8th BN NDRF Ghaziabad, Noida GB Nagar, UP	0120-2766013	9968610014	2766618
9	Commandant, 9th BN NDRF Bihata, Patna, Bihar	06115-252540	8986909490	253939
10	Commandant, 10th BN NDRF Mangalagiri, Vijayawada (AP)	0863-229050	7382299621	2293050

Zonal Railways should get in touch with NDRF officers at the nearby NDRF locations to have the first hand knowledge of the resources available with them and also familiarise NDRF task force with railway related disaster situations and expose them to the issues relevant to rescue and relief of passengers during railway accidents. Railways may also associate NDRF in the full-scale DM Exercise which shall be held once every year. Respective NDRF Battalion pertaining to the Railway territory has to be co-ordinated while doing such exercises.

There are no charges for availing the services of NDRF except for the rail transportation which railways may provide at their cost for attending to rail accidents. Railways may also have to provide the rail transportation logistics for transporting NDRF in case of non-railway exigencies.

Railway Board have also empowered Divisional Railway Managers to directly requisition the relevant NDRF Battalion for relief and rescue operations depending upon the gravity of situation so that their services could be made available expeditiously at

the time of major Railway disasters without any loss of time. However, requisitioning of NDRF should be judicious and NDM Control Room under **Ministry of Home Affairs (Tele No.011-23092885 Fax No.011-23093750) and Security Control Room (Tele No.011-23387981 Fax No.011-23303983) and safety cell (Tele Fax No.011-23382638) in the office of Railway Board must be kept informed**.

This instruction is issued by Railway Board in consultation with National Disaster Management Authority (NDMA) having the administrative control on NDRF.

208 NDMA CONTROL ROOM

Name & Designation	Contact Nos.	E-mail address & Mobile No.
NDMA Control Room	011-26701728 Fax-26701729	ndmacontrolroom@gmail.com
Dr. G.S.G. Ayyangar, JS & Adv.(Mitigation)	011-26701816 Fax-26701820	09958867155
Rakesh Kr. Sinha,	OSD 011-26701742 Fax-26701744	09868117484

(Ref: Rly. Bd's letter No.2003/Safety (DM)/6/3 dt.13.06.08)

209 TRIAGE

The term triage originates from the French verb 'trier', which means to sort, select, or classify. There are many definitions of triage. In disaster medicine, triage is an evaluation or an assessment process of the medical condition of victims and their categorisation depending on the severity of sustained injuries. Triage is to solve the problem of imbalance, which has come up due to excessive demands on the available resources. Triage process ensures care to casualties according to the,

- Severity of injury
- Need for treatment
- Prognosis
- Available medical resources.

Triage is a complex process and includes – sorting and categorisation of victims, and initiating life saving measures and treatment at the;

- Site
- During transportation; and
- In the hospital

It determines priority for evacuation to hospital, and also decides priority for surgical or other specific treatment required. In disaster situation, triage is a continuous process and starts at the site, where the victim comes in first contact with medical care providers, and goes to hospital triage area where casualties are received. Re-triage is essential at each level, from the site to the hospital, and hence is a continuous activity.

These are two major types of triages:

- **Site Triage** – The non-medical triage and is done by the rescue team or the first aid providers at the site. It is also called pre-hospital triage.
- **Hospital Triage** – Medical triage done by trained physicians and surgeons in the receiving hospital.

Triage must distinguish the casualties by different colour tagging, according to the gravity of their injury, and need for urgent medical care or priority for transportation. The Airport Colour Coded Triage Tagging System is accepted world-wide and is used internationally.

- Red – a) First priority.
  b) Victim critical with unstable vital functions.
  c) Requires urgent care.

- Yellow – a) Second priority
  b) Victim serious but stable vital functions.

c) Requires prompt care though no immediate risk, but cannot move without assistance.

- Green – Victims having light injuries and able to walk.
- Black – Dead.

Rescue workers who handle causalities at site and perform first triage, should apply coloured tags to the wrist of each, examined causality. Simultaneous to this, the first aid personnel should start control of bleedings, and anti-shock positions for red-tagged patients, and remove the green-tagged patients from danger areas. Rescue workers should give resuscitation to those who require and make arrangements for shifting the red and yellow-tagged victims.

210 PSYCHOLOGICAL REHABILITATION

Survivors of disasters face the danger of death or physical injury and possible loss of their homes, possessions, and communities. Such stress places survivors at risk of behavioral and emotional readjustment problems and Post Traumatic Stress Disorder (PTSD) is the manifestation of such situations.

Impact of Disasters on Mental health: Most children, as well as, adult survivors of the disasters, experience one or more of the following stress reactions for several days:

- **Emotional reactions**: Temporary feelings of shock (that is, for several days, or a couple of weeks), fear, grief, anger, resentment, guilt, shame, helplessness, hopelessness, or emotional numbness (difficulty in feeling love and intimacy, or difficulty in taking interest and pleasure in day-to-day activities.)
- **Cognitive reactions**: Confusion, disorientation, indecisiveness, worry, shortened attention span, difficulty in concentrating, memory loss, and unwanted memories, self-blame.
- **Physical reactions**: Tension, fatigue, edginess, difficulty in sleeping, bodily aches or pain, started reactions, fast heartbeat, nausea, change in appetite, and change in sex drive.

- **Interpersonal reactions:** In relationships at school, workplace, in friendships, in marriage, or as a parent, distrust, irritability, conflict, withdrawal, isolation, feeling rejected or abandoned, being distant, judgmental, or over-controlling.

Mental health interventions for disasters: In a major disaster, effective mental health response requires the delivery of both clinical and administrative services in ways that differ from services typically provided by the mental health professionals. The primary objective of disaster relief effort is to restore community equilibrium. Disaster mental health services, in particular, work toward restoring psychological and social functioning of individuals and the community, and limiting the occurrence and severity of adverse impacts of disaster-related mental health problems, such as post-traumatic stress reactions, depression, or substance abuse.

The aim of all Disaster Mental-Health Management should be the humane, competent, and compassionate care of all affected.

Basic principles of Emergency Care: It is helpful to remember several basic principles or objectives of emergency care.

1) Provide for basic survival needs and comfort (e.g. water, food, shelter, clothing etc.).
2) Help survivors achieve restful and restorative sleep.
3) Preserve an interpersonal safety zone protecting basic personal space (e.g. private, quiet, personal effects).
4) Provide non-intrusive ordinary social contact (e.g. use of humour, small talk about current events, silent companionship).
5) Address immediate physical health problems or exacerbating of prior illnesses.
6) Assist in locating and verifying the personal safety of separated loved ones or friends.
7) Reconnect survivors with loved ones, friends, and other trusted people.
8) Help survivors to take practical steps to resume ordinary daily life (e.g. daily routines, or rituals).
9) Help survivors take practical steps to resolve pressing immediate problems caused by disaster (e.g. loss of a functional vehicle, inability to get relief vouchers).

10) Facilitate resumption of normal family, community, school and work roles.
11) Provided survivors with opportunities to grieve their losses.
12) Help survivors reduce problematic tension, anxiety, or despondency to manageable levels.
13) Support survivors' local helpers through consultation and training about common stress reactions, and stress management techniques.

211 NATIONAL BUILDING CODE OF INDIA- 2005

National Building Code of India 2005 is an integrated document formulated after successive modifications which are the outcome of the lessons learnt in the aftermath of devastating earth quakes and floods and other natural calamities all over the country over the past decade. This National Building Code is a state-of-the-art document and contemporary application of international standards. This also projects the requirement of green belts, landscaping, planting of trees and shrubs, special requirements for low income housing, fire safety regulations for high rise buildings, revision of structural design section based on new revised codes such as Concrete Code, Earth quake code, Masonry code, addition of outside design conditions for important cities in the country, requirements relating to noise and vibration, air filter, automatic control, energy conservation for air conditioning and guidance on the design of water supply system for multistoried buildings.

The National building code is a single document in which the information contained in the various Indian Standards is reflected in a pattern of continuity and cogency with interdependent requirements. The code gives the all the information required by the architect, structural, construction, services engineers and other professional from the early stages of planning to translate the building on to ***terra firma.***

Para 0, 5, 6, 7, 8 & 9 of the code are binding upon the Railways as a Public Department involved in major construction activities all over the country. Railways may also refer to the instructions issued from time to time by NDMA.

National Building Code of India 2005 reflects the following salient features:

1. Inclusion of a complete philosophy and direction for successfully accomplishing the building projects through Integrated Multidisciplinary Approach right from conceptual stage through planning, designing, construction, operation and maintenance stages.
2. A series of reforms in building permit process.
3. Provisions for ensuring and certification of safety of buildings against natural disaster by engineer and structural engineer.
4. Provision for two stage permit for high rise residential and special buildings.
5. Provision for periodic renewal certificate of occupied buildings from structural, fire, electrical and health safety point of view.
6. Provision for empowering engineers and architects for sanctioning plans of residential buildings up to 500 m^2.
7. Inclusion of detailed town planning norms for various amenities such as Educational Facilities, Medical Facilities, Distribution Services, Police, Civil Defence, Fire Services, etc.
8. Revision of parking requirements for low metro and mega cities.
9. Updating of special requirements for low income housing for urban areas.
10. Inclusion of special requirements for low income housing for rural habitat planning.
11. Inclusion of guidelines for development planning for hilly areas.
12. Revision of the provisions for buildings and facilities for physically challenged.
13. Fire safety norms completely revamped through detailed provisions on Fire Prevention, Life Safety and Fire Protection.
14. Inclusion of new categories of star hotels, heritage structures and archeological monuments for fire safety provisions.
15. Substitution or halon based fire extinguishers/fire fighting system.
16. Promotion to new/innovative building materials/technologies.
17. Inclusion of latest provisions for earthquake resistant design and construction.
18. Inclusion of details on multi-disaster prone districts.
19. Inclusion of new chapter on design and construction using bamboo.
20. Chapter on prefabricated and composite construction for speedier construction.
21. Updating of provision of safety in construction.

22. Complete revision of provision on building and plumbing services in line with applicable international practices.
23. Provisions on rain water harvesting.
24. Inclusion of new chapter to cover landscaping needs.

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CHAPTER III

GUIDELINES OF RAILWAY BOARD

301 PREPARATION OF DISASTER MANAGEMENT PLAN

Railway Board vide letter No. 2003/Safety-I/6/2 dated 29.09.2003 and letter No.2009/Safety/DM/6/14 dated 30.11.2009 has laid down the requirements of Zonal Railway Disaster Management Plan based on the instructions contained in the NDMA. Instructions contained in **DISASTER MANAGEMENT PLAN OF INDIAN RAILWAYS** published in November - 2009 also has been taken into cognizance while formulating the Disaster Management Plan of this Railway.

- Preparation and implementation of DM Plan is the responsibility of the concerned General Manager and Divisional Railway Managers.
- Authority to order ART/ARMV/BD trains – DRM & Sr.DOM/DOM of the Divisions during accidents.
- Senior-most railway officer at the site of accident shall be designated as **'Site Manager'**.
- Management of rescue operations – Primarily, Mechanical and Medical Departments. Assistance to be provided by all Railway servants (irrespective of departments) as needed.
- Relief operation including care for the dead - Commercial, Medical and RPF departments.
- Communication network - S&T department
- Lighting – Electrical Department.
- Crowd control and maintenance of law & order at site – Security Officials.
- State Police's clearance for restoration, Crowd control & Law and Order – Security Personnel to co-ordinate and ensure.
- Restoration operations:
  - Rolling stock - Mechanical Department.

- Fixed infrastructure like track, overhead equipments, signalling system – By the concerned Departments.

- Maintenance of SPARTs/ARTs/ARMVs/Breakdown trains including rail-cum-road and road mobile emergency vehicles etc. – Mechanical Department.
- Maintenance of equipments kept in SPARTs/ARTs/ARMVs for rescue and restoration operations – Departments concerned.
- Media management at site:
  - Site Manager shall be the chief spokesman at site and can be assisted by Branch Officers concerned, if needed.
  - Public Relations / Commercial & PR Department of the Division to look after the needs of the media at site.
- Checklists for Officers and Supervisors must be issued in the form of pocket booklet indicating Do's and Don'ts for the benefit of :
  - First official reaching the site of accident.
  - Senior-most officer at the site.
  - Divisional/HQ Control Organisation.
  - Station Manager.
  - Other Frontline Staff.

The DM Plan inter-alia includes 'who is responsible for what activities' in detail. It must be reviewed and updated on the 1st of January, every year.

CHAPTER IV

DISASTERS & TRAIN ACCIDENTS

(ACT PROVISIONS – DM ACT 2005)

401 NDMA (NATIONAL DISASTER MANAGEMENT AUTHIRITY):

401.1 Powers and functions of national authority:

Subject to the provisions of this Act, the national authority shall have the responsibility for laying down the policies, plans and guidelines for DM for ensuring timely and effective response to disaster.

The National Authority may…

- ✓ Lay down policies on DM.
- ✓ Approve the national plan.
- ✓ Approve planes prepared by the Ministries or Departments of Government of India in accordance with the national plan.
- ✓ Lay down guidelines for State Authorities to draw state plan.
- ✓ Lay down guidelines to be followed by different Ministries or Departments of the Government of India for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects.
- ✓ Coordinate the enforcement and implementation of the policy and plan for DM.
- ✓ Recommend provision of funds for the purpose of mitigation.
- ✓ Provide such support to other countries affected by major disasters as may be determined by the Central Government.
- ✓ Take such other measures for the prevention of disaster or the mitigation or preparedness and capacity building for dealing with the threatening disaster situation or disaster as it may consider necessary.
- ✓ Lay down broad policies and guidelines for the functioning of the NIDM.

401.2 Constitution and role of NDMA:

It is constituted under the DM Act as the apex body in the country to deal with DM holistically. Hon'ble PM is the ex-officio Chairperson of the authority and presently Sri. M. Shashidhar Reddy is the Vice-Chairperson. The Members have also been nominated and the total number of Members is limited to **nine** to be nominated by the Chairperson. Vice Chairperson is Cabinet rank and Members are State rank Ministers, NDMA is responsible for laying down the policies, plans and guidelines for DM for ensuring timely and effective response to disaster. State and Districts have also been mandated to constitute State and District DMA respectively on the lines of NDMA.

401.3 Constitution of Advisory Committee by National Authority:

The National Authority may constitute an Advisory Committee of experts in the field of DM and having practical experience of DM at the National, State or District level to make recommendations on different aspects of DM.

401.4 National Executive Committee:

The Central Government shall, immediately after issue of notification under Sub-section (1) of section 3, constitute a National Executive Committee to assist the National Authority in the performance of its functions under this Act.

The National Executive Committee shall consist of the following members, namely;

a. The Secretary to the Government of India in-charge of Ministry or Department of the Central Government having administrative control of the DM, who shall be Chairperson, ex-officio;
b. The Secretaries to the Government of Indian in the Ministries or Departments havig administrative control of the agriculture, atomic energy, defence, drinking water supply, environment and forests, finance (expenditure), health, power, rural development, science and technology, space, telecommunication, urban

development, water resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee as ex-officio members.

The National Executive Committee shall assist the National Authority in the discharge of its functions and have the responsibility for implementing the policies and plans of the National Authority and ensure the compliance of directions issued by the Central Government for the purpose of DM in the country.

The National Executive Committee may;-

- ✓ Act as the coordinating and monitoring body for DM.
- ✓ Prepare the national plan to be approved by the National Authority.
- ✓ Coordinate and monitor the implementation of the national policy.
- ✓ Lay down guidelines for preparing DM Plans for different Ministries or Departments or State Authorities.
- ✓ Provide necessary technical assistance to the State Government and State Authorities for preparing their DM Plans in accordance with the guidelines laid down by the national authority.
- ✓ Monitor the implementation of the national plan and the plans prepared by the Ministries or Departments of the Government of India.
- ✓ Monitor the implementation of the guidelines laid down b the national authority for integrating of measures for prevention of disasters and mitigation by the Ministries or Departments in their development plans and projects.
- ✓ Monitor, coordinate and give directions regarding the mitigation and preparedness measures to be taken by different Ministries or Departments and agencies of the Government.
- ✓ Evaluate the preparedness at all Governmental levels for the purpose of responding to any threatening disaster situation and give directions where necessary for enhancing such preparedness;
- ✓ Plan and coordinate specialized training programmes for DM for different levels of offices, employees and voluntary rescue workers;

- ✓ Coordinate response in the event of any threatening disaster situatin or disaster;
- ✓ Lay down guidelines for or give directions to the concerned Ministries or Departments of the Government of India, the State Government and State Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster;
- ✓ Require any department or agency of th Government to make available to the National Authority or State Authorities such men and material resources as are available with it for the purposes of emergency response, rescue and relief.
- ✓ Advise, assist and co-ordinate the activities of the Ministries or Departments of the Government of India, State Authorities, statutory bodies, other Governmental or non-governmental organizations and others engaged in DM.
- ✓ Provide necessary technical assistance or give advice to the State Authorities and District Authorities for carrying out their functions under this Act;
- ✓ Promote general education and awareness in relation to DM.
- ✓ Perform such other functions as the National Authority may require it to perform.

401.5 Role of nodal and other Central Ministries and Departments:

For various types of disasters, the nodal Ministry concerned will chart out detailed response plans which will be integrated into the National Response Plans. The NEC may coordinate response in the event of any threatening disaster situation or disaster.

Role of Central Ministries and Departments: As DM is a multi-disciplinary process, the NPDM lays down that all Central Ministries and Departments will have a key role in the field of DM. The nodal Ministries and Departments of Government of India i.e., Ministry of Agriculture, Atomic Energy, Civil Aviation, Earth Sciences, Environment and Forests, Home Affairs, Health, Mine, Railways, Space, Water Resources, etc., will continue to address specific disasters as assisted to them.

Institutional arrangements of Central Government:

- **Armed Forces:** Conceptually, the Armed Forces are called upon to assist the Civil Administration only when the situation is beyond their coping capability. In practice, however, the Armed Forces form an important part of the Government's response capacity and are immediate responders in all serious disaster situations. On account of their vast potential to meet any adverse challenge, speed of operational response and the resources and capabilities at their disposal, the Armed Forces have historically played a major role in emergency support functions. These include communication, search and rescue operations, health and medical facilities and urban transportation, especially in the immediate aftermath of a disaster. The air and heli-lift and movement of assistance to neighbouring countries primarily fall within the expertise and domain of the Armed Forces. The Armed Forces will participate in imparting training to Trainers and DM Managers, especially in CBRN aspects, heli-insertion, high altitude rescue, watermanship and training of paramedics. At the national level, the Chief of the Integrated Defensce Staff and the Chairman Chiefs of Staff Committee has already been included in the NEC. Similarly, at the State and District levels, the local representatives of the Armed Forces may be included in their Executive Commitees to ensure closer coordination and cohesion.

- **Central Paramilitary Forces:** The Central Paramilitary Forces, which are also the Armed Forces of the Union, plays a key role at the time of immediate response to disasters. Besides contributing to the NDRF, they will develop adequate DM capability within their own forces and respond to disasters which may occur in the areas where they are posted. The local representatives of the CPMFs may be co-opted / invited in the executive committee at the State level.

- **State Police Forces and Fire Services:** The State Police Forces and crucial immediate responders to disasters. The Police force and the Fire Service upgraded to acquire multi-hazard rescue capability.

- **Civil Defence and Home Guards:** The mandate of the Civil Defence and the Home Guards will be redefined to assign effective role in the field of DM. They will be deployed for community preparedness and public awareness. A culture of voluntary reporting to any duty stations in the event of any disaster will be promoted.

- **State Disaster Response Force (SDRF):** States will be encouraged to create response capacilities from within their existing resources. To start with, each state may aim at equipping and training one Battalion equivalent Force. They will also include women members for looking after the needs of women and children. The States and UTs will also be encouraged to include DM training in their respective Police Training Colleges and basic and in-service courses for gazette and non-gazetted officers.

401.6 Guidelines issued by NDMA and action thereon:

Till 2010, NDMA have already issued guidelines on the management of earthquakes, cyclones, floods, medical preparedness and mass casualty management, chemical disasters, biological disasters, nuclear disasters, chemical (terrorism0 disaster, landslides and snow avalanches and preparation of State DM Plans, incidence response system, strengthening of safety and securing for transportation of POL tankers, management of tsunamis, role of NGOs in DM, management of drought, etc.,. These guidelines are available on the NDMA website. These guidelines are statutory and mandate all the stakeholders including Railways to take necessary measures for prevention and mitigation of all types of disasters possible on their system and also to have mechanism in place for rescue, relief and restoration, if these happen.

401.7 Guidelines on chemical disasters:

These are issued by NDMA and are very relevant for the Railways, as we transport a number of hazardous chemicals by rail. These guidelines add to safeguards listed in the Red Tariff on handling, storage and transportation of hazardous material. These

guidelines are directed more towards their prevention and mitigation of their effects, if these happen, than on rescue and relief operations afterwards.

401.8 Guidelines on chemical (Terrorism) disasters:

These guidelines call for the railways to strengthen mechanism against chemical terrorism related disasters. Medical and RPF Personnel would be required to be given specialized training to handle such disasters.

401.9 Guidelines on nuclear and biological disasters:

These guidelines call for the railways to take stipulated precautions in the transportation of radio-active substances and chemical (biological) items.

401.10 Guidelines on preparation of State DM Plans:

These plans concern the Zonal Railways to the extent that coordination mechanism between the State and the Railways institutionalized for disaster response. The Relief Commissioners in the States may be coordinated for assistance required from the State Governments, District Officials as also to involve NGOs. Mutual sharing of each other strengths and facilities has tobe institutionalized as a syste.

401.11 Guidelines on medical preparedness and mass casualty management:

This envisages train based casualty transport and evacuation system with following highlights;

a. In MCM (Mass Casualty Management), wherever required Railways need to provide transportation facility for mass casualty evacuation. Where required, ARMVs or special trains may be run to facilitate relief from the nearest coaching terminal to the disaster site.

b. The railway disaster plan will provide support to the community and local administration during mass casualty emergencies. Assistance through railways infrastructure of hospitals, etc., has to be provided as and when it is asked for.

NATIONAL POLICY ON DM (NPDM):

The DM Act 2005 enacted by the Parliament was notified in the Gazette of India on 26th December 2005. The Act provides for legal and institutional framework for the effective management of disasters. The Act mandates creation of new institutions and assignment of specific roles for Central, State and Local Governments. Under the provisions of the Act, the NDMA (National Disaster Management Authority) has been established under the Chairmanship of Prime Minister and a National Executive Committee (NEC) of Secretaries has been created to assist the NDMA it the performance of its functions. At the State level, a State Disaster Management Authority has been created under the Chairmanship of Chief Minister which has been assisted by a State Executive Committee. At the District level, District Disaster Management Authority under the chairmanship of Collector is entrusted for the entire mechanism.

The responsibility of laying down the policies on DM, approving the NPDM and laying down the guidelines on DM has been given to NDMA under the Act. The NDMA accordingly prepared a draft of the NPDM in consultation with the Home Ministry and submitted the same for approval of the Government.

The Home Ministry has circulated the draft NPDM to the concerned Central Ministries and all the State Governments / Union Territories. The comments received by the Central Ministries / State Governments / Union Territories were duly examined and the acceptable views / comments of Central Ministries / State Governments / Union Territories have been duly incorporated in the NPDM. Approval of the cabinet to the NPDM was given in the cabinet meeting on 22.10.2009.

The NPDM envisages a holistic approach to DM, encompassing the entire DM cycle including prevention, mitigation, preparedness, relief, response, rehabilitation and reconstruction. It addresses all aspects of DM covering institutional, legal and financial arrangements, capacity building, knowledge management, research and development. It

focuses on the areas where action is needed and the institutional mechanism through which such action can be channalised.

402 DM ACT – 2005

It is the central legislation on Disaster Management around which all DM related activities revolves since its enactment. It dictates a holistic approach to Disaster Management from responding to disasters to greater attention for prevention, mitigation, capacity building and preparedness.

403 DEFINITION OF DISASTER

Disaster is defined as ***"means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, or damage to, or degradation of environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area".***

404 DISASTER MANAGEMENT IS EXPLAINED IN THE ACT IS AS UNDER:

DM means a continuous and integrated process of planning, organizing, co-ordinating and implementing measures which are necessary or expedient for-

- Prevention of danger or threat of any disaster.
- Mitigation or reduction of risk of any disaster or its severity or consequences.
- Capacity building
- Preparedness to deal with any disaster.
- Prompt response to any threatening disaster situation.
- Assessing the severity or magnitude of effects of any disaster.
- Evacuation, rescue and relief
- Rehabilitation and reconstruction.

405 SECTION – 35

The Central Government shall take all such measures as it deems necessary or expedient for the purpose of disaster management and it shall include:-

a) Co-ordination of actions of the Ministries or Departments of the Government of India, State Governments, National Authority, State Authorities, Governmental and Non-Governmental Organisations in relation to DM.
b) Ensure the integration of measures for prevention of disasters and mitigation by Ministries or Departments of Government of India into their development plans and projects;
c) Ensure appropriate allocation of funds for prevention of disaster, mitigation, capacity building and preparedness by the Ministries or Departments of the Government of India.
d) Ensure that the Ministries or Departments of the Government of India has necessary measures for preparedness to promptly and effectively respond to any threatening disaster situation or disaster;
e) Co-operation and assistance to the State Governments, as required by them;
f) Deployment of Naval, Military and Air Forces, other armed forces of the Union or any other Civilian personnel as may be required for the purposes of this Act.

406 SECTION – 36

It shall be the responsibility of every Ministry or Department of the Government of India to –

a) Take measures necessary for prevention of disasters, mitigation, preparedness and capacity building in accordance with the guidelines laid down by the National Authority.

b) Integrate into Development Plans and projects, the measures for prevention or mitigation of disasters in accordance with the guidelines laid down by the National Authority;

c) Respond effectively and promptly to any threatening disaster situation or disaster in accordance with the guidelines of the National Authority or the directions of the National Executive Committee in this behalf;

d) Review the enactments administered by it, its policies, rules and regulations, with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;

e) Allocate funds for measures for prevention of disaster, mitigation, capacity building and preparedness;

f) Provide assistance to the National Authority and State Government for
   i. Drawing up mitigation, preparedness and response plans, capacity building, data collection and identification and training of personnel in relation to DM.
   ii. Carrying out rescue and relief operation in the affected area;
   iii. Assessing the damage from any disaster;
   iv. Carrying out rehabilitation and reconstruction.

g) Make available its resources to the National Executive Committee or a State Executive Committee for the purposes of responding promptly and effectively to any threatening disaster situation or disaster, including measures for –
   i. Providing emergency communication in a vulnerable or affected area;
   ii. Transporting personnel and relief goods to and from the affected area;
   iii. Providing evacuation, rescue, temporary shelter or other immediate relief;
   iv. Setting up temporary bridges, jetties and landing places;
   v. Providing drinking water, essential provisions, healthcare and services in an affected area;
   vi. Take such other actions as it may consider necessary for DM.

407 SECTION – 37

1. Every Ministry or Department of the Government of India shall –
   a) Prepare a DM Plan specifying the following particulars, namely;
      i. The measures to be taken by it for prevention and mitigation of disasters in accordance with the National Plan;
      ii. The specifications regarding integration of mitigation measures in its development plans in accordance with the guidelines of the National Authority and the National Executive Committee.
      iii. Its role and responsibilities in relation to preparedness and capacity building to deal with any threatening disaster situation or disaster;
      iv. Its role and responsibilities in regard to promptly and effectively responding to any threatening disaster situation or disaster;

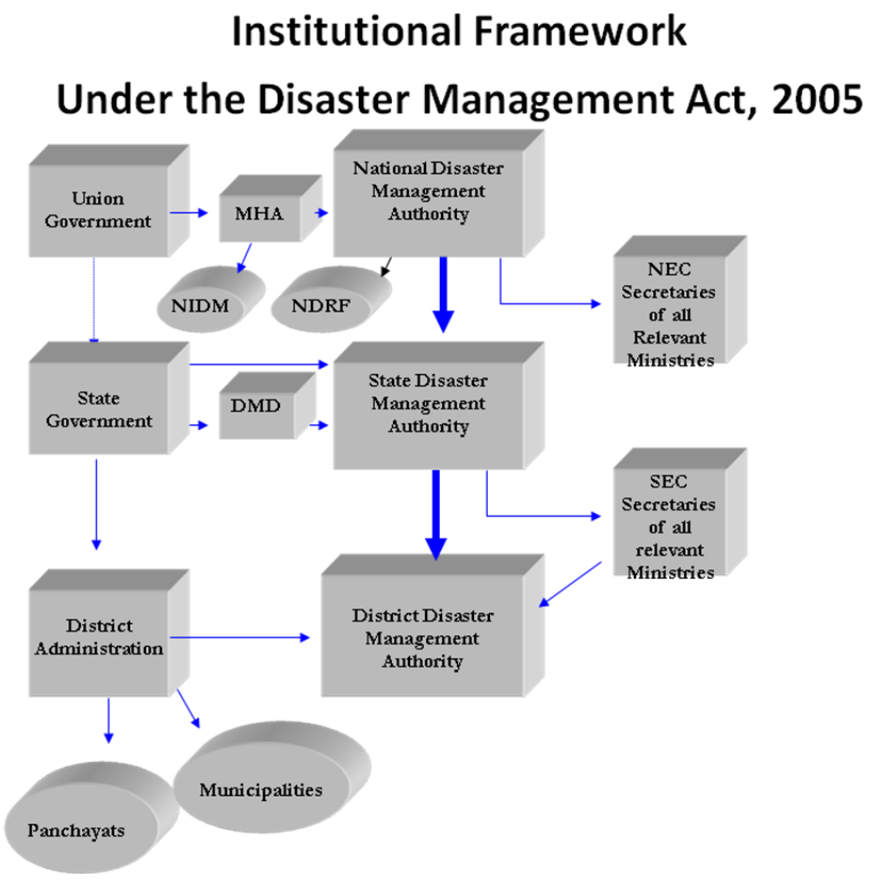
v. The present status of its preparedness to perform the role and responsibilities specifying in sub-clauses (iii) and (iv);
vi. The measures required to be taken in order to enable it to perform its responsibilities specified in sub-clauses (iii) and (iv)

b) Review and update annually the plan referred to in clause (a);

c) Forward a copy of the plan referred to in clause (a) or clause (b), as the case may be, to the Central Government which Government shall forward a copy thereof to the National Authority for its approval.

2. Every Ministry or Department of the Government of India shall –
   a) Make, while preparing DM Plan under clause (a) of sub-section (1), provisions for financing the activities specified therein;

   b) Furnish a status report regarding the implementation of the plan referred to in clause (a) of sub-section (1) to the National Authority, as and when required by it.



No Railway official is nominated either in National Executive Committee (NEC) or State Executive Committee (SEC), though they can be co-opted as per need.

408 TYPES OF DISASTERS CAUSING INTERRUPTION TO TRAIN SERVICES:

A) HUMAN/EQUIPMENT FAILURE:

The disasters/accidents may be caused by human/equipment failures, which may affect normal movement of train services with loss of human life or property or both. These include:

- Collisions
- Derailments
- Accidents at manned or unmanned level crossings.
- Fire or explosion in trains
- Other accidents affecting the safety of rail operation.

B) NATURAL DISASTERS:

Natural disaster in general like floods, cyclones is forecasted; whereas others like earthquakes, landslides etc. are difficult in nature to forecast. But preparedness for floods & cyclone will help in tackling situation for other natural disasters also.

1. Landslide:

- Whenever landslide is expected / experienced due to heavy downpour, all train services to be regulated.
- Rescue team to be rushed for restoration work.

2. Floods:

Based on the weather forecast warnings regarding impending flood condition, the following steps should be taken:

- Watchman at important bridges and at vulnerable points to inform flow of water to be posted.
- Shifting of all movable equipment around the bank.
- If time permits, sandbags, dykes can be constructed to ensure safe passage of trains.
- Regulate the train service till the flood recedes.
- Evacuate people on train / at station and move them to a safer place.
- Contact Fire brigade, Naval, Army, Air force, Local boat man and arrange Divers and boats.
- With the co-ordination of local authorities, arrange temporary shelter in nearby schools, marriage halls, community centres etc.
- If necessary, arrange coaches to accommodate the affected.
- Seek assistance from voluntary organisation and arrange safe drinking water, food, medicines, etc.,
- RPF and GRP in co-ordination with local Police shall arrange protection.
- Keep constant communication with Divisional Control Office.
- When people are marooned by floods, arrange air dropping of food packets, clothes etc., with the assistance of Civil Administration.
- Contact SJAB (St. John Ambulance Brigade), local doctors and provide medical care to the affected.

3. Cyclone / Storm:

When a train is caught in a cyclonic storm at mid section/station:

- Stop the train clear of cuttings, bridges and embankments.
- Guard, Loco-Pilot and other Railway servants on train shall keep open windows and doors of all coaches.
- At stations where Anemometer is installed, shall not start trains when the wind velocity exceeds the permitted level of 65 KMPH. At other stations when the wind velocity exceeds safe limits, SM must consult with Control and GDR of the train before starting.
- Make announcement frequently to warn the public about the storm/cyclone.
- Take all necessary action to provide shelter and other assistance as in the case of floods.

C) PREPAREDNESS FOR NATURAL DISASTER FROM DEPARTMENTS

1. Engineering Department

- Shall identify Risk Zones prone for natural disasters like floods, cyclones or earthquakes with the help of Meteorological Department.
- Shall identify major infrastructures like track, bridges and buildings and such inventory analysed for its strength to withstand such disasters.
- Shall keep sufficient stock of track materials.
- Shall ensure arrangement of essential items like empty bags, sand, dust, cinders etc. ready to be moved to vulnerable locations.
- Intensify Patrolling of track at vulnerable locations.

2. Mechanical Department

- Shall ensure that ARTs, ARMVs are equipped with sufficient tools.
- Staff of proven caliber to be nominated to man ARTs/ARMEs

3. Medical Department

- Shall ensure availability of adequate medicines first and materials, disinfectants etc. at Health Units / Hospitals near the vulnerable places.

- Shall take enough measures to prevent epidemics, in co-ordination with Engineering Department for sanitation and disinfection of drainage and public places.

4. Electrical Department

- Shall ensure availability of standby power (generator) at strategic locations.
- In OHE area, sufficient stock of relief materials shall be kept.
- Tower Wagons with quick mast erection facilities and sufficient spares should be kept ready at Tower Wagon Shed (for electrified section).

5. Telecommunication Department

- Shall ensure proper communication with adequate facilities like Wireless Communication, Satellite phones etc.

6. Transportation Department

- Requirement of essential staff and their deployment shall be assessed by Sr.DOM of respective Divisions.
- SMs of the warned area stations, in co-ordination with assistance respective Departments, shall ensure all station equipments like Generator, Emergency light VHT sets, First Aid equipment etc. are in good condition.
- SMs will also ensure proper securing of stabled coaches / wagons as per extant instructions.
- COM of the Railway will issue instructions regarding regulation, diversion or cancellation of trains in the warned section with information to CPRO.

7. Commercial Department

- Shall alert arrangements to open enquiry offices at areas likely to be affected.
- Shall ensure arrangement for food, water and other requirement at vulnerable places.

8. Security Department

- Alert Security personnel to accompany relief material trains and render assistance at vulnerable stations in handling public enquiries.
- Arrange for crowd control and also prevention of theft.

9. General

- Apart from the above, each PHOD/DRM shall nominate an officer to monitor warned location and order arrangement.
- A monitoring cell shall be formed by all Departments concerned at Divisional and Zonal level to ensure proper co-ordination and planning.

D) ACTION PLAN FOR DIFFERENT EXIGENCIES:

- When first tremors are sensed during an Earthquake, all Personnel should evacuate buildings and assemble at safe places away from structures, walls and falling objects.
- Emergency shutdown should to be declared.
- Emergency response plan to be activated.
- After the status is restored, personnel should inspect all the facilities for rescue, assessment of damage, cleanup, restoration and recovery.

(E) MAN MADE DISASTER & POST DISASTER MANAGEMENT:

The following disasters / accidents may be caused by human activities, which may affect the normal movement of train services with loss of life or property or both.

Sabotage causing deliberate loss of life/damage to property or both.

- Bomb threat/ blasts.
- Setting fire to Train.
- Tampering with Railway fittings to cause accidents.
- Placing of obstructions on track to cause disruption to traffic

1. Bomb threat/Blast:

Person receiving call regarding bomb threat:

- Should attempt to gain as much information as possible from the caller ID devices, time set, location, reason / purpose of the act, dialect mannerism and identity of the caller.
- The person receiving call should inform higher ups who in turn shall alert the Disaster Management team (Bomb detection squad).
- Also, alert Police, Fire Brigade and Explosive Department.
- Pass the information to all Departments concerned.
- Take initiative for evacuation of all from the premises.
- Person noticing a bomb like object, should bring it to the notice of the nearest available Officer.
- Inform Railway Police, RPF, and Bomb detection squad.
- Ensure all persons are away from the spot and to avoid unnecessary crowding near the area.
- Inform control to take further steps of regulating the train services.
- Wait for clearance from the Police Department to restore normal working.

2. Tampering of Railway fittings causing accidents & Placing of foreign particles on track to cause disruption to traffic

- A staunch vigil should be kept by introduction of special patrolling over the area as and when warranted with assistance of RPF personnel.
- Specially trained persons shall be drafted for duty over the area if required.

3. Radiation Emergency/Personal Injury Involving Radioactive Material Contamination

- Render first aid immediately for serious injuries.
- As far as possible, without causing harm to the victim, monitor the injured and remove contaminated clothing and gross personal contamination.
- Remove and bag all contaminated clothing.
- Call Fire Station, bomb squad, and police.

- Skin contamination should be cleaned using mild soap and warm water. Use portable survey meter to monitor for remaining contamination. If not free of contamination, re-wash and re-survey.

4. What to do upon suspected letter/package receipt

- Call Police/Fire Service/ Bomb Squad.
- Handle with care
- Don't shake or bump
- Isolate and look for indicators
- Don't open, smell, or taste
- Treat it as suspect

If parcel is Open and/or Threat is identified for a Bomb

- Evacuate immediately
- Call Police / Fire Service / Bomb Squad.

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CHAPTER V

(PREPAREDNESS)

501 DISASTER RESPONSE

A. INSTANT ACTION TEAM – Loco-Pilot / Assistant Loco-Pilot, Guard & other on-board staff – their duties.

Duties of LP & ALP:

- Ensure loco flasher light is switched 'on'.
- Note down the time, location and weather condition.
- Ensure the formation is secured, protect the train giving priority for protection on adjacent line/s on double and multiple line sections.
- Inform the Guard, nearest SM and SCOR/TPC by using walkie-talkie set/CUG/emergency telephone socket, etc., i.e., in other words make efforts for quickest possible means of communication for transmitting the information.
- Render first-aid and assist Guard in saving the lives.
- Ensure the speedometer memory freeze button is operated duly breaking the glass cover.
- Ensure the important documents such as BPC, VG, caution order and other train passing documents given en-route by the station Operating staff are handed over to the Inspector / Officer who arrives first at the accident site.
- Ensure the important documents / registers are seized from Gate lodge, in case of accidents involving road-users.
- In case of fire related accidents, make use of the fire extinguishers loaded in the locomotives.
- Ensure the clues are not disturbed.
- Do not allow the unaffected wagons / coaches from the site of accident unless they are permitted so by the ART Supervisor or by the C&W official or by conducting GDR check.

Duties of Guard:

- Ensure the LV board / flashing tail lamp is available / properly working during day / night and foggy weather respectively.
- Note down the time, location and weather condition.
- Ensure the formation is in secured position.
- Protect the train in rear and ensure the adjacent line is protected first on double and multiple line section by loco crew.
- Inform the SM and SCOR by the quickest possible means such as walkie talkie set, CUG mobile phone, using the portable control telephone (in case of coaching trains), through nearby LC Gate telephone or IB Signal post telephone, stop the adjacent line trains and convey the information of accident or detach the loco (if, in good condition) and send it to the nearest station, etc.,
- Make a quick survey of the accident site and ask for relief accordingly.
- Render first-aid to the injured passengers and assist / co-ordinate with loco crew in saving the lives, transport the injured to the nearest hospitals/nursing homes/clinics.
- In case of fire related accidents, make use of the fire extinguishers available in the Guard compartment of SLR/LRs.
- Ensure all the clues are preserved.
- Ensure the important documents / registers are seized from Gate lodge, in case of accidents involving road-users.
- Do not allow the unaffected wagons/coaches from the site of accident unless they are permitted so by the ART Supervisor or by the C&W official or by conducting GDR check.

Duties of TTE and Pantry Car staff:

- Avail the services of the doctors and other paramedical staff travelling by the train in rendering first-aid to the injured and in transporting the injured to the nearby hospitals / clinics / nursing homes.
- Render first-aid to the injured passengers.

- Prepare a list with the details of the injured passengers such as name, age, sex, ticket no., along with coach no./ berth no. and contact telephone no., etc.,
- Assist in transporting the injured to the nearby locations where medical facilities are available.
- Co-ordinate with local volunteers and other Railway officials at the site of accident.
- In case of fire related accidents, make use of the fire extinguisher units kept in the AC Coaches, Pantry Cars and at stations.
- Inform the stranded passengers about the cancellation, regulation and diversion of trains as given by Control Organisation.

Duties of AC Mechanics and Coach Attendants:

- Switch 'off' the power supply and avoid short circuiting.
- Assist the LP, Guard, TTE or any other Railway official at the site of accident in saving the lives and in transporting the injured to the nearby hospitals.
- Render first-aid to the injured by using the first-aid boxes available with the in-charge of the Pantry Car and from the Guard.
- Make use of the fire extinguishers kept in the AC coaches in cases of fire related accidents.

Duties of Security staff on escorting duty:

- Render first-aid and help in extricating the entrapped passengers.
- Ensure safety and security of the relatives /dependants of injured passengers and also the security of railway property.
- Protect the clues at the site of accident and collect such P.Way material and Rolling stock parts including that of locomotive which would contributed for the accident.
- Protect the bag and baggage of the train passengers.
- Ensure crowd control by providing plastic tape barricades and give warning messages through hand-held loud speakers.
- Assist Civil Police and GRP.

502 B. FIRST RESPONDERS – NEAREST GANG, STATION MASTERS, OTHER DEPARTMENTAL OFFICIALS – DUTIES

Duties of Engineering Gang:

- The Gangmate and his team of Trackmen should rush to the accident site immediately.
- Render all possible help to the injured passengers and co-ordinate with other Railway officials in relief and rescue work.

Duties of Gatemen:

- Keep the LC Gate in closed condition, if the train is stopped within the gate portion.
- Exhibit stop hand signal to trains coming on adjacent lines.
- Inform the SM of the station to which the LC Gate is connected.

Duties of Station Masters/Managers:

- Do not allow any train into the affected block section on the same line and also on adjacent line on double line/multiple line sections.
- Inform the SM of the adjacent block station, SCOR, Medical authorities (both Railway and non-Railway) and other Officials / Officers (like SSE/SE/JE-P.Way, SSE/SE/JE-C&W, SSE/SE/JE-Electrical, SSE/SE/JE-Signal and Telecom Department, Security Officials, GRP, CCC, SLI, AEN / ASTE / AO / AM, etc., stationed at the station.
- Mobilise all kinds of medical resources available at the station, i.e., Railway and non-Railway to go to the accident site and to take care of the injured passengers brought to the Civil Hospitals/Nursing Homes/Clinics, etc.,
- Inform the Civil, Revenue, Police, Transport, NGO Organisations, Political dignitaries, fire fighting officials, etc.,
- Seize the registers and records from the station / cabin.
- In case of accident at station, note down the position of points / signals/ block instrument position, BPAC condition, Relay Room position, data logger condition, etc.,

- Co-ordinate in making catering arrangements in consultation and sanctions from Divisional/Zonal Headquarters.
- Ensure that Public Assistance booth is opened and manned continuously with details of dead, injured, locations where they are undergoing treatment, details of cancellation/termination/diversion of trains. The necessary infrastructure required to man the booth also to be arranged.
- Call the 'off' duty staff to assist at the station.
- Assist the stranded passengers by arranging catering, transport, medical, shelter arrangements, etc.,

Duties of SSE/SE/JE-P.Way of the section:

- Proceed to the spot immediately.
- Seize the documents from the LP such as BPC, Caution Order, train passing documents, etc.,
- Secure and preserve the gang diary, gang chart, curve register, etc.,
- Assess the accident site and call for the assistance accordingly.
- Assist and co-ordinate with other officials in relief and rescue work.
- Preserve all the clues at the site of accident.
- Prepare the accident sketch.
- Execute other functions as ordered by Officers at the accident site.

Duties of Section TI:

- Proceed to the spot immediately.
- Ensure that no other train is sent into the block section except relief trains.
- In case of accident at station, seize all the relevant station records and registers.
- Seize the important documents from the LP such as BPC, Caution Order, train passing documents, etc.,
- Keep close liaison with Control Organisation and assist in receiving the relief trains at the site. In case of accident at station, assist the SM in receiving, despatching,

marshalling the relief trains and noting down the position of signals/points/block instrument/BPAC, etc.,

- Execute other functions as ordered by Officers at the accident site.

503 C. DM TEAM – DUTIES AT ACCIDENT SITE

Nominated officials from various Departments arriving at site by MRVs and ARTs form part of the DM Team. Officials representing each Department are responsible to ensure that assigned duties of their respective Departments are efficiently carried out. Senior officers of each Department shall also ensure that their work is synchronised with that of functionaries of other Departments for quick rescue, relief and restoration operation.

Members of DM Team: Disaster Management team normally comprises members of following Departments.

a. Trained men from Medical, Commercial, Mechanical, Electrical, Engineering, Security, Operating, Safety and S&T Departments.

b. In case of fire related accidents, fire service personnel shall also form part of the team.

c. In case of water-logged accidents, water body, divers and naval cadets will also form part of the team.

d. In case of suspected sabotage or bomb explosion – bomb disposal squads, forensic lab officials (central and / or state) and GRP/local Police authorities shall also form part of the team.

e. Various rescue units shall accompany MRVs, ARTs or move by quickest possible means to site of accident.

Officer in-charge of site (OIC site): On arrival of MRV at the site of accident, DRM of the Division shall take over as OIC site from the senior most officer. DRM will be responsible for forming core groups as required and direct them to carry out efficient rescue, relief and restoration operations.

Rescue, Relief and Restoration operation: DM team on arrival shall undertake the following action;

A. Crowd control and law & order

B.Rescue operation

C. Clearance from State Police for restoration, where required.

D. Relief operations

E.Installation of communication network

F. Video coverage of accident site

G. Preservation of clues and evidences

H. Media management

I. Salvage operation

J. Restoration operation

K. Lighting arrangements

L.Catering facilities, etc.,

Photography and videography: Prior to restoration work, Divisional authorities shall undertake suitable video coverage if the complete restoration work. Still photographs by digital camera shall also be undertaken extensively. The coverage and photographs shall be taken from a vantage point and from different angles apart from close-ups and Birdseye view filming. Such photographs shall clearly indicate;

a. Severity of the accident

b.Illustrate the damage to P.Way, rolling stock, signal, OHE and other structures and equipment.

c. Victims and unidentified bodies should also be extensively photographed for easy identification, payment of ex-gratia, etc.,

General: For efficient Disaster Management, responsibilities of various Departments are to be executed by deputing responsible Officers and Supervisors. Important duties of such Officers and Supervisors are enlisted below:

a. Ensuring the setting of Unified Command Centre

b. Collecting the information on progress of restoration from OIC site.
c. Take stock of the situation and plan for effective and efficient rescue operation.
d. Estimate the quantum of assistance required from the resources available within the Division, adjoining Divisions, non-Railway agencies and from State/District authorities.
e. Ensure general co-ordination from various Departments.
f. Intimation to District Civil, Revenue, Police authorities.
g. Given prima-facie cause of the accident and probable time of restoration.
h. Total no. of dead, injured with complete details.
i. No. of wagons/coaches involved in the accident, their details and position.
j. Forecast for completion of each activity such as rerailment, track fitness, OHE fit, points and interlocking, clearance of section and movement of first train.

Formation of two teams at accident site for round the clock working:

1. At the accident site, Officers available from the Division shall be formed into two teams for round the clock working in 2 shifts.
2. PHODs/HODs shall take decision regarding composition of the team for night shift for their respective Department.
3. Supervisors of the Division shall also be divided into two teams by their Controlling Officers.

504 D. CO-ORDINATION CENTRES – Role of Divisional Control, Central Control and Disaster Control

Divisional Control

1. Stop movements of trains into the affected block section including adjacent line trains on double and multiple line sections.
2. Order MRV and ARTs on either side of the affected section and in case of more casualties order the adjoining Division's relief trains. Also ensure to order and move the crane specials.

3. Allow only relief trains and give top priority to Accident Relief Medical trains and other relief trains. As a rough thumb rule, the scale of assistance required would be one relief train from a Division for every 50 injuries.
4. Inform DRM, ADRM and other Divisional Officers in the following order:
    a. Sr. DSO
    b. Sr.MS/MS (in case of passenger carrying trains)
    c. DRM
    d. ADRM
    e. Sr.DOM
    f. PRO
    g. Sr.DME
    h. Sr. DEN
    i. Sr.DEE
    j. Sr.DSC / DSC
    k. Other Officers

5. Inform SMs at either end of the block section, Central Control, Civil Authorities, State Government officials.
6. Maintain a log of events in chronological order till the complete restoration; including the details of first train passed over the section.
7. Advise Civil, Military, Private hospitals apart from Railway Hospitals to rush medical aid to the site of accident and to be in preparedness to admit the injured passengers.
8. Arrange for despatching the rescue and relief equipment to the site of accident.
9. Inform the NGO Organisations to solicit their help in relief operations.
10. Run the special trains with injured to the originating / destination of trains or as ordered by the Officers.
11. Arrange for running of duplicate trains for clearing stranded passengers as ordered on priority.
12. Arrange for regulating traffic by diverting / cancelling / terminating trains.
13. Advise the stations about the diversions / cancellations and termination of trains.

14. Collect the details of dead and injured and the locations where they are admitted for medical treatment.
15. Liaison with Commercial Department and ensure that information centres are opened at the accident site and at important stations enroute for the benefit of public.
16. Guide the station staff.
17. Do collect the voice logger CD from the S&T Branch for the benefit of the Accident Enquiry Committee.
18. Do pass clear remarks on the chart along with timings about all instructions given to various agencies.

Duties of Central Control

2. As soon as the information about the accident is received from the Divisional Control, inform all the Officers of Headquarters immediately in the order given along with timings and keep a record of the same.

3. Central Control shall inform all concerned at Headquarters office including GM, PHODs, HODs, etc in the following order:-
    a. CSO
    b. CMD (in case of passenger carrying train accidents)
    c. Secretary to GM
    d. AGM
    e. CPTM
    f. CPRO
    g. Dy.COM/Chg
    h. Dy.CSO/Traffic or Dy.CSO/Electrical or Dy.CSO/Mechanical or Dy.CSO/S&T
    i. COM
    j. PCE
    k. CME
    l. CEE

m. CSC

n. Other PHODs / HODs

505 DUTIES OF OFFICIALS / OFFICERS – MEDICAL DEPARTMENT

On getting emergency call;

- Note down time of receiving message.
- Collect necessary Medical team.
- Inform CMS, other Doctors and staff.
- Alert blood donors, Saint John's Ambulance.
- At least one Doctor to remain in the hospital.
- Move Emergency boxes from ARME–Scale II/Health Unit/Hospital to site.
- Ensure arrival of MRV staff and report its readiness to traffic official.
- Reach the site by road if it is quicker.
- Check all the equipment in MRV while on run.
- Get the operation theatre ready.
- Arrange to inform CMD about the movement of MRV.
- Keep MRV ready to treat the injured without delay.

On reaching the site Medical Officer in charge;

- Refer the list of injured passengers prepared by TTE/TS and assess the situation.
- Plan for efficient Medical Management.
- Ensure rapid access to all injured passengers.
- Take assistance of Mechanical/Engineering/RPF staff and extricate the passengers.
- Conduct a thorough search of coaches including lavatories/vestibules for injured/dead.
- Open the First Aid Post/Clinic and depute a team exclusively to man it.
- Form different groups if required to handle more number of casualties at a time
- Ensure collecting blood and urine samples of Crew of the train/trains in time.
- Ensure the stabilization of condition of injured.
- Ensure expeditious transportation of injured to the MRV/nearby hospitals.
- Take a list of Dead/injured and communicate with the following details.

- **If found Conscious**: Name, sex, age, identification marks, address, ticket number, originating and destination Station.
- **If found Unconscious**: Approximate age, sex, identification marks, ticket number and the particulars if relatives and friends are available.

- Ensure covering of bodies with shrouds.
- Arrange to move bodies to Govt. hospital with the assistance of RPF/ Commercial Department.
- Take necessary steps to handle unhygienic condition that may arise due to decomposed/mutilated bodies.
- Certify the injured/dead and inform Site Manager for arranging on the spot ex gratia payment.
- The Medical Officer at Division/Head Quarters shall have constant touch with site; if necessary arrange supplemental Medical assistance.

506 DUTIES OF MECHANICAL OFFICIAL/OFFICER

On getting emergency call;

- Collect details about the accident and assess the requirement
- All nominated Break Down special staff shall report to the in charge.
- Ensure marshalling of BD special according to site requirement
- Inform the traffic official about BD special readiness
- Ensure the requirement of Crane/Re-railing equipment and marshal accordingly

On reaching the site;

- The specially trained CRACK TEAM shall extricate the passengers from the affected coaches in co-ordination with the Medical Team.
- For efficient extrication of entrapped passengers take the assistance of Engineering Department/Electrical Department.
- Be cautious in using the rescue tools like cutter, spreader etc.
- If suspected spillage of inflammable substances use only Cold cutting equipment.
- In case of suspected sabotage, to save lives extricate passengers after taking photograph / video graph and ensure minimum interference to clues.
- If necessary ask for supplemental assistance

- Ensure that Speedo graph, engine repair book etc. are seized/sealed.
- Record details of Brake Power and other aspects of Rolling Stock as per the Pro-forma.
- Take joint measurements of the rolling stock
- Note down the observations and measurements of Loco etc. at site if it is not possible arrange for taking the reading at shed.
- Monitor the efficient working of Cranes/Re-railing equipment to clear or rerail the affected Rolling stock.
- Examine the unaffected/re-railed Rolling stock and certify for further movement.
- Take precautions in electrified section that the power supply is switched off before commencing the rescue/relief work.
- Use necessary safety equipment like Hand gloves, Helmet etc.
- Arrange the trained manpower in shifts for continuous rescue/relief operations.
- Plan for quick restoration of traffic.
- Sr.DME on getting information assess the situation and proceed to site if warranted.
- A responsible Mechanical Officer shall be available in the Control Office and co-ordinate with the site/other department.
- Always ensure the safety of the staff working at the site.
- Assess the damage to the Rolling stock.

507 DUTIES OF ENGINEERING OFFICIAL/OFFICER

On getting emergency call;

- Collect details of accident and assess the requirement
- AEN/SSE (P.Way/Works) shall collect men, rescue tools and proceed to site by MRV and assist in the rescue of passengers.
- Keep ready necessary men and material by BD special

On reaching the site;

- Assist Medical/Mechanical Department in rescue work
- Arrange to provide a temporary shelter at site with tents for Medical Clinic, Catering, Stores and for the Site Manager with basic facilities.

- Ensure availability of water supply.
- Ensure preservation of clues as per procedure.
- Provide necessary dummy track for Restoration work/Crane working.
- Plan for quick restoration of traffic.
- If necessary move Gang staff from adjacent unit/Division.
- If necessary under the direction of DRM Contact Army/Navy/Air Base and collect the required personnel like Divers for rescue operation.
- If necessary hire Private Crane, Bulldozers, Earth movers etc.
- One Engineering Officer shall be available in Control office for monitoring and arranging reinforcement of men and material.
- Plan for coordinated working and movement of track machine for quick restoration with TRD official and transportation official.
- Assess the cost of damage to the Engineering Department.

508 DUTIES OF SIGNAL & TELECOMMUNICATION OFFICIAL / OFFICER

On getting emergency call;

- Collect details of accident and assess the requirement.
- Arrange to move Satellite phone by available means including road transport to the site.
- Depute one officer to control office to coordinate with accident site, emergency control and other officers.
- Adequate number of mobile phones available with the Divisional staff should also be rushed to site for emergency use.
- Send required number of telecom staff by Accident Relief Train for installation and operation of telecom equipment.

On reaching site

- Provide portable Telephone / Emergency Telephones at site and man it.
- Install at least two BSNL phones with STD facilities and communicate the contact numbers to all concerned.
- Ensure availability of adequate copies of Disaster Management telephone directory containing important telephone numbers. This directory should be updated once in

3 months by the fault control staff of the Divisional office duly verifying each of the numbers.

- Provide Walkie-talkie set and chargers.
- Provide Railway phone connectivity Emergency Control/ Zonal Headquarters.
- Provide satellite/mobile communication facility
- Wherever feasible provide wireless sets/use services of HAM
- Provide adequate number of Public Address system/Hand sets
- Note the position of levers, knobs, slides, indicators as the case may be, preserve clues- Seal block instruments, relay room etc.
- Restore working of S&T equipment like signal, points etc after getting clearance from the Site in charge.
- Assess the cost of damage to S&T equipment.

509 DUTIES OF COMMERCIAL OFFICIAL/OFFICER

On getting the emergency call;

- Collect details of accident and assess requirement for arranging relief to the injured/dead and the stranded passengers as under.
  - Drinking water/Beverages/Food packets etc.
  - Sufficient Labour for transshipment.
  - Sufficient coolie porters.
  - Ticket Collectors.
  - Govt./Private buses.
- The Commercial inspector shall withdraw sufficient amount of money from Station collection under the authorization of Sr.DCM

On reaching the site;

- Provide immediate transport facility to shift the injured to hospitals;
- Collect details of injured/dead and convey them to Emergency Counters;
  - Supply the following free of cost;
  - Free telegrams to the relatives of dead and injured;
  - Complimentary passes with the assistance of Personnel Inspector;

- Arrange ex-gratia payment on the spot to the injured and next of kin of dead;
- Assist Medical Department;
- Protect the luggage/belongings of injured/dead with the assistance of RPF;
- Protect luggage, parcels and goods;
- Arrange transportation of the stranded passengers, record the details of passengers dispatched and relay the particulars to Control;
- For information to general public;
  - Open information counters for giving information to public regarding the names of injured, dead etc.,
  - List of dead and injured to be displayed at a prominent place at station / important stations;
  - Make announcement through PA system on diversion of trains, regulations, and probable time of arrival of relief train;
- Arrange refund of fare through special counters;
- One Commercial Officer in Control Office shall coordinate with site and arrange supplemental assistance;
- Take care of the Media personnel;

510 DUTIES OF ELECTRICAL OFFICIALS/OFFICERS

- Provide lighting arrangements at site.
- Provide sufficient number of portable generators.
- Arrange supply from nearby sources if possible.

511 TRD OFFICIAL

- Move OHE staff to site.
- Switch off OHE supply to enable safe rescue work.
- Clear OHE obstruction by slewing the wires for restoration.
- Ensure the section is earthed before the staff working near OHE.
- Ensure the preservation of clues as per procedure.
- Ensure early restoration.
- Ensure temporary portals are erected without delay.

512 TPC

- Where an EMU or Electrical Loco is involved arrange for relief Loco/Train if required.
- Send Sr. Supervisor to the site immediately with adequate shed/break down staff.
- Ensure that records of maintenance of Loco/EMU and repair books are seized and sealed.
- One Electrical Officer of respective branch in Control Office shall co-ordinate with site and arrange for supplemental assistance.

513 DUTIES OF SECURITY STAFF

- On getting emergency call;
  - Collect details of accident and assess the requirement.
  - Collect maximum manpower and proceed to site.
  - Inform nearby outpost for additional manpower.

  Security department while sending men to the spot necessary equipment as listed below shall be carried.

  - Torches/lighting arrangements.
  - Nylon ropes/poles to control crowd.
  - Loud Hailer for making announcements.
  - Stretcher and First Aid equipment.
  - Wireless sets/ Walkie-Talkies for communication.
  - Camera including Video camera.

  On arrival at site
  - Rescue passengers and assist Medical/Mechanical Department.
  - Cordon the site and prevent unauthorized entry of outsides.
- Protect the luggage and belongings of stranded/injured/dead
- Provide barricade and ask for additional force to control crowd during VIP visits.
- Obtain assistance of GRP/Local Police.
- Protect the Railway consignments/goods till it is properly handed over.

- In case of sabotage liaise with the officers of various departments, GRP, Local Police and officials of civil administration and get early clearance.
- Inform the development at the site to higher officials every hour.
- An RPF assistance booth to be opened if the operation continues for longer period.
- Preserve clues and evidences, take photograph/videograph etc.
- Care shall be taken to post staff at stations to avoid agitations from passengers due to delay/regulation/cancellation of trains.
- Ensure proper documentation about the number of persons injured/dead giving their identity and address if available.
- Arrange to guide the friends and relatives of injured/deceased.
- Maintain the log of events.

514 DUTIES OF CPRO/PRO

- On getting the information proceed to the Emergency Control Room.
- Collect the details on real time basis from the Emergency Control.
- Only the reliable details as confirmed by the Site Manager are to be given to the Print/Visual Media.

515 DUTIES OF PERSONAL INSPECTORS/OFFICERS

- DPO shall direct an Officer/Inspector to site
- Such officials like welfare Inspectors shall be available round the clock in shift to look after the welfare of the injured persons in hospitals.
- Issue pass to the relatives and escort the injured to hospital and back home if required.
- Assist Doctors in collecting details of injured/dead and shifting them to hospitals.
- Convey such information as required by Sr.DCM.

516 DUTIES OF DIVISIONAL ACCOUNTS OFFICER

- In case of serious accident an assistant officer shall be available in the control office and coordinate with the commercial officers in respect of payment of ex-gratia/other expenditures in the accident spot.

517 DUTIES OF DIVISIONAL SAFETY OFFICER

- Proceed to the site of accident by the first available means.
- Ensure the clues are preserved and video/still photos are taken as needed.
- Ensure that the front and the rear portions are cleared from the site.
- Ensure that joint measurements/ observations are recorded in the prescribed Pro-forma.
- Ensure that the evidence of the train staff, station staff and public are recorded on the spot.
- Addresses of the passengers willing to give statements later should also be obtained.
- Ensure proper co-ordination among all departments for efficient Rescue, Relief and Restoration work.

518 DUTIES OF DIVISIONAL OPERATIONS MANAGER

Immediately after getting the information,

- Ensure that the medical relief van, Breakdown Specials are ordered, moved and reach the spot without any detention.
- Ensure the marshalling of the crane if needed while proceeding to the accident spot.
- Inform Collector and other civil authorities with details.
- Open an Emergency Disaster Co-ordination Unit in the Control Office
- Plan for regulation of Passenger/Express trains, cancellation, diversion, and termination short of destination in consultation with the Headquarters in time.
- Ensure efficient movement of relief train, engine, tower wagon etc., between the site and the station for quick restoration in consultation with the Disaster Manager available at the site.
- Ensure prompt transport of stranded passengers at the site and clearance of passengers held up at other stations in coordination with the commercial department.
- Assist Commercial Department in arranging relief to the victims.
- Check the information of passengers dead, injured verified with the Railway
- Keep liaison with adjacent divisions, Headquarters and the site.
- Ensure proper logging of all the events by control office and at site.

519 DUTIES OF DIVISIONAL RAILWAY MANAGER

On being informed about the accident,

- Collect details of accident and assess the situation.
- If necessary proceed to the site.
- **Inform the CRS/SC Circle about the accidents falling under Section 113 of Railways Act.**
- Give clear directions to Officers in connection with rescue and relief work.
- Depute ADRM as in charge in Control office.
- Order to keep a vehicle ready for immediate use at Control Office.
- Arrange to advise the Home Secretary/ Chief Secretary or other officers of the state in case of sabotage for prompt attendance of the Superintendent of Police.
- Monitor that each department renders prompt assistance.
- Arrange for collection of clues/ evidence.
- Appoint a reporter in case of serious accident.
- Ensure taking joint observation / readings by Supervisors.

520 ROLE OF OFFICERS DEPARTMENT-WISE IN DISASTER MANAGEMENT CONTROL ROOM

1. On getting information from the Central Control, nominated Officers should be present in the Disaster Management Control Room, II Floor, Railnilayam, Secunderabad for getting further information about the accident.

2. As per the need, the DMCR will be manned with Officers for co-coordinating relief works under overall Supervision of COM.

Safety Department:

The Officer/s representing Safety Department shall report the accident to Railway Board. **Apart from DRM of the Division, CSO will inform the CRS/SC Circle.** The Safety Branch Officer shall collect the information of the accident as per the pro-forma and

inform the Safety Directorate / Railway Board. Continuous monitoring of relief, rescue and restoration details shall be done and the updated information shall be informed to Safety Directorate from time to time. The Safety Branch shall also co-ordinate with other Departments.

Medical Department:

The Officer/s representing Medical Department shall obtain complete details related to the dead and injured passengers involved in the accident and shall maintain liaison with the Accident site and doctors of District/State Government Hospitals, Private and Corporate Hospitals. They shall also consolidate the list of injured and dead in minimum time and the same shall be faxed/informed to the Officials in DMCR.

Commercial Department:

The Commercial Department Officer/s shall ensure catering arrangements to the passengers at the site of accident, passengers travelling in trains which are terminated / regulated / diverted en-route. They shall also ensure the catering arrangements to the staff working at the site of accident and in DMCR. They shall ensure payment of ex-gratia to the dead / injured as per the rules and instructions. Arrange for transshipment of goods wherever required, arrange transport, collect the information details about the dead and injured. They shall also ensure transmission of information regarding the dead and injured to originating, destinating stations, to DMCR, etc., They shall also arrange for opening of emergency booths at various locations.

Operating Department:

The Operating Department Officer/s shall manage relief and restoration operations at Headquarters level. He shall record all events related to the accident chronologically. He shall ensure regulation, diversion and termination/cancellation of trains keeping in view the likely time of restoration. They shall ensure that the passenger carrying trains are regulated at such stations where minimum catering arrangements including

drinking water is available. They shall monitor the ordering and movement of MRV/ART/140T Crane relief trains of the Division, Railway and adjoining Railways.

Mechanical Department:

The Officer/s representing Mechanical Department shall assess the requirement of additional Medical Vans / BD Specials and shall liaison with adjoining Railway / Division for ordering the same. He shall also monitor the movement of all Relief trains. He shall obtain the details of rolling stock involved in the accident and its PRO particulars. They shall obtain the restoration details and record the handling of each and every vehicle including locomotive. They shall also obtain the bio-data of the crew involved train/s.

Engineering Department:

The Officer/s representing Engineering Department shall obtain the details of damage to P.Way and also ensure movement of Engineering Materials. Details of track structure and other relevant details such as USFD, last inspection, profile of track, index plan details shall be obtained. Organise ordering of labour specials and material specials as per the requirement at site from within the zone / adjoining zones.

Electrical Department:

Officer/s representing Electrical Department shall obtain the details of extent of damage to OHE and loco/s. He shall also obtain the bio-data of crew of the involved train/s. Assess the requirement of material and organise for the movement of the same. Also order and monitor the movement of Tower Cars to the site of accident.

S&T Department:

The Officer/s representing S&T Department shall ensure efficient communication system is established and also ensure continuous manning of phone/s from accident site to DMCR and vice-versa. One line should be dedicated for the emergency transmission from the site of accident to Divisional Control and from Divisional Control to DMCR.

Also shall ensure installation of BSNL public phone at the site of accident involving passenger carrying train/s. They shall obtain the details of S&T gears involved, if any in the accident. Also arrange to get a copy of the data-logger output in the form of CD, voice-logger output from the Control Office in the form of CD.

Liaison with Railway Board:

DMCR shall maintain constant liaison with the Safety Cell of Safety Directorate, Railway Board and give the details of the following:

a. Movement of Relief trains.

b. Movement of men and material from adjoining Divisions/Railways to the site of accident as rescue, relief and restoration measure.

c. Assistance required from the District, State Government authorities, Armed Forces, Para-military forces, voluntary Organisations, etc., and convey the same to Railway Board.

d. Progress of rescue and restoration operations.

e. Prima-facie cause as given by the Division.

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CHAPTER VI

601 RESOURCE UNIT – 1 (PASSENGER TRAIN, AT SURROUNDINGS, AT ADJOINING STATIONS)

ON PASSENGER CARRYING TRAINS FOLLOWING RESOURCES ARE AVAILABLE:

1. First-aid box available with the Guard of the train.
2. First-aid box available with the Train Superintendant.
4. Portable Control Telephone available as BV Equipment and as personal / loco equipment with the LP of passenger carrying trains.
5. Fire extinguishers loaded as BV Equipment, loco equipment, in AC Coaches in Pantry Cars, etc.,
6. Walkie talkie sets with LP and Guard.
7. CUG mobiles phones with LP, ALP and Guard.
8. Information about the doctors travelling in the train on the reservation chart.
9. Information about Railway officials in the train whether 'on' duty or 'off' duty as per the reservation chart.
10. Passengers travelling who volunteer to help in rescue and relief operations.

NON-RAILWAY RESOURCES AVAILABLE NEARBY:

1. Volunteers from nearby villages and towns.
2. NGO Organisations stationed nearby towns and villages.
3. Transport vehicles passing through the nearby Level Crossings (both manned and unmanned), owned by Contractors (Railway and Civil) and Private and Public transport vehicles located nearby villages and towns.
4. Tractors with trolleys or without trolleys for transporting both men and material apart from loading the lighting equipment to lit up the site of accident.
5. Station staff at either end of the block section shall mobilise all possible medical assistance for treating the injured and transport for transporting the injured to the

nearby hospitals. Mobilise the non-Railway resources stationed at the station in co-ordination with the Civil Authorities.

6. Moving the relief trains to the site of accident in the stipulated timeframe.
7. Informing the 'all-concerned' through the quickest possible means of communication.
8. Station staff shall give priority for arranging medical succor, mobilising additional manpower, moving the rescue equipment, arranging lighting equipment of accident site, arranging transport, informing the fire fighting personnel, etc.,
9. Resources as mentioned in the Divisional DM Plan.

RAILWAY RESOURCES:

1. Mobilise the Engineering gangs stationed at the station, in the Division and from adjoining Divisions, if required; OHE staff and S&T staff to be alerted and moved to the site of accident as per the directions given from time to time.
2. Mobilise the Railway Medical staff and arrange medical facility to the site.
3. Arrange Communication network at the station and as well as at the site of accident.
4. Security officials to be informed and moved to the site of accident.
5. Railway resources as mentioned in the Divisional DM Plan.

602 RESOURCE UNIT – 2 (ART & MRT – SOUTH CENTRAL RAILWAY)

ACCIDENT RELIEF TRAINS AND RELIEF MEDICAL VANS ON SCR					
DIVN	**CLASS"A" ART (5 BG + 1 MG)**	**140 T CRANE**	**CLASS "B" ART**	**ARMV SCALE – I (ARMV)**	**ARME SCALE – II**
SC	SC (SPART)	SC	….	SC (SPMRV)	BPA
	KZJ	KZJ	…	KZJ	DKJ
			BPA	BPA	PRLI
					VKB
HYB			NZB	NZB	MBNR
BZA	BZA (SPART)	BZA	…	BZA	GDR
			RJY	RJY	OGL
			BTTR	BTTR	EE
					TUNI
					BVRM

GTL	GY	GY	GTL	GTL	HX
			RU	RU	RC
			DMM	DMM	NRE
					CTM
					KDY
GNT			GNT		NDKD
					NDL
NED	PAU	PAU		PAU	J
	AK (MG)			AK (MG)	KNVT

603 RESOURCE UNIT – 3 (ART & MRT OF ADJOINING ZONES)

Southern Railway – Chennai Division

S.No.	Type of ART / MRV	Location	Class
1	SPART	Madras (MAS)	….
2	ART	Tondiarpet (TNP)	'A'
3	ART	Basin Bridge (BBQ)	'B'
4	ART	Jolatpet Junction (JTJ)	'B'
5	ARMV	Jolarpet Junction (JTJ)	Scale – I

Palghat Division

S.No.	Type of ART / MRV	Location	Class
1	ART	Mangalore (MAQ)	'B'
2	ART	SRR	'B'
3	ARMV	Mangalore (MAQ)	Scale – I
4	SPART	SRR	….

Trivandrum Division

S.No.	Type of ART / MRV	Location	Class
1	ART	Trivandrum Central (TVC)	'B'

2	ART	TEN	'B'
3	ART	ERM	'B'
4	ARMV	ERS	Scale – I
5	ARMV	Trivandrum (TVC)	Scale – I

Madurai Division

S.No.	Type of ART / MRV	Location	Class
1	ART	Madurai (MDU)	'A'
2	ARMV	Madurai (MDU)	Scale – I
3	ART (MG)	Madurai (MDU)	'A'
4	ART (MG)	SCT	'A'
5	ARMV (MG)	Madurai (MDU)	Scale – I
6	ARMV (MG)	SCT	Scale – I

Thiruchirapalli Division

S.No.	Type of ART / MRV	Location	Class
1	ART	Thiruchirapalli (TPJ)	'B'
2	ART	VM	'B'
3	ARMV	Thiruchirapalli (RPJ)	Scale – I
4	ARMV	VM	Scale – I
5	ART (MG)	TVR	'A'
6	ARMV (MG)	TVR	Scale – I

Salem Division

S.No.	Type of ART / MRV	Location	Class
1	ART	Erode (ED)	'A'
2	ARMV	Erode (ED)	Scale – I

Central Railway – Bhusaval Division

S.No.	Type of ART/ MRV	Location	Class
1	ART	Bhusaval (BSL)	'A'
2	ART	Manmad (MMR	'B'
3	ARMV	Bhusaval (BSL)	Scale – I

Pune Division

S.No.	Type of ART / MRV	Location	Class
1	140/T Crane	Miraj (MRJ)	
2	ARMV	Pune (PUNE)	Class – I
3	ARMV	Miraj (MRJ)	Class – I

Nagpur Division

S.No.	Type of ART / MRV	Location	Class
1	140/T	Ajni (AJNI)	
2	SPARMV	Nagpur (NGP)	Scale – I

Sholapur Division

S.No.	Type of ART / MRV	Location	Class
1	140/T	Daund (DD)	
2	ARMV	Sholapur (SUR)	Scale – I
3	ARMV	Wadi (WADI)	Scale – I
4	ART	Wadi (WADI)	'B'

South Western Railway – Hubli Division

S.No.	Type of ART / MRV	Location	Class
1	ART & 140T	UBL	'A'
2	ART	CLR	'B'

3	MRV	UBL	Scale – I

Bangalore Division

S.No.	Type of ART / MRV	Location	Class
1	ART & 140T	SBC	'A'
2	MRV	SBC	Scale – I

Mysore Division

S.No.	Type of ART / MRV	Location	Class
1	ART & 140T	MYS	'A'
2	MRV	MYS	Scale – I
3	MRV	ASK	Scale – I
4	MRV	HRR	Scale – I
5	MRV	SKLR	Scale - I

East Coast Railway – VSKP Division

S.No.	Type of ART / MRV	Location	Class
1	ART & 140T	VSKP	'A'
2	MRV	VSKP	Scale – I

Kurda Road Division

S.No.	Type of ART / MRV	Location	Class
1	ART	KUR	'A'
2	MRV	KUR	Scale – I

604 RESOURCE UNIT – 4 (NON-RAILWAY RESOURCES)

STATE AUTHORITY, DISTRICT AUTHORITY, PRIVATE HOSPITALS, MILITARY, NGOs, OTHER SOURCES

IMPORTANT CONTACT NUMBERS – GOVERNMENT OF ANDHRA PRADESH

REVENUE (DM) DEPARTMENT – A.P. SECRETARIAT

Officer/Office	Contact Number/s
CM Office Principal Secretary Special Secretary Joint Secretary Additional Secretary	BSNL: 040-23454664, 23454828 Mobile: 09849482244 BSNL: 040-23452421 Mobile: 09849905130 BSNL: 040-23454071 Mobile: 09848782043 BSNL: 040-23454193 Mobile: 09849199226
Chief Secretary	BSNL: 040-23452620, 23455340 Mobile: 09848054504
Revenue (DM) Department Commissioner (DM) Additional Commissioner Special Commissioner (SDMA) Assistant Commssioner	BSNL: 040-23456005 Mobile: 09866396663 BSNL: 040-23452144 Mobile: 09000150345 BSNL: 040-23450211 Mobile: 09000100191 BSNL: 040-23451044 Mobile: 09959277731

Ministry of Home Affairs (DM) Home Secretary Joint Secretary (DM-I) Joint Secretary (DM-II) Executive Director Control Room	 BSNL: 040-23093003, 23093031 BSNL: 040-23092456 Mobile: 09868819595 BSNL: 040-23092478 Mobile: 09910320373 BSNL: 040-23702445 Mobile: 09818394225 BSNL: 040-23092923, 3054, 2763, 3563
NDMA Vice-Chairman Member Member Member Member	 BSNL: 011-26701701 Mobile: 09211822999 BSNL: 011-26701775 Mobile: 09871837999 BSNL: 011-26701777 Mobile: 09810111328 BSNL: 011-26701735 Mobile: 09810203406 BSNL: 011-26701736 Mobile: 09848046677 & 09810809456
Army Commander, HQ (Andhra Sub-area) Colonel, General Staff (-do-)	 BSNL: 040-27862278 Mobile: 09849044764 BSNL: 040-27862086 Mobile: 09849005243

Air Force Wing Commander Group Captain, Begumpet Air Force Stn. Air Office Commander, Hakimpet	 BSNL: 040-27862282 Ext.407 Mobile: 09866638796 BSNL: 040-27753905 Mobile: 09849022747 BSNL: 040-27862064, 2282 to 87
Control Room/s	Toll Free No. 1077 common to all Districts within the District limits only. Toll Free No. 1070 – Main Control Room, Secretariat

IMPORTANT CONTACT NUMBERS – GOVERNMENT OF MAHARASHTRA

S. No.	Designation	Telephone Nos. (Office)	Telephone Nos. (Residence)
1	Mumbai DM Helpline	108	….
2	Chief Secretary	022 – 22025042	022 – 22846604
3	Principal Secretary & Special Enquiry	022 – 22028762 / 22025162	022 – 22040546
4	Additional Chief Secretary (Home)	022 – 22029059	022 – 22836688
5	Principal Secretary (Home & Law and Order)	022 – 22023572	022 – 23678620
6	Principal Secretary (Earthquake rehabilitation)	022 – 22025073 / 22023039 / 22021984	022 – 22818226
7	Principal Secretary (Public Health)	022 – 22873848 / 22026579	022 – 24966116
8	Director General of Police	022 – 22026672	

9	Commissioner of Police	022 – 22621855 / 22625020	
10	Civil Defense	022 – 22611928	
11	BEST	022 – 22085888 / 22856262	
12	GRP Control (Byculla)	022 – 23081725	
13	IG – GRP, Byculla	022 – 22051914	022 – 24965887
14	Air Force Exchange	022 – 23714982 / 23714963	
15	Naval Exchange	022 – 22663030 / 22664949	
16	Military Exchange, Coast Guard	022 – 22151701	
17	HPCL – Sr. Manager	022 – 25540531	022 – 25545169
18	IOC	022 – 26400926 / 26423272	
19	GM Operation / IOC	022 – 26400524	022 – 28147764
20	BPCL Ballard Pier	022 – 22713000 / 22714000	
21	Fire Brigade	101 022 – 23076111 / 23086181	
22	Chief Fire Officer	022 – 23086181, 182, 183	022 – 22882787
23	Commissioner, MGCM	022 – 22620251 Ext. 3109 / 22620525	022 – 24937290 / 24954680

24	Additional Commissioner, MGCM	022 – 22620251 Ext. 2314 / 22620149	022 – 23670078

IMPORTANT CONTACT NUMBERS – GOVERNMENT OF MADHYA PRADESH

S. No.	Designation	Telephone Nos. (Office)	Telephone Nos. (Residence)
1	Chief Secretary	0755 – 2441370 / 2441848	0755 – 2553090
2	Dy. Secretary	0755 – 2441085	0755 – 2441145
3	Secretary (CM's Secretariat)	0755 – 2441742	0755 – 2441514
4	Secretary (CM's Secretariat)	0755 – 2441386	0755 – 2466153
5	Principal Secretary (Home)	0755 – 2441619	0755 – 2441738
6	DGP	0755 – 2443500	0755 – 2443333
7	ADG(Railway)	0755 – 2773405	0755 – 2768021
8	IG (Railway)	0755 – 2770652	0755 – 2575011
9	Principal Secretary (Information & PR)	0755 – 2441816 / 2556831	0755 – 2571466
10	Principal Secretary (Medical, Health & FP)	0755 – 2441424	0755 – 2441681

IMPORTANT CONTACT NUMBERS – GOVERNMENT OF KARNATAKA

Designation	Office	Residence	Mobile
Chief Secretary	080 – 22252442	080 – 22353124	09880003696

Home Secretary	080 – 22256774	080 – 25355353	09845666077
DGP	080 – 22842111	080 – 22293525	09741262262
ADGP (L&O)	080 – 22211834	080 – 26684668	09449084688
State Police Control Room	080 – 22211777	….	….
Disaster Management Agency (Secretary)	080 – 22032582	080 – 23512222	09448290807
Deputy Secretary	080 – 22392451	080 – 23118988	09449446182

CHAPTER VII

VARIOUS PHASES OF DISASTER MANAGEMENT

701 Phase I – GOLDEN HOUR

In the period immediately after the accident where grievous injuries to passengers takes places, action has to be taken on war-footing by the Railway Authorities to render definite medical care which gives relief to affecter passengers ad also help them to overcome the trauma.

If a critical trauma patient is not given definite medical care within one hour from the time of accident, chances of his ultimate recovery reduce drastically, even with the best of medical attention thereafter. This initial one hour period is generally known as "The Golden Hour".

- ✓ Render definite medical care within Golden Hour.
- ✓ Arrest bleeding and restore blood pressure within an hour.
- ✓ Persons under shock shall immediately be relieved of shock.
- ✓ Transport the casualties to the nearest hospital.

During this Golden Hour, following efforts should be made:

1. On-board staff like, LP/ALP/Guard/TTE/GRP/RPF/Pantry Car/AC Coach Attendants, etc., shall pass on the information quickly to the nearest station or to control about the accident. They shall render first-aid and take the help of other volunteers travelling by train or from the site of accident location to rescue the passengers.
2. Senior-most officer travelling by the train whether 'on' or 'off' duty shall take charge as Officer in-charge (OIC) at site.
3. All Railways officials shall report to the Guard and work as per the directions of the OIC.

4. SMs of the adjoining stations must inform Control about the accident and the nature of assistance required.

702 Phase II – ARRIVAL OF CRACK TEAM

(A) Crack Team of Zonal Railway with rail rescue experts and equipment should be rushed to the site of accident by any transport which is quicker, if required even by air-lifting.

(B) Divisional Crack Team consisting of representatives from Mechanical, Medical, Electrical, Engineering, Security and S&T Departments shall be rushed to the site of accident by the most expeditious means of transport feasible.

(C) Functions of Crack Team: As soon as hooters / siren are sounded, the nominated team shall proceed to the site of accident by first available train or by road. The Crack Team shall carry the following kits;

i. S&T kit
ii. Lighting kit
iii. Augmented First-aid kit or POMKA
iv. Rescue kit, etc.,

(D) On reaching the site of accident, the Crack Team shall perform the following activities:

i. Extrication / removal of injured passengers from the coach/es.
ii. Rendering first-aid to the injured.
iii. Provide succor and help to the passengers at site.
iv. Relieve panic and create sense of confidence among the passengers.

(E) **Special Disaster Management Team of RPF**: Special DM Team of RPF has to be set up at all Divisional Headquarters for proceeding to the site of accident and assist in relief and restoration at the site of accident. They shall reach to the accident site by the first available means of transport.

703 Phase III – ARRIVAL OF RELIEF TRAIN/S

Phase III begins with the arrival of relief train/s. The senior most officer who reaches the site first becomes the OIC at site. The staff and Officers should work as per the directions of the OIC at site.

Site Organisation:

- Medical relief camp
- Security of luggage
- Preservation of clues
- Relief, rescue and restoration
- Co-ordination with Civil and Media
- Liaison with Control
- Communication network
- Lighting arrangement
- Information booth
- Catering arrangements
- Evacuation of passengers
- Payment of ex-gratia, etc.,

The Medical team reaching the site first shall comprise more doctors and staff including paramedical staff. The senior most doctor and OIC at site should have all details about dead and injured and hospitals where they are being treated.

704 Special Task Teams of different Departments

I.	**Medical**	Relief and transportation of the injured to hospitals.
II.	**Commercial**	Catering, payment of ex-gratia, information booth, liaison with Civil Administration and Media.

III.	**RPF**	Security of luggage, parcels and other Railway property.
IV.	**Operating**	Liaison with control and arranging logistics including Shunting operations.
V.	**S&T**	Establishment of communication network, free telephones and booth.
VI.	**Mechanical**	Rescue, relief and restoration operations including re-railment, measurements, photography/videography of clues and restoration activities and preservation of clues.
VII.	**Electrical**	Adequate lighting arrangements at the site of accident.
VIII.	**Civil Engg.**	Provision of tents, relief, rescue and restoration activities. Restoration of track, preserving the clues, readings photography/videography of clues and restoration activities.
IX.	**Safety**	Preservation of clues, statement of witnesses, photography/videography of clues and restoration activities.
X.	**Personal**	Passenger care

Armbands: Rescue team members must wear armbands and luminous jackets. Armbands for medical and paramedical staff shall bear a red cross.

Cold-cutting: Extreme care must be exercised while tackling damaged coaches. Cold cutting equipments should be used on coaches containing passengers so as to avoid burns to passengers.

705 **Handling of dead / injured:**

- Dead bodies should be handled with care and respect.
- Cover the dead bodies with white shrouds and they should also be numbered.
- Expeditious issue of death certificates.
- List of dead and injured shall be passed on to Divisional Control and DMCR at Zonal Headquarters from time to time.
- A photographer shall take coloured photographs of dead and injured.

706 **Free food, drinking water, tea and snacks:** Food and clean drinking water must be rushed to the accident site from the nearest source. Free food and beverages shall be arranged.

707 **Action to be taken at Divisional-level:**

- Opening and continuous manning of enquiry booths at originating, terminating and at en-route major stations.
- Furnishing updated position of dead, injured and evacuated passengers to 'all-concerned'.
- Helpline number shall be relayed through electronic and print media.
- Arrangements for issue of free Railway passes to relatives / friends / dependants of dead and injured.
- Make arrangement for transportation of evacuated passengers to be sent to destinations. Transport vehicles can be hired.
- In case of major disaster, DRM of the Division can requisition for the services of helicopter / aeroplane.
- Media shall be briefed properly and quickly.
- Zonal headquarters should be advised quickly.

708 Phase IV – HANDLING INJURED PASSENGERS:

- Relief trains clearing the injured and stranded passengers must get overriding priority.
- Road vehicles shall be arranged for transporting the injured and stranded to the nearby hospitals and station.
- List of injured, hospital-wise shall be conveyed to all concerned and displayed at prominent locations.
- Ex-gratia payment shall be arranged.

709 Phase V – RESTORATION OF TRAFFIC

Restoration of traffic should be planned and acted upon without affecting the relief operations. Restoration of passenger services gives a sense of normalcy, besides providing means of transport to relatives and friends/dependants of victims to visit them and attend to them.

710 CONCEPT OF CONTROLLING STATION:

The SM of nominated controlling station should, immediately on receiving information of an accident, reach the site with sufficient staff drawn from all Departments. He shall take necessary steps for rescue and relief. It should be made clear to everybody that staff of all Departments must follow the directions of the Station Manager of the controlling station and render all possible assistance necessary for tackling the disaster.

Division	Controlling stations		Division	Controlling stations
SC	SC, BG, KZJ, RDM, BPA, SKZR, WL, KMT, DKJ, BDCR, VKB, TDU, MQR, BIDR, PRLI		GNT	GNT, RAL, MRGA, NDKD, MCLA, DKD, MRK, NRT, NDL.

HYB	KCG, MBNR, KRNT, MED, KMC, NZB		**GTL**	GTL, GY, ATP, KLU, DMM, MPL, PAK, CTO, TPTY, RU, KHT, NRE, HX, TDP, AD, RC, YG.
BZA	BZA, EE, TDD, RJY, SLO, COA, TUNI, TNKU, BVRM, NS, GDV, MTM, TEL, CLX, OGL, BTTR, NLR, GDR		**NED**	NED, MUE, KNVT, ADB, PAU, PBN, GNH, J, AWB, HNL, AK, KNW.

CHAPTER VIII

(AUTOMATIC TRIGGER MECHANISM)

801 ACCIDENT SIREN

Long Range Electric Siren:

As a means of giving immediate warning to the staff of various Departments, in the event of an accident, a Long Range Electric Siren has been installed at those stations where the relief trains are stationed. In addition to this, the siren provision is kept at Diesel / Electric Loco Sheds, DRM Offices.

Each siren is provided with

1. A delayed action switch (the tumbler switch marked 'Accident Warning') and
2. A check switch (marked 'Test Push')

a. The delayed action switch (the tumbler switch marked "Accident Warning') is designed to give call of ¾ minute duration, each with ½ minute interval between two successive calls.

c. The check switch (marked 'Test Push') is for checking whether the siren and motor are in good working order. For testing the siren the push button of the check switch shall be pressed and kept in the ON position until the siren gives a continuous blast extending to not less than 30 seconds and then released.

d. If, for any reason, the delayed action switch fails to function, the emergency call shall be given by manually operating the check switch to give calls. Description of accident and the number of hooters to be sounded are as follows.

Sl. No.	Description of the Accident	Siren code
1.	Accident at the Station / Loco Shed where the ART/MRT is stationed	**Two long**
2.	Accident at out station and mainline is clear	**Three long**

4.	Accident at out station, mainline is clear and MRT is required	**Three long – one short**
5.	Accident at out station and through running is affected	**Four long**
6.	Accident at out station, through running is affected and MRT is required	**Four long – one short**

NOTE: The duration of the long hooter shall be 45 Seconds and 10 seconds for the short, with half minute (30 seconds) interval between two successive calls.

g. Both the delayed action switch and the check switch are provided with locking arrangements. The key of the delayed action switch and the duplicate key of the check switch shall be kept in a sealed glass fronted case. The original key of the check switch shall be kept by the electrical staff. In case of emergency the seal or glass shall be broken and the key taken out to give the emergency call. After the emergency is over and the key restored to the box, arrangements shall be made to replace the broken glass and/or to reseal the box.

f. The check switch shall be operated by the Electrical Department once a month.

(i) On hearing the emergency call the staff nominated to turn out for such calls by the respective Heads of Departments shall do so and take up the positions and duties allotted to them. The staff concerned shall respond to the call with alacrity. Indifference in responding or failure to respond to the call must be dealt with seriously.

(ii) At stations where long range electric sirens have been installed, staff nominated to turn out for such calls by the Head of Department shall take up positions with the portable emergency wireless set to proceed to the accident spot by the first available means.

802 SOUNDING OF ENGINE WHISTLE/HOOTER/STATION BELL:

In the event of the long-range electric siren going out of order, the emergency call must be given as indicated below-

a. The whistle/hooter of engine shall be sounded as coded above, so as to give whistles/hooting or call of 1 minute duration each, with ½ minute interval between two successive whistle/hooting this being repeated twice at an interval of 3 minutes.
b. In case an engine is not available at the time to give the emergency call, the emergency call shall be given by the violent ringing of station bell. The Station Master or the senior official of the Transportation (Traffic) Department, present at the station shall arrange and be responsible for the issue of the emergency call.

CHAPTER IX

(MEASURES ADOPTED FOR PREVENTION AND MITIGATION OF DISASTERS)

901 CIVIL ENGINEERING DEPARTMENT:

Role of Engineering Department in responding to threatening disaster situation or disaster: A constant liaison is maintained with all the IMDs for getting information about the weather warning and cyclone storm. Whenever, there is a warning of a severe cyclonic storm, the following action is taken;

a) Intensifying of monsoon patrolling and night surprise inspection.

b) Posting of Watchman at vulnerable bridges/locations. Posting of special Watchman with walkie-talkie, mobile phone at RATs where message about them being under danger of overflowing/bursting is received to monitor their condition on real time basis.

c) Officials of Engineering Department are located at locations as incorporated in the joint Engineering & Operating circular.

d) Monsoon emergency reserve stock is kept in readiness at nominated locations according to sanctioned scales. This emergency reserve stock on wheels will be moved as per the directives of engineering officials at Headquarters monitoring the situation.

e) The following engineering officials of BZA division shall proceed and be available at stations indicated below;

   i) Sr.DEN/South at BTTR.

   ii) Sr.DEN/Central/BZA at BPP.

   iii) DEN/E/BZA at BVRM

   iv) Sr.DEN/North at SLO

   v) Sr.DEN/Co-ord/GNT at GNT

   vi) CGE shall proceed to BZA depending on the severity of the situation at his discretion.

f) A constant liaison with Central Water Commission authorities during monsoon period to keep track of the real time water level of major reservoirs and dams to take timely action during emergency.

g) The emergency material such as diesel oil, K.oil, torches, hurricane lanterns, tarpaulins, gum boots, umbrella, rain coat, manila rope, shovels, etc., track materials are kept in readiness to meet any eventualities.

902 ELECTRICAL DEPARTMENT:

Measures taken for the prevention or mitigation of disasters/accidents:

- No crew is being allowed to work the train with over due in G&SR & Technical Refresher Courses and Periodical Medical Examination (PME).
- Knowledge of crew is being updated from time to time especially in safety aspects and G&SR rules.
- Alertness of crew is being checked by surprise inspections by Loco Inspectors especially during night times.
- Regular Safety Seminars and interaction with running staff are being conducted to educate/update their knowledge duly guiding in all safety/technical related aspects.
- Regular training is being conducted on in-motion simulator to update knowledge/driving skills of Loco-Pilots.
- All Electric Locos are equipped with auto-flasher lights with high prominence LED flasher lights.
- Vigilance Control Device and emergency stop is being provided in all electric locos.
- All locos are equipped with Energy-cum-Speed Monitoring System which record the important events also.
- Crew-friendly cab modification on electric locos is being carried out during POH.

903 SIGNAL & TELECOM DEPARTMENT:

Measures taken for prevention or mitigation of disasters/accidents:

i. Signalling

Provision of track circuiting and BPAC: Provision of BPAC on entire route 'A' shall be completed over SCR within March 2009. Works on the other routes shall be progressively proposed and carried out. As per old route classification, complete yard track circuiting was completed over route "A' and 'B'. Works are sanctioned for track circuiting (balance portion) on route 'D' which shall be completed with March 2010. Over route 'E', the balance works shall be progressively proposed and

carried out. However, track circuiting on Mainline (FM-FM, FM-BSL and HM-FM-St) is already complete over the entire passenger traffic carrying BG network.

ii. **Communication:**

In addition to the communication network specified under Chapter VI of existing Disaster Management Plan, the following may be supplemented.

a. Provision of FCTs at accident site.

b. Provision of WLL exchange as additional means of communication at accident site.

iii. IRPMU is executing the work of provision of video conferencing from accident site to zonal headquarters along with high-speed satellite modem.

904 SECURITY DEPARTMENT:

Specified measures taken for the prevention of mitigation of the same:

- Collection of sharing of advance intelligence with central intelligence agencies and State Police.
- Sensitising of railway employees in the field especially, in public interacting areas.
- Involving active license porters and contractors of cycle/scooter stands in identification of suspects.
- Posting of RPF staff at vulnerable areas.
- Rescue teams of RPF should be in readiness to reach the spot at a short interval duly equipped with modern gadgets in the event of any eventualities.
- Dog squad to be pressed into service by first means.
- Random track patrolling, provision of firefighting equipment, etc.,
- The trains in the vulnerable sections should be escorted by RPF and GRP, besides conducting anti-sabotage checks in the trains and at all important stations by deploying sniffer dogs.
- Sabotage-prone areas/sections have been identified and joint track patrolling by RPF & Engineering staff has been introduced.
- Modern surveillance cameras are installed at important railway stations to monitor the movements of suspected elements.
- The concept of community policing has been introduced all over the zone from 01.02.2007, with the title 'Sahyog'. Under this scheme, representatives of daily commuters, vendors, hawkers, porters, TTEs, Guards, loco-Pilots, ASM/SMs and GRP are associated to educate and create security awareness among the passengers

to elicit information and to use them as partners in the mission to make railways a crime-free area.

- "RPF Mithra Yojana" has been introduced involving NGOs, Lions/Rotary Clubs to get useful information/intelligence pertaining to railway security.

Mitigation measures should be integrated with the development of the plan and projects:

- In times of disasters, the integrated efforts should be taken to keep the rescue teams in alertness.
- Setting up of Disaster Management Cells at all important stations for immediate reaching spot for carrying rescue operations.
- Whenever any new project is taken up, basic security measures should be ensured in consultation with Security Department.
- Provision of Security Department staff and equipment must be planned along with other department's staff and equipments right at the planning stage.

CHAPTER X

(PASSENGER CARE)

1001 GENERAL:

1. Providing assistance to passengers and their relatives / dependants is of utmost importance in helping them relieve their misery.
2. Injured passengers and their relatives are to be treated with utmost courtesy and sympathy so as to alleviate their trauma and discomfort.
3. For dealing with the relatives and dependants arriving from far flung corners of the country, staff fluent in local language of the place from where the train originated should be used as interpreters.
4. Commercial Supervisors and Welfare Inspectors should talk to injured passengers and ascertain if they wish to call their relatives / dependants.
5. Injured passengers should either be provided with a mobile phone/s or STD phones to enable them to speak to their relatives and dependants.
6. Transshipment of unaffected passengers and their clearance from the accident site would be arranged quickly. The officer available in the Control Office shall arrange the transshipment on priority.
7. In rescue operations, top priority shall be given to all passengers in critical condition for immediate medical attention.
8. Dead bodies should be extricated and the ARMV in-charge and other officials present at the site of accident should act swiftly and arrange for shifting of the dead bodies after shifting the injured passengers to nearby hospitals.

1002 HOSPITALISATION OF THE INJURED:

1. As a general policy, in case of railway accidents involving passengers, rapid evacuation of victims to railway/non-railway hospitals after rendering immediate and necessary first-aid treatment is of paramount importance.
2. In the following cases, the injured may be taken to a private hospital:
   a. When there is no Railway / Government Hospital available within a radius of **8 KMs** from the site of accident.
   b. When the attending doctor certifies in writing that the treatment in private hospital is necessary in the interest of the patient's survival.
   c. Except where Railway doctor certifies, such injured passenger/s should normally be eligible to the class of accommodation in the private hospital where different scales are available.
   d. Where the family of the injured passenger desires to be provided with a higher-class accommodation, the family should be give in writing to pay the extra cost involved directly to hospital authorities.
3. For this purpose, the Division should chalk out a working arrangement with such private hospitals as may be necessary in areas served by them, so that in case of emergencies, injury cases can be referred to hospitals concerned without loss of time.
4. To facilitate matters and to avoid misunderstanding, CMD should draw a list of such private hospitals bearing in mind the Railway and other Government hospitals in the vicinity.
5. CMD should also fix the charges to be paid in such asses for each class of accommodation. Complete medical care will be taken of all injured passengers, including payment of medical bills till their final discharge from hospitals. Claims compensation booklets containing forms and other instructions will be distributed to all injured passengers and next of kin of all deceased passengers.
6. Bills by such private hospitals should be submitted through CMD who shall certify the correctness of charges payable before forwarding for payment to FA&CAO.

7. Under this para, payment to private hospitals can be arranged locally by the Railway and ministry of Railways approval is not necessary.
8. If the injured are admitted in non-Railway hospitals, railway doctors should be deputed to these hospitals to render necessary assistance including supplying the medicines that are not available in these hospitals.
9. They should carefully monitor the condition of injured and maintain an updated list with all details.
10. If more than one hospital is involved, apart from deputing doctors to individual hospitals, a railway doctor should also be deputed to co-ordinate and maintains the centralised updated position.

1003 FACILITIES TO BE MADE AVAILABLE IN THE HOSPITAL:

1. There shall be a separate reception counter manned by a Commercial Supervisor or by a Welfare Inspector at the entry to the hospital to deal with relatives / dependants of the injured passengers.
2. A chart shall be displayed at this reception counter indicating ward and bed numbers where the injured passenger/s are admitted along with their names, coach no. etc.,
3. At the entry to every ward, a second list should display the name of the patient, coach number and bed number inside the ward.
4. Commercial staff and Welfare inspectors on duty at that hospital should carry a list indicating the name, address and telephone numbers of relatives / dependants as given by the patient; and whether they have been informed or not.
5. Arrangements should be made to inform the next of kin or friend of the deceased incase of identity of the person involved in accident becomes known.
6. As each relative arrives, his name should be marked in the list against the passenger's name.
7. Reception counter should be provided with STD telephone facility and some minimum infrastructure.

8. There should be minimum two mobile phones readily available to be taken to patients inside the wards for making outgoing calls.
9. Complete medical care of all passengers including payment of medical bills till their final discharge shall be ensured.

1005 COMMUNICATION:

1. Telephone with STD facility shall be made available to passengers to communicate with their relatives / dependants.
2. BSNL / Railway telephones available at adjoining stations / cabins / towns shall be extended to the accident site.
3. PCO telephones and other BSNL telephones in nearby localities / towns / villages shall also be extended to the accident site by persuading owners of such phones.
4. Payments for such telephone connections will be made from station earnings.
5. Sr. DSTE shall hire some mobile phones to meet the needs of stranded passengers.
6. Wherever cellular phone connectivity is available, stranded passengers should be permitted to use these phones free of charge.

1006ARRIVAL OF RELATIVES / FRIENDS / DEPENDANTS:

1. After a few hours, the kin of the deceased and relatives / friends / dependants of injured passengers will start arriving to the site of accident, hence adequate number of display boards with the details of dead and injured be displayed at the site of accident by the Commercial / Personal / Medical Officials.
2. Some display boards should indicate the direction of the Assistance Centre at the site of accident.
3. Periodic announcements on loudspeakers shall also be made for guiding them to the Assistance Centre at the site of accident.

1007 TAKING CARE OF RELATIVES / DEPENDANTS:

1. At the Assistance Centre, Commercial and Welfare Inspectors should be available to guide the relatives / friends / dependants. They should go through the reservation charts and list out the dead and injured among them.
2. They shall also depute a railway servant to accompany the relatives / friends / dependants to the hospital, if possible.
3. A hired vehicle shall also be provided for carrying them to various hospitals and mortuary.
4. The Commercial / Welfare Inspector should stay with the relatives / friends / dependants until they have found the injured or identified the dead.
5. Thereafter, they should help them in completing all formalities at the Assistance Centre.

1008 SINGLE WINDOW CLEARANCE:

1. Assistance Centre at the site should provide single window clearance for all legal formalities and paperwork.
2. It should provide the following facilities:
    a. Reservation chart for locating the name.
    b. List of dead and injured including the name of the hospital where the injured are sent for treatment.
    c. Vehicle to take the relatives / friends / dependants to various hospitals and mortuary.
    d. Railway doctor for issue of death certificate.
    e. Government doctor for issue of post mortem clearance.
    f. Municipality official for issue of death certificate based on the doctor's certificate.
    g. Local Police for handing over the dead body.
    h. Claim counter for payment of ex-gratia and issue of claim compensation form.

i. Counter to help in performing last rites in case it is decided to cremate the dead body there itself.
j. Pass counter for issue of return journey pass.
k. Return journey facilitation counter to make arrangements for return journey.

1009 ACCOMMODATION FOR RELATIVES / FRIENDS / DEPENDANTS OF DEAD AND INJURED:

1. Commercial Supervisor or Welfare Inspector deputed shall arrange for the stay and accommodation of relatives / friends / dependants of dead and injured.
2. Depending upon the need, accommodation in hotels / Railway guest houses or retiring rooms should be booked for accommodating passengers.
3. Catering ARRANGEMENTS should also to be taken care.

1010 PERFORMING LAST RITUALS:

1. In many cases, the relatives / friends / dependants prefer to perform the last rites at the place where accident took place. Hence, assistance should be rendered in locating the following:
   a. The nearest cremation / burial ground.
   b. Crematorium facility where available.
   c. The location where the required material available including the pundit/priest.
   d. Vehicle for carrying the dead body, etc.,
2. The above information should be conveyed to the relatives / friends / dependants of passengers who died in the train accident.
3. Commercial Supervisor or Welfare Inspector shall help them in this Endeavour.

1011 DEPARTURE OF RELATIVES / FRIENDS / DEPENDANTS OF DEAD AND INJURED:

1. Assistance Centre at site should have counters to help the relatives / friends / dependants for planning their return journey.
2. Personal Branch staff at the Assistance Centre at accident site should be available for issuing complimentary passes for their return journey.
3. Reservation of berths shall be provided on trains.
4. Extra coaches should be attached to trains going to the destination station for the next two or three days. These extra coaches should be brought in locked condition from the originating station.
5. Space should be reserved in SLRs for loading deadbodies in coffins, etc., in case they desire so.

1012 GUIDELINES FOR COMMERCIAL DEPARTMENT AT THE SITE OF ACCIDENT TO DEAL WITH THE AFFECTED PASSENGERS:

1. Ex-gratia payment:

   The amount of ex-gratia payable to bonafide passengers involved in **train accidents** is as under:

a) In case of death	Rs.50,000/-
b) In case of grievous injury	Rs. 25,000/-
c) In case of simple injury	Rs. 5,000/-

Note: This ex-gratia payment will be exclusively for passengers who are grievously injured in train accidents or untoward incidents as defines under Section 123 of Railways Act, 1989 and stay in hospital as indoor patients. This ex-gratia is payable for a maximum period of 13 months. The period of treatment as indoor patient for more than 30 days need to be certified by a Railway doctor for the purpose of further ex-

gratia payment upto the period of 13 months. In case where the injured is taking treatment in other than Railway hospital, the treatment has to be certified by Railway doctor. Sr.DMO shall also keep track of such injured person taking treatment in other than Railway hospitals. Sr.DCM/DCM shall keep co-ordination with Sr.DMO for the purpose and arrange payment of ex-gratia every week at the doorstep of injured person. Every care shall be taken by Sr.DCM/DCM to avoid any inconvenience to injured person in such cases.

The amount of ex-gratia relief admissible to road-user who meet with an accident due to Railways prima facie liability at manned level crossings would be as follows:

a) In case of death	Rs. **50,000/-**
b) Serious injury	Rs. **25000/-**
c) Simple injury	Rs. **5,000/-**

Ex-gratia payment should also be made to Railway servant killed or injured while on duty by a moving train. For example, Trackmen working on track run over accidentally by a moving train.

The withdrawal of money from station earnings for making ex-gratia payments is permissible. Allocation of ex-gratia payments is **G – 1502 – other compensation (Demand No.9)**.

The amount required for making ex-gratia payments should be drawn on the authority of **station pay orders Form No. Com. 480/B/A/Rev.55.**

DRM and Sr.DCM/DCM have the powers to grant ex-gratia monetary relief in so far as their Divisions are concerned. In case of an emergency, the DRM may nominate a Sr. Scale Officer, who is on the spot on any occasion to make ex-gratia payment in any particular accident.

2. **Meal charges:** Cash payment of Rs. 60/- per head per day.

3. **Withdrawal from station earnings:**

   a. Money can be withdrawn from station earnings with personal sanction of a Senior Scale Officer.

   b. Station pay order (withdrawal from station earnings) should be duly signed with official designation, indicating his name.

   c. Proof of payment on whom it has been made and the reason for payment should be kept with payee having revenue stamp.

   d. The accountal should be submitted to Accounts Officer within 15 days from the date of withdrawal (**Para 2425 of IRCM**).

4. **Station earnings can be utilised for:**

   a) Departmental expenditure necessitated by floods, accidents and earthquakes, etc.,
   b) Handling charges for transshipments due to accidents.
   c) Cost of transportation of sick and wounded persons to hospitals, when ambulances are not available at wayside / small stations.
   d) Payment of expenses of special catering – when the imprest is exhausted in emergent cases only with the authorisation of an officer.
   e) Refund of fare on unused and partially used tickets.
   f) Ex-gratia payment to the persons involved in train accidents.
   g) Payment not exceeding Rs. 100/- in each case for shrouds to cover dead bodies of victims of accident on railway. The voucher required to be submitted along with counter signature of GRP Official.
   h) Payment to licensed porters for carrying injured / dead bodies.

5. **Free meal, water and tea snacks to affecter passengers, injured, uninjured or stranded:** (Railway Board letter No. 69/Safety-I/4/3 dated 22.9.1989)

CHAPTER XI

(Hospital Management DM Plan and Medical Preparedness)

1101 BRIEF

South Central Railway has got a well established Central Hospital at Lallaguda at Secunderabad, Divisional Railway Hospitals, at Vijayawada, Guntur, Guntakal and Nanded apart from Railway Health Units at various locations with sophisticated equipments.

1102 FORMULATION OF HOSPITAL DM PLAN

The Hospital DM Plan will come into effect whenever the competent authority GM or AGM or CSO declares the incident as disaster or come into effect if any Central Government or State Government declares a major disaster and when medical facilities of Railways is asked for assistance.

This plan comes into effect when there is a mass casualty resulting from mass casualty events occurred away from the Hospital or in situation when hospital itself has been affected by a disaster like fire, explosion, floods or earthquake.

1103 GOALS IN CASE OF MASS CASUALTY EVENT AWAY FROM HOSPITAL – NOT AFFECTING THE HOSPITAL

1. To control a large number of patients and the resulting problems in an organised manner.
2. To enhance the capacities of admission and treatment.
3. By treating patients based on rules of individual management, despite their being a greater number of patients.
4. By ensuring proper ongoing treatment for all patients who were already present in the hospital.
5. By smooth handling of all additional task caused by such an incident.

6. To provide medication, medical consultations, infusion, dressing materials and any other necessary medical equipments.

1104 GOALS IN CASE OF MASS CASUALTY EVENT AWAY FROM HOSPITAL – AFFECTING THE HOSPITAL ITSELF

To protect life environment and property inside the hospital from further damage.

- By putting into effect the preparedness measures.
- By appropriate action of the staff who have to know this task in such a situation.
- To re-establish as quickly as possible and in an orderly situation enabling the hospital to return to normal working condition.

1105 CONTINGENCY PLAN FOR THE INJURED

The injured patients belonging to the same emergencies are categorised as under for rendering assistance in an organised manner.

Category "A": Patients in critical condition – **coded Red.**

Category "B": Patients in serious condition but not life threatening condition – **coded Yellow.**

Category "C": Patients who can walk but had undergone minor wounds – **coded Green.**

Based on this injury categorisation, we shall classify the contingency plan into three categories:

Category "A": This plan is put into practice when number of expected injured patients belonging to single accident is less than 05. In this plan there is no disruption to the normal and routine work of the Central Hospital.

Category "B": This plan is put into practice when number of expected injured patients belonging to single accident is 05 – 10. In this plan there is minor disruption of the day to day functioning of the hospital

with some re-adjustments like postponement of routine surgeries, procedures and check up camps, health education programmes, etc., discharging of stable improving patients, utilising beds in special wards, semi-special wards, post-operative wards, sick sister wards, etc., To call back doctors and Group 'C' and 'B' staff from rest or 'off' duty.

Category "C": This plan is put into practice when number of expected injured patients belonging to single accident is more than 10. In this plan there is disruption of routine works, there will be only general OPDs functioning. There will be no specialist OPD till the situation improves, postponement of all routine surgeries, procedures and check up camps, health education programmes, etc., discharging of stable improving patients, utilising beds in special wards, semi-special wards, post-operative wards, sick sister wards, etc., The corridors of the wards, present conference hall and some empty rooms are converted into temporary wards to call back all doctors and Group 'C' and 'B' staff from rest or 'off' duty and if required call back from leave. Pharmacy, Laboratories, Stores, X-Ray Room, Operation Theatres will function for 24 hours till situation improves, will stop admitting non-emergent patients.

There may be change in the contingency plan as per situation requirement by Medical Incident Command.

1106 Hospital DM Plan

1. The Medical Command Authority will be CMD / CHD / CMS / Sr.MS - Admn. / Senior most doctor available.
2. The Control Central location will be MD's chamber / Sr.MS-Admn / Duty doctor's room.
3. There is a plan to have hospital siren system which will give information regarding type of contingency plan in action or type of event like WMD events.

4. After the incident, the duty doctor in consultation with medical command authority should make arrangements for blowing hospital siren. After blowing the siren, the Nursing Staff and Group 'D' for alternative ward should come to casualty immediately. After hearing the sire, all the doctors and staff who are 'on' duty or 'off' duty should come to casualty at the earliest (within 15 to 20 minutes). Duty Pharmacist should inform all the other doctors and designated staff specially CMD, CHD, Sr.MS and all specialist doctors, Chief Matron and Ward Matrons, OT staff, ICCU staff, Chief Pharmacist, staff of surgical and medical stores, staff of laboratory, staff of X-ray unit, staff of kitchen, etc., One medical team shall move to accident site whenever required by MRV / Road Ambulance and remaining staff will stay back in hospital and prepare themselves to receive the injured persons and render all necessary treatment.
5. The Reception and Triage will be in Casualty where patients are received and initial treatment will be given in casualty male OPD, Medical OPD, Skin OPD after examining the patient. Minor OT will be used for minor operations or immediate emergency procedures and major dressings will be done. Minor dressings will be done in Dressing Room. Dialysis Room can be utilised for treating immediate emergencies and resuscitations. The patient will be colour coded according to the kind of treatment they require.
6. Red – immediate resuscitation.
7. Yellow – patients life threatening injury.
8. Green – walking wounded.
9. Black – dead.
10. Additional medicine, dressing materials, suturing materials will be kept for the purpose. A dedicated disaster store will be commissioned in casualty or nearby.
11. After initial treatment and resuscitation in casualty, patient will be shifted to ICCU, OT or wards as per the condition of the patient.
12. Necessary operations, procedure or resuscitation will be done in OTs, ICCU and Wards. For this visiting specialist and on call specialists are called wherever required.
13. When number of cases coming to hospital is beyond the capacity of the Central Hospital or when requires some specialised care, the cases will be referred referral hospitals like Yashoda, Care, KIMs, Apollo, Kamineni, NIMS, etc.,

14. Necessary extra registers and paper will be kept in casualty and all other areas for proper documentation and medico-legal registration.
15. Kitchen staff will provide food and refreshment to new patients and also medical staff as per the need.
16. Hospital Ambulance and other ambulances of nearby hospitals are used for shifting cases from accident site to Hospital/s; may be Railway or referral.
17. List of hospitals having ambulance facilities and their phone numbers shall be kept in the casualty.
18. Communication network shall be provided with Railway, BSNL, hospital intercom, CUG and walkie-talkie.
19. RPF and Civil Police should be called for security purposes.
20. Dead bodies after examination by the doctors shall be shifted to mortuary after noting all details including photography/videography of the dead. Shift mortuary shed will be erected if dead bodies are more in number. Later the bodies will be handed over to Civil Police for post-mortem.
21. Decontamination of patients will be done in casualty or within the compound in case of chemical and radiological cases.
22. Family welfare room and dormitory can be utilised for patient's relatives / friends / dependants and non-wounded victims who are waiting and family welfare staff can help in this regard.
23. Personal protection equipments and detection devices are required during handling of patients of WMD events like Radiological, Chemical and Biological events which will be procured at the earliest.
24. Media briefing shall be done in CMD or CHD's or Sr.MS chamber.
25. In any case Central Hospital, Lallaguda, Secunderabad shall be involved in the event of shifting the patients to other Railway premises like Rail Kalyan, Railway institute/s, Officer's club, etc.,

1107 HOSPITAL DISASTER COMMITTEE

For implementing the Hospital DM Plan, a Hospital Disaster Committee shall be formed with members such as CMD, CHD, Dy.CMD, Sr.MS, specialist doctors, in-charge doctors of all OPDs including casualties apart from other medical / para-medical staff as decided by the medical authorities. Regular meeting/s shall be conducted at least once

in a quarter. Regular revision of Hospital DM Plan shall be done along with DM Plan of the Zonal Railway.

1108 STAFF EDUCATION AND TRAINING

1. Training of all staff involved in Hospital DM Plan will be done by conducting refresher courses, disaster drills, table top drills, partial evacuation / non-evacuation drills.
2. Doctors and related staff shall be trained in management of WMD events / CBRN disasters.
3. Training of doctors and hospital staff will be done as per NDMA's guidelines.
4. Help from NDRF, Arakkonam and Pune shall be taken for training.

1109 OBJECTIVES AND GOALS OF HOSPITAL DM PLAN

1. The main objective of Hospital DM Plan is to optimally prepare the staff and institutional resources of the hospital for effective performance in difference disaster situations.
2. The Hospital DM Plan shall address not only the mass casualties which may result from MCE that has occurred away from the hospital but should also address the situations where hospital itself has been effected by a disaster like fire, explosion, floods, earthquakes, etc.,
3. In the NDMA's guidelines on medical preparedness and MCE, duties had been specified for hospitals. There is need to lay down a system that there should be sharing of facilities amongst hospital in big cities which have a number of them.
4. Some of them may be earmarked as 'Super Speciality / multi-speciality hospitals'. Others as general hospitals to treat general casualties.
5. The Railway Hospitals need not be in the category of a 'Super Speciality / multi-speciality hospital' as they do not have specialized expertise for specific diseases.

1110 LIST OF HOSPITALS – PRIVATE AND GOVERNMENT WITHIN THE TERRITORY OF SC RAILWAY WITH FACILITIES AVAILABLE SUCH AS NO. OF BEDS, AMBULANCE SERVICES, BLOOD BANKS, ETC.,

(WITHIN HYDERABAD METRO CITY)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Apollo	Kukatpally	040 – 23160039, 23160041 & 23607777
2	BHEL Hospital	Ramachandrapuram	040 – 23182556
3	Poly clinic	Moula-Ali	040 – 27145555 & 27006268
4	Andhra Mahila Sabha	Vidyanagar	040 – 27617801
5	CDR	Hyderguda	040 – 2322221
6	CDR	Secunderabad	040 – 2620066
7	CARE Hospital	Nampally	040 – 24735465
8	CARE Hospital	Banjara Hills	040 - 55517777
9	Cancer Hospital	Jubilee Hills	040 – 23318422
10	Gandhi Hospital	Secunderabad	040 – 27702222
11	Global Hospital	"	040 – 23244444
12	Government Chest Hospital	Hyderabad	040 – 23814421
13	Government ENT Hospital	Kothi	040 - 24740245
14	Kamineni Hositals	LC Nagar	040 – 24022272
15	Mahaveer Hospital	Mehdipatnam	040 – 23393134
16	Mediciti	Near Secretariat	040 – 23237644
17	Medinova	Hyderabad	040 – 23311122
18	Medwin	Hyderabad	040 – 23202902
19	Newciti Hosp[ital	Hyderabad	040 – 26260004
20	Nilofer Hospital	Hyderabad	040 – 23320332
21	Osmania Hospital	Kothi	040 – 24600122
22	Railway Hospital	Lallaguda	040 – 27001134
23	Usha Mullapudi	Medchal	040 – 23090609
24	Vijaya Marie	Secunderabad	040 – 23315055
25	Yashoda	Somajiguda	040 – 23319999

26	Yashoda	Malakpet	040 – 24555555
27	Heritage Medical Centre	Hyderabad	040 – 23379999, 23379201
28	LV Prasad Eye Institute	Banjara Hills	040 – 23608262
29	St. Theresa Hospital	Hyderabad	040 – 23701013
30	NIMS	Hyderabad	040 – 23320332, 23396552
31	Yashoda Hospital	Secunderabad	040 – 27713333
32	KIMS Hospital	Ministers Road Secunderabad	040 – 27814910
33	SIGMA Hospital	Secunderabad	040 – 39123456
34	Vijaya Health Care	Secunderabad	040 – 66262929
35	Meena Narsing Home	Tukaram gate, lallaguda	040 – 27730674
36	KG Hospital	Tukaram Gate, Lallaguda	040 – 27730384 040 – 32001398
37	Manjari Narsing Home	Lalapet	040 – 27061399
38	Military Hospital	Lalbazar	040 – 27852545

(Within HYB Division other than Hyderabad city area)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Government Hospital	AKE	08452 – 276555
2	Government Hospital	BSX	08752 – 244293
3	Government Hospital	BDHN	84672 – 222146
4	Government Hospital	GWD	08546 – 272111
5	Government Hospital	JDCL	08544 – 232600 233999
6	Government Hospital	KMC	08468 – 224933

7	Government Hospital	KRNT	08518 – 220422
8	Government Hospital	MBNR	08542 – 242434 242354 242299
9	Government Hospital	ME	08454 – 235544
10	Government Hospital	MED	08418 – 223701
11	Government Hospital	MZL	08452 – 247463 276831
12	Government Hospital	NVT	08462 – 246242 276242 220011
13	Government Hospital	NZB	08462 – 221813 221513
14	Government Hospital	SHNR	08548 – 252055
15	Government Hospital	SCP	08461 – 211400
16	Private Hospital	WDRM	08452 – 225735
17	Government Hospital	WPR	08545 – 222113

(Within SC Division other than Hyderabad city area)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Government Hospital	ALER	08685 – 281644
2	Area Hospital (Rly)	BDCR	08744 – 242267 244955
3	Rajeshwari Maternity Hospital	BGSF	08727 – 253225
4	Government Hospital	BHLK	08464 – 262400
5	Methodist Hospital	BHLK	08464 – 261061
6	Government Hospital	BIDR	08482 – 227392 225474 226426

7	Lalithamma Hospital	BIDR	08482 – 225323 09440042491
8	Apex Hospital	BIDR	08482 – 225728 220501 09449825728
9	Government Hospital	BKL	08749 – 275511
10	Government Hospital	BN	08685 – 278244 278384 9440439164
11	PHC Hospital	CKN	08742 – 284686 284372
12	Government Hospital	CT	08474 – 236180 09248163770
13	Dr. Girish Clinic	DKJ	08719 – 117877 9966059088
14	Government Hospital	GNP	08711 – 220889 9849467513
15	Teja Nursing Home	”	08711 – 220468
16	JVM Nursing Home	”	08711 -220348
17	Sai Nursing Home	”	08711 -220219
18	Government Hospital	GTU	02446 – 252539
19	Government Hospital	HBU	08484 – 263625
20	Siddappa Hospital	HBU	08484 – 263615
21	Government Hospital	HER	02385 – 267686
22	Government Hospital	HSP	0870 – 255211
23	Government Hospital	JMKT	08727 – 9849310138
24	Umapriya Nursing Home	”	08727 – 253307
25	JMKT Nursing Home	”	08727 – 253453
26	Government Hospital	JOA	02381 – 254082
27	Government Hospital	JPTN	08654 - 222484
28	Government Hospital	KDM	9440166578
29	Government Hospital	KMNR	08485 – 285228

			285229
30	Dr. Vishwanadha Hospital	"	08485 – 285234 09448519207
31	Cure Hospital	KMT	08742 – 234077 234088
32	Kinnera Hospital	"	08742 – 228366
33	Government Hospital	KOHR	08451 – 289323
34	Government Hospital	KQT	08441 – 228573
35	Railway Poly Clinic	KZJ	0870 – 2546124
36	T.B. Hospital	KZJ/HNK	0870 – 2578100 2423090
37	Jaya Hospital	KZJ/HNK	0870 – 2553844 2578100
38	Government Hospital	LTRR	02381 – 222008
39	Government Hospital	MABD	08719 – 240403
40	Private Hospital	"	08719 – 240332
41	G.V. Hospital	MAGH	07173 – 222136
42	Government Hospital	MCI	08736 – 252028
43	Krithi Nursing Home	"	08736 – 253854
44	Samatha Nursing Home	MDR	08749 – 273212 274224 274811 273390 274201
45	Praja Vidyasala	"	08749 – 274243
46	Government Hospital	MRF	08416 – 268236
47	Private Hospital	MTMI	09440186056 09948849451
48	Sai Ramprasad Hospital	NAW	08411 – 248256 248604
49	Dr. Krishnamurthy Nursing Home	PBP	08716 – 255152 220210
50	Government Hospital	PDPL	08728 – 221014

			9603366784 9949016111
51	Gupta Hospital	”	08728 – 224010
52	Jaya Nursing Home	”	08728 – 222227
53	Government Hospital	PNF	02382 – 236554 236478
54	Railway Hospital	PRLI	02446 – 225606 09730471544
55	Government Hospital	”	02446 -223098
56	Accident Hospital	”	02446 – 222086
57	Munde Hospital	”	02446 – 223111 0942240866
58	Karad Hospital	”	02446 – 223344 09422330358
59	Laxmi Clinic	PTKP	9849608407
60	Sirua JPS	RDM / GDK	08728 – 242700 244567 246789
61	Medbone Hospital	”	08728 – 247788
62	Railway Health Unit	”	08728 – 2551088
63	Kavitha Clinic	RGP	9490854252
64	Government Hospital	SEM	08441 – 276163 09448577384
65	Dr.Desai Hospital	”	08441 – 276229
66	Dr.Deshpande Hospital	”	08441 – 276239
67	Government Hospital	SKP	08417 – 222294 9440684466
68	Government Hospital	SKZR	08738 – 238078 238038
69	G.V. Hospital	SRUR	08738 – 241418
70	Private Hospital	SSPD	08416 – 267536
71	Government Hospital	TDU	08411 – 272100
72	Balaji Nursing Home	”	08411 – 274066

73	Venkata Padmavathi Hospital	"	08411 – 272116
74	Government Hospital	UDGR	02385 – 256336 09422468082
75	Private Hospital	VKB	08416 – 255888
76	Private Hospital	"	9440248777
77	Private Hospital	"	9866761949
78	Private Hospital	"	9949135143
79	P.V. Hospital	WIRR	07173 – 255124
80	MGM Hospital	WL	0870 – 2433376 2421398
81	CKM Hospital	"	0870 – 2435606
82	ESI, Shivanagar	"	0870 – 2444936
83	Pruthivi Hospital	"	0870 – 2435804
84	Laxmi Nursing Home	"	0870 – 257611
85	Warangal Hospital	"	0870 – 2434353 2434363
86	Lifeline Hospital	"	0870 – 2568378
87	Apple Hospital	"	0870 – 2565230
88	Jaya Hospitals	"	0870 – 2577234
89	Rohini Hospital	"	0870 – 2579297
90	Dr. Srinivas Nursing Home	YSPM	08716 – 224210
91	Government Hospital	ZB	08451 – 282361
92	Ravali Nursing Home	ZN	08716 – 220921
93	Madhavi Nursing Home	"	08716 – 220505

(Within BZA & BZA Division)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	BBC	BZA	0866 – 2492300
2	Nagarjuna	"	0866 – 2554030

3	S.V.R. Neuro	"	0866 – 2494930
4	Help	"	0866 – 5515552, 2430112
5	Ravi Neuro	"	0866 – 2471031
6	City Cardiac	"	0866 – 2470881
7	CARE Hospital	"	0866 – 2431866
8	Usha Cardiac	"	0866 – 2483744
9	ESI	"	0866 – 2450215
10	RICH	"	0866 – 5566977
11	Railway Hospital	"	0866 – 2573437
12	Government Hospital Private Hospital	MBL	0861-2390692 0861-2390487
13	Government Hospital Private Hospital	VKT	
14	Government Hospital Private Hospital	VDE	40861-2330024 0861-2326751 0861-2315838
15	Government Hospital Private Hospital	NLR	0861-2326833, 2327009, 2331845, 2326751, 23252999
16	Government Hospital Private Hospital	KJJ	08622-275130 275144
17	Government Hospital Private Hospital	TTU, KVZ, UPD	08626-243524 08599-274022
18	Government Hospital Private Hospital	SKM	9848118549 08598-236215 236248, 236755, 236292
19	Government Hospital Private Hospital	TNR	08592-242305 & 9848635614 242537, 242640,242605
20	Government Hospital Private Hospital	SDM	08592-233270 242588, 242640

21	Government Hospital Private Hospital	OGL	08592-233270 231212, 232012, 283222, 232023
22	Government Hospital Private Hospital	KRV	08592-274629
23	Government Hospital Private Hospital	ANB	08592-270523
24	Government Hospital Private Hospital	UGD	08594-241700 & 9440144140 08592-275220
25	Government Hospital Private Hospital	CJM	08594-241700& 9440144140 241268, 241268
26	Government Hospital Private Hospital	GALA	0866-257284 0866-2554702, 2770283
27	Government Hospital Private Hospital	MBD	08676-250042 & 9885423549 9391277250
28	Government Hospital	GWM	8676-253811
29	Government Hospital Private Hospital	PAVP	08676-259634, 08676-253811
30	Government Hospital	TOU	08656-221096
31	Government Hospital	VAT	08812-230401
32	Government Hospital	EE	08812-230401
33	Government Hospital Private Hospital	BMD	08812-230401 08829-222205
34	Government Hospital Private Hospital	PUA	08812-230401 08829-222205
35	Government Hospital Private Hospital	CEL	08829-282229 9849860444
36	Government Hospital Private Hospital	BPY	08818-221144
37	Government Hospital Private Hospital	TDD	08818-221144
38	Government Hospital Private Hospital	NBM	08818-221144
39	Government Hospital Railway Hospital	NDD	08813-221049 0883-2428837

40	Government Hospital Private Hospital	CU	8813-271192 9440104673
41	Government Hospital	GVN	0883-2473022
42	Government Hospital	RJY	0883-2473022
43	Government Hospital	DWP	08857-227260
44	Government Hospital	APT	08857-227260
45	Government Hospital	BVL	8857-236079
46	Government Hospital	MPU	0884-2375831
47	Government Hospital	SLO	328900
48	Government Hospital	SVPM	0884-2302021,2302131
49	Government Hospital	RBCS	08857-242303
50	Government Hospital	KPLH	08857-242303
51	Government Hospital	CCT	0884-2362842, 2302001, 2302008
52	Government Hospital	COA	2375831
53	Government Hospital	PAP	08869-251710
54	Government Hospital	GLP	08869-251723
55	Government Hospital Private Hospital	RVD	08869-251723 08854-253722 08854-276526
56	Government Hospital	ANV	08854-253722
57	Government Hospital Railway Health Unit/TUNI	HVM	253722-08854 9908261541
58	Government Hospital	TUNI	08854-253722& 9848066136
59	Government Hospital	GLU	08931-227125
60	Government Hospital	YLM	08931-231088
61	Government Hospital	REG	08931-231088
62	Government Hospital	YLM	08924-231088
63	Government Hospital	KSK	08924-220403

64	Government Hospital	BVM	08924-223340
65	Government Hospital ESI Hospital	RYP	0866-2572854 2540215
66	Government Hospital	KI	2827633
67	Government Hospital	RMV	0866-2572854
68	Government Hospital	NDM	0866-2572854
69	Government Hospital Private Hospital	GWM Kankipadu	08676-253811 0866-2821754
70	Government Hospital	DPD	08674-247050
71	Government Hospital	GDV	08674-247050
72	Government Hospital	KVM	08674-248513
73	Government Hospital	PAV	08672-248513
74	Government Hospital Private Hospital	MTM	08672-248513 08672-222302 252628
75	Government Hospital	OTR	236420
76	Government Hospital	KKLR	08677-222079 994941386
77	Government Hospital	BVRM	08816-233662
78	Private Hospital	VVM	286864
79	Government Hospital	AVLI	08819-257724
80	Government Hospital	TNKU	08819-222175
81	Government Hospital	KLDI	08819-222175

(Within GNT city & in GNT Division)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Government Hospital	GNT	0863 - 2220035
2	St. Joseph's Hospital	"	0863 – 2234700
3	Venkateswara Nursing Home	"	0863 – 2356111
4	Ashwini Clinic	"	0863 – 2220806
5	Padmavathi Nursing Home	"	0863 – 2222222
6	Lalitha Super Specialities	"	0863 – 2222866
7	Rangarao Nursing Home	"	0863 – 2223479
8	Samatha Hospitals	"	0863 – 2222487
9	People's Nursing Home	"	0863 – 2220038
10	Nightingale Hospital	"	0863 – 2235221
11	Ambulance Services	GNT	0863 – 2224487 2233971 2223222
12	Blood Bank/GNT Kumar Blood Bank	GNT	0863 3 – 2224080 2225313
13	NRI Hospital	MAG	08645 – 248521
14	Soumya Apollo Hospital	KCC	0866 – 2470577 2490577
15	Government Hospital	MRK	08596 – 222879
16	St. Ann's Nursing Home	"	08596 – 224918
17	Sravani Hospitals	"	08596 – 222294
18	Madhu Clinic	"	08596 – 226461
19	Santhi Nursing Home	"	08596 – 222222
20	RRM Nursing Home	TLU	08499 – 246403
21	Government Hospital	CBM	08406 – 233777
2	Bhavani Nursing Home	CTYL	9951409849
23	Vennela Nursing Home	"	9885604454

24	Haritha Hospital	"	08682 – 242089
25	Divya Hospital	"	08682 – 243641
26	12th Batallion Police Hospital	SRMR	08682 – 284002
27	Kamineni Hospital	"	08682 – 304500
28	Government Hospital	NRT	08647 – 223232
29	Government Hospital	VKN	08646 – 275328
30	St. Xavier Hospital	"	08646 – 272084
31	Government Hospital	SYM	08646 – 256126
32	ICL Hospital	VNUP	9490758063
33	Government Hospital	PGRL	08649 – 256126
34	Government Hospital	KDGL	08689 – 242050
35	Nagarjuna Nursing Home	NDKD	9849888281
36	Government Hospital	MAG	08645 – 232530
37	NRI Hospital	"	08645 – 248521
38	Kali Gardens	NBR	0863 – 2293442
39	Government Hospital	NLDA	08682 – 222001
40	Government Hospital	NDL	08514 – 242575
41	PHC	GZL	08514 – 282528
42	Government Hospital	GID	08405 – 242044
43	Government Hospital	MCLA	08642 – 222180
44	Sri Sai ENT Hospital	MRGA	08689 – 245014
45	Sai Ortho Care	"	08689 – 240552
46	Sai Ortho Centre	"	08689 – 245768
47	Ankitha Nursing Home	"	08689 – 244751
48	Jeevan Jyothi Hospital	"	08689 – 244858

(Within GTL Division)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Government Hospital	AD	08512 – 253566, 231006, 253500, 253703
2	Private Hospitals	"	08512 – 253792, 253703, 252739, 253507, 252677, 252856
3	Government Hospital	ATP	08554 – 275001, 277762, 270332
4	Private Hospital	"	08554 – 274194
5	Government Hospital	BAY	08392 – 276250, 273411, 230575
6	Private Hospital	"	08392 – 230575, 230975
7	Government Hospital	CTO	08572 – 233437, 272585, 233515, 232554, 228102, 252440
8	Private Hospital	"	08572 – 229324
9	Government Hospital	DMM	08559 – 220313
10	Private Hospital	"	08559 – 220082, 222429
11	Government Hospital	DHNE	08516 – 223001, 222523
12	Private Hospital	"	08516 – 222564
13	Government Hospital	GY	08551 – 242305
14	Private Hospital	"	08551 – 252331
15	Government Hospital	GTL	08552 – 226897, 252331
16	Private Hospital	"	08552 – 227143, 226999, 226099, 227237, 226104
17	Government Hospital	GDR	08624 – 251804, 25153
18	Government Hospital	KDI	08494 – 224966
19	Private Hospital	"	08494 – 224330, 224188, 224284, 224094, 224237, 224112
20	Government Hospital	HX	08562 – 256800, 250351
21	Private Hospital	"	08562 – 253703, 256800
22	Government Hospital	KDP	08560 – 274221
23	Government Hospital	KHT	08578 – 222217
24	Government Hospital	KOU	08566 – 244463, 244077

25	Government Hospital	MALM	08512 – 279596
26	Government Hospital	NRPD	08473 – 262455
27	Private Hospital	”	08473 – 222445
28	Government Hospital	RU	0877 – 2274280
29	Private Hospital	”	0877 – 2275370, 2275375, 2275303, 2275150
30	Government Hospital	RC	08532 – 235740, 236201
31	Private Hospital	”	08532 – 233108, 227031, 230777, 236201
32	Government Hospital	RJP	08565 – 240258, 249324
33	Government Hospital	TPTY	0877 – 2286666, 2287777, 2255967, 2240522
34	Private Hospital	”	0877 – 2222196, 2228250, 2240001, 2232081, 2223636
35	Government Hospital	WADI	08474 – 202295
36	Government Hospital	YG	08473 – 252311, 252424

(Within NED Division)

S.No	Name of the hospital	Location	Telephone nos. with STD code
1	Government Hospital	ABZ	07258 – 231120
2	Private Hospital	”	07258 – 237757, 237731, 237763
3	Government Hospital	ADB	08732 – 232200, 226461
4	Private Hospital	”	08732 – 231325, 233547, 227057
5	Government Hospital	AK	0724 – 2434401
6	Railway Hospital	”	0724 – 2426228
7	Private Hospital	”	0724 – 2433398, 2417222, 2440120
8	Government Hospital	AKOT	07258 – 222570
9	Private Hospital	”	07258 – 222115, 222081, 222578
10	Government Hospital	ABX	02469 – 234003
11	Private Hospital	”	02469 – 223078, 222243

12	Government Hospital	AMW	07252 – 232001
13	Private Hospital	”	07252 – 232056, 232200, 232371
14	Government Hospital	AWB	0240 – 2334412 to 17
15	Private Hospital	”	0240 – 2321239, 2341894, 2335418
16	Government Hospital	BDU	02482 – 232182
17	Private Hospital	”	02482 – 261008, 261114
18	Government Hospital	BSQ	07255 – 242047
19	Private Hospital	”	07255 – 242038, 24244
20	Government Hospital	BMF	02454 – 220284
21	Private Hospital	”	02454 – 224199, 224202
22	Government Hospital	CTH	0240 – 2334412 to 17
23	Private Hospital	”	0240 – 2485332, 2485907, 2331994
24	Government Hospital	CRU	02452 – 255902
25	Private Hospital	”	02452 – 258219, 258277
26	Government Hospital	DLB	0240 – 2334412 to 17
27	Private Hospital	”	0240 – 227576, 261589
28	Government Hospital	GUX	0733 – 2225990
29	Private Hospital	”	0733 – 2286444, 2286522
30	Government Hospital	NED	02462 – 234003
31	Railway Hospital	”	02462 – 243120
32	Private Hospital	”	02462 – 222212, 220003, 233827
33	Government Hospital	J	02482 – 224942
34	Private Hospital	”	02482 – 230149, 234355
35	Railway Hospital	”	02482 – 223865
36	Government Hospital	KNRG	02456 – 220253
37	Private Hospital	”	02456 – 266113, 266099, 266012
38	Government Hospital	KMV	0240 – 2334412
39	Private Hospital	”	0240 – 2623488, 2623266
40	Government Hospital	KXX	07252 – 232001
41	Private Hospital	”	07252 – 232056, 232200, 232371
42	Government Hospital	KNW	0733 – 2223238

43	Private Hospital	”	0733 – 2227787, 2223133, 2223251
44	Railway Hospital	”	0733 – 2221122
45	Government Hospital	KNVT	02462 – 234003
46	Private Hospital	”	02462 – 223078, 222243
47	Government Hospital	KODI	02482 – 224942
48	Private Hospital	”	02482 – 2233149
49	Government Hospital	KSAE	08732 – 232200, 226461
50	Private Hospital	”	08732 – 231325, 233547, 227057
51	Government Hospital	LSR	02433 – 221259
52	Government Hospital	LBG	02462 – 270035, 270038
53	Private Hospital	”	02462 – 270096, 234003
54	Government Hospital	MVO	02451 – 240606
55	Private Hospital	”	02451 – 240417,240422, 240358
56	Government Hospital	MQL	02452 – 223584
57	Private Hospital	”	02452 – 223270, 224200, 225026
58	Government Hospital	MRDD	0733 – 2225990
59	Private Hospital	”	0733 – 2223133
60	Government Hospital	MUE	02462 – 275535
61	Private Hospital	”	02462 – 275457, 275462, 275561
62	Government Hospital	MGC	02462 – 222212, 220003
63	Private Hospital	”	02462 – 277227, 277389, 235174
64	Government Hospital	NSL	02559 – 261240, 265016
65	Private Hospital	”	02559 – 261249, 268382
66	Government Hospital	NDPR	02455 - 220202
67	Government Hospital	NVLN	02456 – 220253
68	Private Hospital	”	02456 – 224757, 220359
69	Government Hospital	PBN	02452 – 223458
70	Private Hospital	”	02452 – 222830, 333036, 330167
71	Government Hospital	PSD	02436 – 222238
72	Private Hospital	”	02436 – 283560
73	Government Hospital	POZ	02433 – 221259, 221414
74	Private Hospital	”	02433 – 241410, 241641

75	Government Hospital	PTU	02484 – 221293
76	Private Hospital	”	02484 – 221095, 221010
77	Government Hospital	PKNS	02452 – 223548
78	Private Hospital	”	02452 – 223270, 221635, 225026
79	Government Hospital	PAU	02452 – 255259, 254589
80	Private Hospital	”	02452 – 255104, 254589, 220357, 220037
81	Railway Hospital	”	02452 - 254589
82	Government Hospital	RNE	02482 – 271351
83	Private Hospital	”	02482 – 271215, 232400, 231111
84	Government Hospital	SVD	02482 – 224942
85	Private Hospital	”	02482 – 230149, 239001
86	Government Hospital	SCO	02484 – 221283
87	Government Hospital	SELU	02451 – 222542
88	Private Hospital	”	02451 – 222844, 222467
89	Government Hospital	UPR	02484 – 221293
90	Government Hospital	WHM	07252 – 232001
91	Private Hospital	”	07252 – 232056, 232371, 232200, 232256

CHAPTER XII

(OTHER DISASTERS, CHEMICAL DISASTERS, BIOLOGICAL DISASTERS, WATER-LOGGED RAIL DISASTERS)

1201 FIRE AND FIRE FIGHTING

"Fire instills in the human mind an elemental fear harking back to mankind's primeval origin. Our dormant animal instincts arouse awe if not an unreasonable fear of fire. Fire on train particularly in the running train is the most difficult of the accidents to investigate since by their very nature, destroy the evidence."

Fire on a running train is more dangerous than a static one, because the fanning effect spreads the fire very quickly to other coaches and in panic the passengers may jump out of running train. Under such situation, every Railway servant available on train or at site shall immediately stop the train and plunge into action to save the lives and property. In this context, the Railway servants are expected to have a basic knowledge on fire and fire fighting methods.

1202 FOLLOWING SOURCES OF IGNITION ARE THE CAUSES OF FIRE:-

- Carrying Stoves, sigris, Gas cylinders, Kerosene oil, Petrol fireworks etc. in passenger compartments;
- Making fire/using fire near paper, wood, petrol or such inflammable articles;
- Lighted match sticks, cigarette butts carelessly thrown;
- Short circuit in electrical wirings.
- Using naked flame for sealing of inflammable & other wagons, delivery of token to the LP/ALP, Shunting of inflammable loads etc.
- Use of open fire, smoking near gas/ petrol tank.

Everyone should take all possible precautions to keep away from doing the above acts so that possibility of breaking out of fire can be minimised.

1203 GROWTH AND SPREAD OF FIRE

In general, fire originates in a small level. When it is surrounded by burning materials with adequate supply of oxygen (air) fire spreads.

1204 CONVECTION

Transmission of heat by movement of air and gases produced, to the surrounded materials. To prevent this stop air supply.

1205 RADIATION

Objects in the surroundings of the fire are exposed directly to the flame, to prevent isolate fire from its surroundings.

1206 CONDUCTION

Conducting materials in contact with combustible materials will cause a fire.

1207 THREE MAIN METHODS TO BE ADOPTED TO EXTINGUISH FIRE

(a) **STARVATION** – means removing combustible substances away from the Fire.

(b) **SMOTHERING** – means prevention of Oxygen, access of fresh air in fire, using sand, foam etc to cover fire, which cuts Oxygen supply.

(c) **COOLING** – means reducing the degree of the temperature with water

IF FIRE BREAKS OUT IMMEDIATELY SUMMON THE FIRE BRIGADE

1208 IN THE EVENT OF A VEHICLE ON A TRAIN BEING ON FIRE

- Stop the train immediately.
- Do not panic.
- Evacuate the passengers from the burning coaches.
- Protect property, valuables & mails.
- Locate the fire extinguishing substances viz. water bucket with water/sand, fire extinguishers etc;

- Ascertain the type of fire viz. dry, oil gaseous, electric and use the right type of extinguishers;
- Use the fire extinguisher if any and put out the fire.
- Use water from the coaches and extinguish the fire.
- Isolate the burning vehicle from other vehicle by uncoupling.
- Train to be protected by Driver and Guard at both ends according to the provision of GR 6.03.
- Report it to the nearest station/control/fire station.
- Every effort shall be made to extinguish the fire and to save the wagon labels, seals and the contents of the vehicle.
- Throw Earth or sand, if available on the fire.
- In case of the fire is discovered when the train is near the tank or a watering station, the Guard and Driver shall use their discretion to proceed there, but no such attempt shall be made until the portion of the train in rear of burning vehicle has been detached.
- Inform all concerned to assist in extinguishing the fire;
- In case of fire from electricity, switch off the source;

1209 IN THE EVENT OF FIRE ON AN ELECTRIC ENGINE / EMU

- The Loco Pilot shall immediately switch off the circuit and lower the pantograph. The train shall then be brought to a stop at once.
- After disconnecting the electric supply to the affected circuits, the Driver shall take necessary action to put out the fire.
- If fire cannot be extinguished by the above means the Loco Pilot shall advice the Traction Power Controller through the emergency telephone to arrange the affected section of the over-head equipment to be made dead.
- The Guard and any other staff available shall render all possible assistance to the Loco Pilot in putting out the fire.
- Ordinary fire extinguishers or water from a hose pipe shall on no account be used to extinguish fire on live wire or electrical equipment. If the services of the fire brigade are required, the brigade shall not be allowed to commence operation until all electrical equipment in the vicinity of the fire has been made dead.

1210 IN THE EVENT OF A FIRE ON A DMU STOCK

- The Motorman shall immediately switch off the circuit breaker and shut down the engine and the train shall be brought to stop at once.
- The Guard shall give all possible assistance to the Driver in putting out the fire.
- The fire extinguishers of approved type shall be provided on each motor coach of DMU when a DMU rake is turned out from the car shed. The CWS in charge of the shed shall inspect the fire extinguishers and ensure that these are in good working condition.

1211 WHEN A PERSON IS ON FIRE

- Approach him holding the nearest available wrap in front of you.
- Wrap it round him.
- Lay him flat and smother the flames.
- He may roll on the floor, smothering the flames.
- On no account should he rush in to the open air.
- Call for assistance.

1212 FIRE CAUSED BY PETROL OR ANY OTHER INFLAMMABLE LIQUIDS, ACIDS OR GASES

- Segregate the affected wagon, coach or area involved.
- On opening a wagon do not enter it immediately to thus, avoid fumes, which may be dangerous.
- Use foam type fire extinguishers and sand. Water or soda acid type fire extinguishers must not be used at all.
- Do not bring naked lights near the site of fire.
- Warn the people living in the surrounding one Km radius.
- Stay away from ends of tanks, as tanks normally burst from the ends.
- Cool tanks that are exposed to flames with water from the sides only after the fire is put out.
- Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

- Inform the nearest Railway or Civil Fire Stations intimating that the fire has been caused by Petrol or any other inflammable liquids, acids or gases.

1213 In Case Of Fire/Accident Due To Explosives/Inflammables/Dangerous Goods Etc.,

- Extinguish by closing the valve or isolating LPG feed to fire by other suitable controls.
- Following steps may be taken if no undue risk is involved:

  a. Move unheated Cylinders to a safe place after ensuring closure of valves.

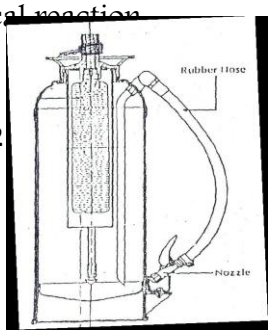
  b. Cool the Hot cylinders by spraying water from a safe position. The person directing the spray should take up a position where he would be protected from possible explosion.

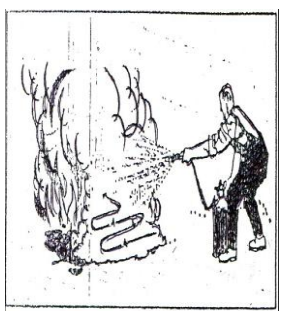
- If the cylinder containing inflammable/toxic gas which develops leak during transport remove it to an isolated at an open place away from any source of ignition and advise the filler or consigner as required.
- Inform the Chief Controller of Explosives by fax/telephone.
- Inform Officer in charge of nearest police station.
- Inform Departmental Officers concerned.
- Pending the visit of the Chief Controller of Explosives/his representatives, the wreckages and debris shall be left undisturbed except to save lives.
- After getting information from the Chief Controller of Explosives that he does not wish any further investigation, the restoration work may be commenced.

If you smell gas or vapour, hold a wet cloth loosely over your nose and mouth and breathe through it in as normal a fashion as possible.

1214 DRY CHEMICAL POWDER TYPE FIRE EXISTINGUSIHER (DCP)

These types are suitable for tackling petroleum,. Gas, electrical fire and controlling fires in textile fibres. Sodium based chemical powder is used on a fire which undergo chemical reaction





How to use

1215 HOW TO USE

1. Carry to the place of fire and keep it up right.
2. Remove the safety clip.
3. Strike the knob located in the cap.
4. Sealing disk of the cartridge is broken and allows carbon dioxide gas to escape to the main shell and powder is pushed out.
5. Direct the steam of the powder at the base of the flame.
6. For effective result stand at about 1.5 to 2.5 m. near the seat of the fire.
7. Move forward with moving the nozzle rapidly from side to side in sweeping motion.

When using on outdoor fires operate from the up wind side of the wind for effective spray.

1216 CHEMICAL DISASTERS

HAZARDOUS GAS EMERGENCIES (Including Guidelines of NDMA)

National Disaster Management Authority (NDMA) has issued guidelines on the management of chemical disasters. These guidelines are directed more towards their prevention and mitigation of their effects, if these happen than on rescue and relief operations afterwards.

Indian Railways have also been transporting chemicals and hazardous materials e.g. petroleum products (petrol, Naphtha, HSD, etc.), Caustic Soda, alcohol, compressed gases (LPG gas) chemical manures, acids, matches, etc. These goods are carried either in the SLRs or in the parcel vans or in the goods wagons. Quantum and type of transportation of such hazardous material varies from railway to railway.

Rules for carrying dangerous (hazardous goods) by rail have been legislated in the Red Tariff Rule 2000 as per which dangerous goods have been classified into following 8 classes:

(i) Explosives
(ii) Gases – compressed, liquefied or dissolved under pressure
(iii) Petroleum and other inflammable liquids
(iv) Inflammable solids
(v) Oxidizing substance
(vi) Poisonous (toxic substances)
(vii) Radio-active substances
(viii) Acids and other corrosives

Above chapters deal with the above classes of dangerous goods which include General Rules governing acceptance, handling, carriage, storage, delivery and the list of commodities included in that class. Carriage of goods of a hazardous nature other than those specified in these chapters shall not be accepted for transport by rail unless specially authorized by the railway administration as provided under these Rules.

Out of the above 8 classes of dangerous goods, classes II (Gases, compressed, liquefied or dissolved under pressure), III (Petroleum and other inflammable liquids) and VIII (Acids and other corrosives) area dealt in bulk on the railways whereas other classes of dangerous goods are dealt in piecemeal/small quantities in parcel vans/SLRs. Railways may refer to the specific paras pertaining to all these classes of dangerous goods. However, important relevant details of the popular classes (II, III and VIII) of dangerous goods are detailed as under:

1217 LIQUID PETROLEUM GAS (LPG)

Important properties of LPG from point of view of safe handling and tackling emergencies are as under:

- LPG is a mixture of mainly propane (25% to 45%) and butane (75% to 55%) and some quantity of propylene and butylenes.
- As liquid, LPG is lighter than water (density 0.52 to 0.57 gm/cc at 15^0C). As gas, LPG is 1.4 to 2.1 times heavier than air. When liquid LPG converts to gas in case of leakage to atmosphere, it expands heavily (230 to 270 times). During leakage in still air, LPG tends to settle at floor level.

- Volumetric expansion of LPG with temperature is 10 times that of water and 100 times that of steel. Adequate vapour space should be left in LPG pressure vessel and it should never be overloaded. Leakages will increase with rise in temperature.
- LPG is highly inflammable. It becomes explosive when mixed with air more than 2% by volume.
- LPG catches fire instantly on coming in contact with a source of ignition such as flame, spark, lighted match stick, cigarette, beedi etc. Without source of ignition, LPG will not catch fire till 410^0C.
- In case of continuous LPG leak, a source of ignition even far away can ignite the escaping vapours. The fire may also travel back to the source of leak, engulfing the leaky wagon.
- Normally LPG is stored in refrigerated state (boiling point -15^0C to 0^0C).
- When pressure is released and liquid LPG changes to vapour, heat required for vaporization is picked up from surroundings. The liquid product while evaporation can become cold enough to cause frost burns on bare flesh. Protective gloves should be worn when there is possibility of skin contact with liquid LPG. During evaporation from leak source, water vapour also condenses from the air forming a visible cloud.
- LPG is not poisonous. It does not contain toxic gases like carbon-monoxide. However when a person comes in contact with large amount of LPG in a closed space, difficulty of breathing can occur due to lack of oxygen. Liquid LPG handled without protective clothing can cause cold burns.
- Warning symptoms when breathed in sufficient quantities – stomach upset and headache.
- To facilitate detection of LPG leakage, it is mixed with ethyl merceptan to impart a foul odour resembling that of rotten eggs.

Note: A wagon which was loaded with LPG earlier and is in "empty" condition, is potentially dangerous. In this state, in case of a leaking or open valve, air can diffuse inside and mix with residual LPG at atmospheric pressure to form an explosive mixture. Valves and bleeder caps of "Empty" wagons should always be kept closed.

1218 A. LEAKAGES IN LPG WAGONS:

Leakage occurs from barrels of tank wagons due to –

- Damaged barrel.
- Defective dome fittings – improperly tightened or become loose during run.
- Defective valve seals, gaskets and corrosion from seating area.

B. PRECAUTIONS

1. Nearest Railway Authority, Oil Company and fire brigade to be informed. Directions should be obtained from Divisional C&W Controller.
2. When leakage is detected, all lights and fires in vicinity should be extinguished / removed. Incandescent electric lights can be used. As LPG vapour mixed with air remains suspended at a lower level, this area must be kept free from sources of ignition.
3. Lanterns or signal lamps should be kept on side from which wind is blowing and as high as possible. Locomotives should be kept away from site.
4. Personnel should keep to the windward side of the leakage.
5. Spectators should be kept away and instructed not to smoke.
6. Earth should be spread over the surface on which LPG has leaked.
7. In case inspection of dome fittings is required to be done, the wagon has to be moved to a non-wired line. Alternately, power block with protective earthing on both sides has to be taken to inspect the dome fittings.
8. In case of leakage from dome fittings, a **trained fitter equipped with proper tools** should first identify the location of leakage using soap water, and then attend as under-

- Leakage around Valve securing bolts – tighten the bolts using non-sparking tools. Excessive force not to be used. If leakage persists, it indicates defective seal.
- Leakage from Eduction Valve – Tighten the valve from wheel without using excessive force. If leakage does not stop, it indicates defective valve seal.
- Leakage from Safety Valve – It may be due to valve performing its function of relieving extra pressure or due to defect. Pouring of cold water over outer surface of barrel can help to reduce leakage.

- Leakage from Thermometer Well – Very dangerous situation as thermometer well is practically the part of barrel. Tighten top nut to stop the flow of liquid. Do not over tighten as removal of nut will worsen the situation.
- Physical damage to barrel – immediately isolate the tank and notify all concerned.

9. Leaky wagon should be removed to an open area if so advised by control.

10. Arrange for sufficient quantity of water and activate the existing fire-fighting system to handle any emergency.

C. DOs

- Ensure quick and accurate information is given to Divisional Control.
- Arrange for local resources.
- Ensure no ignition sources near leaky wagon. Affix labels of "Dangerous" and "Not to be loose shunted" on both sides of the wagon and attach a red flag.
- Check for sparking due to loose brake shoes or hot axles.
- Leakage can be checked by smell, hissing sound or ice-formation on dome.
- In case of leakages from valves, check that they are closed.
- In case of heavy leakage, isolate the wagon on the advice of control. Keep the wagon cool by spraying water.
- Guard wagon should always be available during shunting.

D. DON'Ts

- Do not smoke.
- Do not keep fuel oil, lubricant oil and debris accumulated in engine rooms.
- Do not carry lighted cigarettes, kerosene signal lamps near the vicinity of leaky wagon.
- Don't use steel hammers or other such tools for checking / tapping. Only rubber / Teflon or brass / beryllium-copper non-sparking tools are permitted for handling LPG wagons.
- No loose / fly shunting is to be carried out.

E. OTHER SUGGESTIONS

- Extent of leak can be detected by soap-water.
- If leaky valves are found hard to operate, excessive force should never be used.
- No hammering is permitted on tank barrel.
- Headers of eduction valves should always be blanked by pluggers.
- In case of heavy leakage and vapour cloud formation, OHE traction and Diesel locomotives in yard can be shut Dn.

F. TACKLING LPG WAGON DERAILMENTS / ACCIDENTS

- Explosive meter should be used to measure the extent of leakage and decide appropriate restoration measures.
- No smoking / gas cutting, lighting of stoves is to be permitted in the affected area.
- Nearest fire Brigade and Oil Company team to be called to site.
- For re-railing operations, Diesel crane needs to be fitted with spark arrester.
- Only water is permitted for LPG wagon fire control. In case of fire, all attempts should be made to keep the upper portion of the barrel cool by spraying water; else the barrel can explode due to heat and cause heavy loss of property and life.

1219 AMMONIA

Important properties of Ammonia from point of view of safe handling and tackling emergencies are as under:

1. Ammonia is a poisonous gas with characteristic pungent odour. The gas causes irritation of eyes, respiratory tract above 140 ppm. Ammonia gas is poisonous in concentrations above 5000 ppm.
2. Explosive Limit (Flammable limit) – 15% to 28%
3. It is extremely soluble in water and organic solvents. In case of leakage, a water curtain dissolves the leaking gas. The eyes and skin of affected personnel should be washed with sufficient quantity of water.
4. Dry ammonia is not corrosive to most material – however with the addition of moisture it is corrosive to metals such as copper, zinc and their alloys and galvanized surfaces.
5. It has a boiling point of –33.3°C and specific gravity of 0.77.

A. PRECAUTIONS TO BE OBSERVED FOR LEAKY AMMONIA TANK WAGONS

1. Nearest Railway Authority, Fertilizer Company and fire brigade to be informed. Directions should be obtained from Divisional C&W Controller.
2. The pungent odour of ammonia gives warning of its presence well before dangerous concentrations are achieved.
3. In case of leakage, personnel should keep to windward side of leak. Breathing apparatus and goggles to protect the eyes from irritation are required in cases of heavy leakage. Leaky wagon should be immediately isolated to an open area.
4. In case inspection of dome fittings is required to be done, the wagon has to be moved to a non-wired line. Alternately, power block with protective earthing on both sides has to be taken to inspect the dome fittings.
5. In case of leakage from dome fittings, a **trained fitter equipped with proper tools** should first identify the location of leakage, and then attend as under-

   - Leakage around Valve securing bolts – tighten the bolts until leakage stops. Excessive force not to be used. If leakage persists, it indicates defective seal.
   - Leakage from Education Valve – Tighten the valve handle from hand without using excessive force. If leakage does not stop, it indicates defective valve seal.
   - Leakage from Safety Valve – It may be due to valve performing its function of relieving extra pressure or due to defect.
   - Leakage from Thermometer Well – Very dangerous situation as thermometer well is practically the part of barrel. Tighten top nut to stop the flow of liquid. Do not over tighten as removal of nut will worsen the situation.
   - Physical damage to barrel – immediately isolate the tank and notify all concerned.

6. A leaky wagon which has been emptied should be properly stenciled and returned for repairs to the owning fertilizer company. Such a wagon can be put back in service after repairs only after being given a hydraulic test.

B. DO's

- Ensure quick and accurate information to Divisional Control.
- Subsequently arrange for local resources.
- The affected area should be cordoned and personnel should stay in the upwind direction as far as possible.
- Attempts to be made to locate and plug the source of leakage.
- Spray sufficient quantity of water to dissolve the ammonia. Fire brigade at site can spray water around the leak source to form a water curtain.
- First aid– Eyes and skin should be washed with sufficient quantity of water to dissolve the ammonia. For unconscious victims, artificial respiration may be done.
- Breathing Apparatus / canister respirator with ammonia filter and protective goggles are to be used by personnel approaching leaky wagons. In case of emergency, wagon can also be approached applying a wet handkerchief over the face to dissolve the ammonia vapours.
- Tank should be shifted to an isolated place if so advised by the control.

C. DON'Ts

- Source of ignition should not be allowed near the leaky wagons.
- Direct contact with ammonia is to be avoided as it causes caustic burns.
- Ammonia should not be inhaled directly – a moist cloth should always be used for protection.
- Oil or ointment should not be used on affected part of body.
- No attempt should be made for carrying out welding repairs on leaky wagon.

D. IMPORTANT TOOLS TO HANDLE LPG / AMMONIA GAS EMERGENCIES

- Spark proof tool set (rubber / Teflon / brass / beryllium–copper tools) consisting of set of spanners, chisel, ball peen hammer, blanking flanges, education valve pluggers and adopters, Teflon tape and M–seal epoxy adhesive.
- Protective hand gloves, helmet.
- Explosive meter.
- Intrinsically safe torches.

- Breathing aids – A canister respirator with LPG/Ammonia and dust filters can be used in open spaces with upto moderate gas leakage. For heavier gas concentrations, breathing apparatus with oxygen cylinder is required.
- Clear protective goggles.
- Plenty of water, buckets and water-spraying arrangement.

CLASS-II (GASES COMPRESSED, LIQUEFIED OR DISSOLVED UNDER PRESSURE)

Gases compressed, liquefied or dissolved under pressure, which have been permitted for their carriage by rail, as per Red Tariff No.20 are given below:

A. DISSOLVED GASES

- Acetylene (compressed into porous substances)

B. COMPRESSED GASES

Compressed Air	Argon	Coal gas	Oxygen	Sulphur Hexaflouride
Methane	Neon	Nitrogen	Hydrogen	

C. LIQUIFIED GASES

Ammonia (Anhydrous)*		Carbondioxide (Carbonic Acid gas)	
Ethyl chloride	Freon, Arcton or Genetron	Hydro-cyanic Acid	Methyl Bromide
Chlorine	Liquefied petroleum gas (Commercial butane or propane)		
Nitrous oxide	Medical mixtures (Oxygen & CO2, Oxygen & Helium mixture) Methyl Chlorine (Chloromethane)		
Liquid air	Liquid oxygen	Liquid nitrogen	Liquid Helium
Sulphur dioxide toxic (sulphurous acid gas)		Cyclopropane gas	

General Rules regarding acceptance of above commodities for carriage by rail are given in Rules 202, 203, 204, 205 & 206 of Red Tariff No. 20.

D. PACKING

Before the above commodities are transported by rail, it must be packed as per rules 207.1 & 207.2 of Red Tariff No.20. However, Rule 207.2 i.e. rule for protection of cylinder valves during transport shall not apply to cylinders containing oxygen or nitrous oxide for medical purposes having water capacity less than 5 litres.

E. MARKING & LABELLING OF CYLINDERS OR CONTAINERS

Rules for marking and labeling of cylinders are given in rules 208 & 209 of Red Tariff No.20. It must be ensured that the date of the last hydrostatic test or hydrostatic stretch test with the code mark of recognized testing station is marked on every cylinder. In the case of liquefied petroleum gas cylinders, the quarter and the year of test shall be given additionally in a neck ring or on a shoulder plate.

F. STORAGE

(Refer Rule No.211 of Red Tariff No.20)

Following points must be ensured:

- Thin wall cylinders such as liquefied petroleum gas cylinders and dissolved gas cylinders shall not be stacked in a horizontal position.
- Cylinders containing inflammable gases other toxic gases shall be kept away from cylinders containing other type of gases.
- Cylinders shall not be stored along with any combustible material.

G. PRECAUTIONS IN HANDLING & STORING GAS CYLINDERS OR CONTAINERS:

(Refer Rule No.212 of Red Tariff No.20)

Commodities mentioned in this chapter, shall not be stored or handled with or near explosives or other dangerous goods. Smoking and carrying any type of fire must not be allowed near these commodities.

H. MODES OF TRANSPORT

Regarding modes of transportation, refer rules 213, 214, 215, 216, 217 & 218 of Red Tariff No. 20.

I. STOWAGE & CARRIAGE

Stowage and carriage rules of gases, compressed, liquefied or dissolved under pressure are discussed in rules 219, 220, 221, 226, 227 & 228 of Red Tariff No.20.

J. ADDITIONAL RULES

Exceptional or additional rules regarding packing marking and labeling, carriage by goods/mixed/parcel train and stowage and carriage rules have been specified in Tables II, Chapter II of Red Tariff No.20. Characteristic property of gas and pictorial level indicating main characteristics of the gas is also indicated in column 2 & column 3 of table II.

CLASS – III (PETROLEUM & OTHER INFLAMMABLE LIQUIDS)

Petroleum and other inflammable liquids i.e. mixture of liquids & liquids containing solids in solution which give off inflammable vapour and is capable of ignition in suitable concentration of air when exposed to a source of ignition. Petroleum and other inflammable liquids are considered dangerous as per Railways Act 1989 (24 of 1989) and have been classified in three classes i.e. Class 'A', Class 'B' & Class 'C'.

(i) Class A: Petroleum and other inflammable liquids, the vapour of which having flash point below 23°C.
(ii) Class B: Petroleum and other inflammable liquids, the vapour of which having flash point above 23°C but below 65°C.
(iii) Class C: Petroleum and other inflammable liquids, the vapour of which having flash point at 65°C and above.

A list of items included under above three classes is given in table III, Chapter III of Red Tariff No.20.

Rules regarding general restrictions on conveyance and acceptance of petroleum and other inflammable liquids have been detailed in rules 302, 303, 304, 305 & 306 of Red Tariff No.20.

A. PACKING, MARKING & LABELLING

It is to be ensured that the words "Highly inflammable" and "Inflammable" as the case may be is marked on every package containing petroleum and other inflammable liquids. Every tank vehicles used for transportation of petroleum must be marked on each side and rear thereof in letters at least 7 cm high on a background of sharply contrasting colour the word "INFLAMMABLE" and the common name of the liquid being transported e.g. "MOTOR SPIRIT", "KEROSENE" etc. For method of packing, marking and labeling of petroleum and other inflammable liquids, Rules 308, 309 and 310 of Red Tariff No.20 may be referred.

B. STORAGE

i) Time of Loading & Unloading: All operations of loading, unloading and handling of petroleum and other inflammable liquids shall be conducted between sunrise and sunset. Provided that consignments to be sent in brake vans of passenger, mixed or parcel trains and by transship or road van trains may be handled at any hour, after due precautions have been taken to prevent accidents. Loading and unloading of petroleum products shall be allowed at any hours if, adequate electrical lighting and fire fighting facilities as determined by Chief Controller of Explosives, have been made available at the place of loading and unloading.

ii) Prohibition of smoking, fires, etc.: Petroleum and other inflammable liquids must not be stored or handled near explosives and other dangerous goods. Smoking, taking fire or naked light matches or other articles of inflammable nature is strictly prohibited near petroleum and other inflammable liquids. All due precautions should be taken at all times to prevent any escape of petroleum and other inflammable liquids. Rules 312 and 313 of Red Tariff No.20 may be referred for detail.

C. TRANSPORTATION

Subject to the provisions of Rules (i) and (ii):

(a) Petroleum and other inflammable liquids, class 'A', shall be transported by goods trains only.

(b) Petroleum and other inflammable liquids, Class 'B' and 'C' may be transported in wagons by all trains except passenger trains.

Rule (i): Petroleum and other inflammable liquids, class 'A' may be transported in wagons by a mixed or parcels on any line or section on which goods trains are not running provided that immediately on entering any section on which goods trains are running, the wagons containing petroleum and other inflammable liquids class 'A' shall be detached from the mixed or parcel train.

Rule (ii): **Carriage in brake van of passenger, mixed or parcel trains** – Except as otherwise provided in column 5 of table III of Red Tariff No.20, petroleum and other inflammable liquids shall not be carried in brake van of passenger, mixed or parcel train. Whenever these commodities are permitted to be carried in the brake van, the following points must be ensured.

a) The total quantity in the brake van of any one train at any one time shall not exceed 50 litres.

b) Petroleum and other inflammable liquids shall not be conveyed in the same carriage with any matches or fuses or appliances producing ignition, or any explosives or other dangerous goods.

c) Packages containing petroleum and other inflammable liquids shall be carried only in the rear brake van which shall be well ventilated.

d) Packages containing petroleum and other inflammable liquids shall be placed as far as possible from other packages in the brake van and from the tail light of the train.

D. CONVEYANCE IN TANK WAGONS

Tank wagons used for the conveyance of petroleum and other inflammable liquids shall be of a design approved by the Chief Controller of explosives.

E. PRECAUTIONS TO BE OBSERVED WHILE LOADING AND UNLOADING TANK WAGONS

(i) Tank wagons used for the conveyance of petroleum and other inflammable liquids shall be in good condition and free from leakage.

(ii) In filling tank wagons, an air space of more than 5% of the capacity of the tank wagon shall be left, provided that, the prescribed air space may be reduced to (a) 2.5 percent in the case of some important items like

High speed diesel oil
Furnace oil
Kerosene oil
Turbine fuel

(a) 4 percent in the case of some important items like

Aviation spirit
Petrol
Naptha

(iii) All inlets and outlets shall be securely closed.

(iv) Petroleum and other inflammable liquids, class 'A' shall not be filled in or discharged from tank wagons:

(a) At any place where tank wagon is exposed to sparks

(b) Within a distance of 30 m from any fire, furnace or artificial light capable of igniting inflammable vapour. Distance may be reduced to 9 m when the liquid is filled or discharged under seal and closed vapour return pipe lines are provided.

F. EMPTY TANK WAGONS: All empty tank wagons which have contained petroleum and other inflammable liquids shall, except when they are opened for the purpose of

cleaning them and rendering them free from vapour, be kept securely closed unless they have already been thoroughly cleaned and rendered free from vapour.

G. STOWING IN WAGONS, LABELING, SEALING AND LOCKING

Guidelines regarding stowing, labeling, sealing and locking of wagons have been discussed in Rules 322 and 323 of Red Tariff No.20. A 'Dangerous' label as shown in Rule No.323 of Red Tariff No.20 must be affixed to both sides of every wagon in which petroleum and other inflammable liquids are stored for despatch or delivery or while in transit.

The rules for shunting, marshalling and delivery of consignments have been discussed in Chapter III of Red Tariff No.20.

H. ADDITIONAL RULES

Any additional or exceptional rules applicable for any specific item regarding packing, marking and labeling carriage by goods train, carriage in brake van of passenger, mixed or parcel train and stowage and carriage rules have been discussed in detail in table III, Chapter III of Red Tariff No.20.

Class VIII: ACIDS AND OTHER CORROSIVES

A list of acids and other corrosives which have been considered dangerous goods are given in Chapter VIII, table VIII of Red Tariff No.20. Only these acids and other corrosives shall be accepted for conveyance by rail. Regarding general restrictions on conveyance of acids and other corrosives by rail and notice of despatch to be given by sender, rules 802, 803, 804, 805 & 806 of Red Tariff No.20 may be referred.

a. Packing, Marking and Labelling

Although acids and other corrosives is to be packed by consignor but more precautions need to be taken by concerned Railway officials, that it is packed strictly in the manner laid down in column 2 of table VIII and as per rules 807 of Red Tariff No.20.

The outermost package containing acids and other corrosives must be marked with the word "Corrosive" and name of the acid or corrosive. Labeling of package must be done as per rule 808, 809 & 810 of Red Tariff No.20.

b. Handling and Storage

(i) Time of Loading and Unloading

All the operations of loading, unloading and handling of acids and other corrosives shall be conducted between sunrise & sunset. Consignments sent in sectional vans may be handled at any hour by taking all due precautions to prevent accidents, including provision of adequate lighting.

(ii) Handling of Packages

(1) Packages containing acids and other corrosives not to be thrown dropped down or dragged along the ground of floor and care should be taken to avoid striking them against any hard object.

(2) When loading and unloading heavy drums or casks cushions of a suitable type, thick coir matting, felt, bags filled with saw dust or similar protection should be used to avoid damage to the drums or casks and to prevent leakage.

(3) Whenever practicable, packages containing acids and other corrosives shall be carried or conveyed on trolley or hand barrows.

(4) Acids and other corrosives not to be stored or handled with or near explosives or other dangerous goods or articles of inflammable nature.

(5) Acids and other corrosives not to be stored or handled with or near foodstuffs or foodstuffs empties.

(6) The floor of any place or wagon on which acids and other corrosives have been stored or the wagon or trolley or hand barrow in which they have been carried shall swept and thoroughly cleaned after removal of the goods there from.

c. Transportation

(i) Acids and other corrosives in wagons may be transported by all trains including passenger trains, but not to be transported in the brake van of trains.

(ii) Acids and other corrosives shall be carried in covered iron wagons and tank wagons. End opening carriages or wagons shall not be used.

d. Conveyance in tank wagons

Tank wagons used for the conveyance of acids and other corrosives shall be of a design approved by the Chief Controller of explosives.

e. Precautions to be taken while loading tank wagons

(i) Tank wagons used for the conveyance of acids and other corrosives shall be in good condition and free from leakage.

(ii) In filling tank wagons, an air space of not less than 5% of the capacity of the tank shall be left.

(iii) All inlets and outlets shall be securely closed subject to provision of vents where required.

f. Stowing in wagons

(i) Packages containing acids and other corrosives should be compactly loaded so that they do not shift during transit.
(ii) Different kinds of acids and other corrosives when loaded together in the same wagon shall be kept as far apart from another as may be practicable.
(iii) Drums containing acids and other corrosives shall as far as possible be loaded on end.
(iv) Bottles, jars and carboys should not be loaded on top of other goods and the other goods should not be loaded on the top of bottles, jars and carboys.

g. Labelling, Sealing and locking of wagons

A "dangerous" label as shown in rule 824 of Red Tariff No.20 shall be affixed on both side of every wagon in which acids and other corrosives are stored for despatch or delivery or while in transit.

h. Precautions to be taken during shunting

Shunting of wagons containing acids and other corrosives shall not be carried out, except under the superintendence of a duly authorized officer who shall ensure that during shunting operations:-

a) The speed of all movements does not exceed 8 kmph.
b) No rough hump, fly or loose shunting takes place.

Stationary Storage of Dangerous Goods

Some of the dangerous goods like HSD oil, lubricants, etc. are also stored by the railways for their own consumption in diesel loco sheds, RDIs at stations, store depots, etc. These places of storage of dangerous goods must have sufficient fire fighting equipments and trained man power to deal with initial phases of fire. All such locations of storage must also have the road access so that fire tenders can approach in the event of any major fire. Adequate security arrangements should be made at these locations to prevent any outside interference which may cause any untoward incident. The facilities for storage of petroleum products by the Railways should conform to the Petroleum Rules 2002 notified in the Gazette of India.

In addition to the railways own storage, there are major storage points of dangerous goods adjacent to the railway infrastructure under the private ownership. Railways should liaise with such private owners to ensure that adequate safety precautions are taken and locations are suitably guarded by them to obviate any untoward incident that might affect railway system.

Rescue, Relief and Restoration Operations

Railway's expertise in dealing with the mis-happening like spillage, catching fire, etc. of these dangerous goods is very limited. It is, therefore, imperative that the respective zonal railways will develop and nurture in coordination with those agencies and organizations on their system that have expertise in dealing with the hazardous material being handled and transported on the respective zonal railways. Contact details e.g. name, designation, telephone Nos., mobile Nos. etc. of such agencies should be available in the divisional and zonal railway Disaster Management Plan so that these agencies can be called for without any delay during any untoward incident. However, not to mention the nominated staff of ARMVs, ARTs and few of the staff maintaining the rolling stock which is used for transportation of hazardous material may be trained and equipped with the equipment used for dealing with such material in the eventualities.

1220 BIOLOGICAL DISASTERS

A. Epidemics & contagious diseases

An epidemic is defined as the occurrence of an illness or other health-related event that is clearly in excess of unexpected occurrence. A disease epidemic or outbreak is the occurrence of cases of a particular disease in excess of the expected, therefore, demanding that emergency control measures be implemented. The threat of communicable disease outbreaks is greater after a disaster than in non-emergency situations, particularly when large populations have been displaced. However, an epidemic or outbreak will only occur if the equilibrium between the population's susceptibility (host or reservoir), the virulence of the infectious agent (bacteria, viruses, parasites or fungi or their products) and the environment that promotes the exposure is upset.

The onset of an epidemic can be either rapid or sudden and this depends on several factors. An epidemic can be anticipated by the rise in number of people suffering from a

particular disease. In some cases an epidemic can be anticipated or predicted by an increase in the vector breading sites or in the death of the disease carriers.

The main cause for an epidemic is the pathogen (virus, bacteria, protozoa or rarely fungi). Reports of outbreaks of communicable diseases are increasing in number and reported in many of the national dailies. This is because of a number of reasons like poor sanitary conditions, contamination of food and water, conducive environmental conditions for breeding of the vector etc. Other factors include the seasonal changes that favour the breeding of an insect vector such as mosquitoes, flies etc. in the rainy season, exposure of non-immune persons like tourists and migrants. Poverty is one of the major factors contributing to the vulnerability.

Epidemics cause illness and death. There are other secondary effects such as disruption in the society and economic losses. Vulnerability is high among those who are poorly nourished, people living in unhygienic conditions, poor water supply, individuals who do not have an access to the health services or those who have weak immune systems. The outbreak of an epidemic in situations where already a natural calamity has struck will cause life-threatening situations.

B. Mitigation measures

- **Structuring the health services** is important to have clear understanding of roles and responsibilities of the public health system. Organizational preparedness and the coordination mechanism is required right from the Railway medical units with State and District to the sub centre level which is manned by the village health nurses or the health workers.
- **Contingency Plan** for response should be prepared after identifying the epidemics that are likely to occur in the region. Early warning system through a surveillance system is the primary requirement so as to have an effective response and prevent any outbreaks. For this, surveillance needs to be carried out at a regular basis through the routine surveillance system by involving the health tier system. Maps of all the health facilities in each division with an inventory of drugs and vaccines,

laboratory set ups, list of of doctors and supporting staff etc. needs to be kept ready and updated at regular intervals.

- **Training** need to be given to so as to build the capacity at all levels. Training will help to cope better during the emergency response period for epidemics.
- **Personnel protection** through vaccination is an effective mitigation strategy and will protect the persons at risk.

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CHAPTER XIII

(NATURAL CALAMITIES LIKE CYCLONE, EARTHQUAKE, FLOODS AND LANDSLIDES, ETC.,)

1301 MANAGEMENT OF CYCLONES

1301.1 National Cyclone Risk Mitigation Project:

The National Cyclone Risk Mitigation Project (NCRMP) to be implemented with financial assistance from the World Bank, is envisaged to have four major components:

Component 'A': Improvement of early earning dissemination system by strengthening the Last Mile connectivity (LMC) of cyclone warnings and advisories. Railways need to obtain advance warnings from the system developed.

Component 'B': Cyclone risk mitigation investments. On the Railways alone the high risk coastal rail infrastructure lengths, a similar protection needs to be planned where required.

Component 'C': Technical assistance for hazard risk management and capacity building, where required on the railway infrastructure.

Component 'D': Project management and institutional support by advance coordination by the Sr.DEN/PCEs of the Divisions and Zonal Railways is essential to be able to obtain it at short notice.

1301.2 Coordination by Railways regarding cyclones risk management, advance warnings and mitigation:

The Zonal Railways in the high risk zone of cyclones (four states – Tamilnadu, Andhra Pradesh, Odisha and West Bengal), one UT (Puducherry) on the east coast; and one state on the West Coast (Gujarat) have to be in close coordination with the respective Government Departments for handling all phases of the cyclones. These include;

- Cyclone risk mitigation investments on rail track, colonies in the vicinity of high risk area.
- Capacity building on rail tracks / bridges and important rail installations both for reducing devastation from a cyclone and for relief, restoration, etc.,
- Advance warning of a cyclone. Action for regulation mainly of passenger trains follows thereafter.

The Railway infrastructure is located in the vulnerable states in part either in a densely populated area or alternately where no significant population exists. While in the former case, the resources of the District / State Government would also be concentrated for rescue / relief / mitigation, in the latter case the Railways would have to depend mostly on their own resources for restoration of railway track.

1302 MANAGEMENT OF EARTHQUAKES:

1302.1 EARTHQUAKE RISK IN INDIA:

India's high earthquake risk and vulnerability is evident from the fact that about 59% of land area could face moderate to severe earthquake. During the period 1990 to 2006, more than 23,000 lives were lost due to 6 major earthquakes in India, which also caused enormous damage to property and public infrastructure. The occurrence of several devastating earthquakes in areas hitherto considered safe from earthquakes indicates that the built environment in the country is extremely fragile and out ability to prepare ourselves and effectively respond to earthquakes is inadequate. India witnessed several earthquakes like Uttrkashi of 1991, Latur in 1993, Jabalpur in 1997, Chamoli in 1999, Bhuj in 2001 and J&K in 2005.

1302.2 Nodal Ministry:

Ministry of Earth Sciences (MoES) is the nodal ministry which will prepare the earthquake management plan covering all aspects like earthquake preparedness, mitigation, public awareness, capacity building, training, education, R&D, documentation, earthquake response, rehabilitation and recovery.

1302.3 Monitoring seismic activity and safety codes:

The IMD will be the nodal agency for monitoring of seismic activity. The BIS will be the nodal agency for preparing earthquake-resistant building codes and other safety codes. All such key stakeholders, including Central Ministries and Departments and State Governments / SDMAs will develop detailed DM Plans recognizing the seismic risk in their respective jurisdictions, based on the guidelines of NDMA.

Given the high seismic risk, the earthquake vulnerability in India, the NDMA guidelines require the Railways along with other stakeholders to ensure that hereafter, all new

structures are built in compliance of earthquake-resistant building codes and town planning bye-laws. This will be taken up as a national resolve.

1302.4 Structural safety audit and strengthening:

The NDMA guidelines emphasise the need for carrying out the structural safety audit of existing lifeline structure and other critical structures in earthquake-prone areas and carrying out selective seismic strengthening and retrofitting. The critical factors responsible for the high seismic risk in Indian and consequently the prioritized six sets of critical interventions have been presented as the six pillars of earthquake management. They will help to;

1. Ensure the incorporation of earthquake-resistant design features for the construction of new structures.
2. Facilitate selective strengthening and seismic retrofitting of existing priority and lifeline structures in earthquake-prone areas.
3. Improve the compliance regime through appropriate regulation and enforcement.
4. Improve the awareness and preparedness of all stakeholders.
5. Introduce appropriate capacity development interventions for effective earthquake management including education, training, R&D and documentation.
6. Strengthen the emergency response capability in earthquake-prone areas.

1302.5 Institutionalisation earthquake-resistant design and construction:

The Railways along with Central Ministries and Departments and State Governments will facilitate the implementation of enforcement of relevant standards for seismically safe design and construction of buildings, flyovers, bridges, ports and harbours, and other lifeline and operationally important structures including track infrastructure, etc., falling within their administrative control.

1303 MANAGEMENT OF LANSLIDES:

1303.1 Landslide risk:

Landslides are one of the natural hazards that affect at least 15% of the land area of our country – an area which exceeds 0.49 KMs. Landslides of different types are frequent in

geo-dynamically active domains in the Himalayan and Arakan-Yome belt of the NE parts of our country as well as in the relatively stable domains of the Meghalaya Plateau, Western Ghats and Nilgiri Hills. In all, 22 States and parts of UT Puducherry and Andaman and Nicobar islands are affected by this hazard. The phenomenon of landslides is more pronounced during the monsoon period.

1303.2 Nodal agency of GOI:

GSI was declared the nodal agency for landslides by the Government in 2004. The responsibilities of the Ministry of Mines / GSI as the nodal ministry / agency include coordinating all the activities related to landslide hazard mitigation and monitoring physical the occurrence of landslides in the country.

As per DM Act, the responsibility to cope with natural disasters is essentially that of the State Governments and the role of the Central Government is a supportive one in terms of supplementing physical and financial resources.

On the Railways, RDSO has still to undertake any study to identify vulnerable areas of rail infrastructure prone to landslide hazards. This work will be initiated by the Civil Engineering Directorate of Railway Board who will lay down guidelines for RDSO to undertake the study. Although management of landslides requires coordinated and multi-faceted among many stakeholders in the total disaster management cycle, one important recommendation for follow up by Civil Engineering Directorate of Railway Board is the landslide hazard zonation mapping in macro and micro scales after identification and prioritization of the areas in consultation with the Border Roads Organisation, State Governments and local communities.

1303.3 Monitoring and forecasting of landslides:

The monitoring and forecasting of landslides which are two of the least developed fields of landslide management practice will be given special attention as a part of mitigating the risk arising from landslide hazard. Monitoring of landslide include

- Surface measurements of landslide activity.
- Sub-surface measurements of landslide activity.

1304 MANAGEMENT OF SNOW AVALANCHES:

The recording of avalanche data and their clearance is carried out by the Border Roads Organisation. The forecasting and control of snow avalanches are generally dealt with by the snow and avalanche studies establishment. According to the management of this hazard will be a collaborative work of the NDMA, District Administration, Border Roads Organisation, Snow and Avalanche studies establishment and academic institutions active in carrying out research in this field.

WEATHER WARNING

Arrangements exist with the Meteorological Department, Government of India for issuing telegrams of warning and also through FAX and email whenever storm / gales or for heavy rainfall are expected. The conditions under which warnings are issued are detailed below:

(i) Amount of rainfall considered dangerous – 5 cm and above in 24 hours.
(ii) Wind velocity considered dangerous - 65 KMPH or above.
(iii) Period when warning will be given – throughout the year.

1302 TERMINOLOGY USED IN MET. DEPARTMENT BULLETINS REGARDING CYCLONES

Type of disturbance	Associated wind speed	
	Knots	KMPH
Low pressure area	less than 17	30
Depression	17 – 27	30 – 50
Deep depression	28 – 33	50 – 64
Cyclonic storm	34 – 47	65 – 90
Severe cyclonic storm	48 – 63	90 – 120
Very severe cyclonic storm	64 – 119	120 – 220
Super cyclonic storm	more than 120	more than 220

(1 knot is equal to 1.85 KMPH)

1303 INTENSITY OF PRECIPITATION

Rainfall amount (in cm)	Description
Less than 1	Light rain
1 to 3	Moderate rain
4 to 6	Rather heavy rain
7 to 12	Heavy rain
13 and above	Very heavy rain

1304 SPATIAL DISTRIBUTION

The area over which the phenomenon like rainfall is expected to occur.

Isolated (at one or two places):	25% or less of the total area under consideration.
At few places (scattered) :	Between 25% to 50% of the total area.
At many places (fairly widespread):	Between 50% to 75% of the total area.
At most places (widespread):	More than 75% of the total area.

1305 NORMAL WEATHER WARNINGS:

- Conveying messages by IMD, GOI.
- The entire SCR territory has been divided into 7 zones.
- Weather warning telegrams will be classified as "XXW" (weather warning) or "000" (weather immediate). These telegrams will normally be delivered by the BSNL Office direct to the Central Control Office/SC and Divisional Control Offices concerned. Liaison should be kept with local BSNL Authorities for the receipt of telegrams over phone to avoid transit delay in actual delivery of the message.

- State Meteorological centres function at Hyderabad for Andhra Pradesh state, at Bangalore for Karnataka and at Mumbai for Maharashtra state. In addition, Cyclone Warning Centre has been established at VSKP. The weather warning telegrams will emanate from:

  (i) Regional Meteorological Centre, Colaba, Mumbai for Zone I.
  (ii) State Meteorological Centre,Hyderabad Airport, Hyderabad for Zone II, III & IV.
  (iii) Cyclone Warning Centre, Andhra University, Vishakapatnam for Zones V & VI.
  (iv) State Meteorological Centre, HAL, Airport, Bengaluru for Zone VII.

- The Cyclone Warning Centre, Vishakapatnam will give the adverse weather warning telegrams on depressions and cyclonic storms coming from Bay of Bengal and storms are still at sea for the coastal area of A.P.

- Long distance telephone calls will not be resorted to normally, but on special occasions this mode of communication may be utilised by the Foreocasting Officer at his discretion.

LIST OF ZONES ON S.C.RAILWAY WITH THEIR AREAS COVERED BY EACH ZONE FOR WHICH WARNING TELEGRAMS ARE ISSUED

S.No	Zone	State & District	Railway Section	Telephone Nos. & email addresses	Regional Meteorological Centre issuing the warning
1	I	**Maharashtra** Nasik, Aurangabad, Parbhani, Nanded, Osmanabad, Akola **M.P** Khandwa	MMR-BSX MUE-ADB PBN-PRLI PAU-AK-KNW	02462 – 261729 drmned@scr.railnet.gov.in	RMC, Colaba, Mumbai – 400005 Tel. No. 022-8393473, 8394105, 26823009
			Kamalnagar-PRLI	040 – 27823156 040 - 27823905 drmsc.railnet.gov.in	

2	II	**Andhra Pradesh** Adilabad, Karimnagar, Nizamabad, Warangal, Medak	KZJ-BPQ, KZJ-DKJ, SSPD-ZB, MAGH-GDCR, PDPL-KRMR	040-27823156 drmsc.railnet.gov.in	SMC, Hyderabad–500 019 Tel No. 040-27908506 27904950
			ME-BSX	040-278223905 drmhyb@scr.railnet.gov.in	
3	III	**Andhra Pradesh** Khammam, Nalgonda, Hyderabad, Mahaboobnagar	DKJ-MDR DKJ-BDCR-MUGR KRA-SYI SC-ALER BMT-HYB SC-NWG VKB-SSPD	040-27823156 drmsc.railnet.gov.in	SMC, Hyderabad–500 019 Tel No. 040-27908506 27904950
			SC-ME, SC-KRNT	040-278223905 drmhyb@scr.railnet.gov.in	
4	IV	**Andhra Pradesh** Kurnool, Anantapur, Kadapa, Chittoor	GTL-MALM, GTL-RU, RU-VKI, GTL-DMM, DMM-PAK, PAK-KPD, PAK-RU, GTL-BVL, GTL-DHNE, DHNE-NDL, PDKL-GY, GTL-KLU	08552-227882 drmgtl.railnet.gov.in	SMC, Hyderabad–500 019 Tel No. 040-27908506 27904950
			KRNT-DHNE,	040-278223905 drmhyb@scr.railnet.gov.in	

5	V	**Andhra Pradesh** Guntur, Prakasham, Nellore	BZA-GDR	0866-2578860 drmbza@scr.railnet.gov.in	CWC, Andhra University Campus, Vishakapatnam – 530 003 Tel. No. 0891-2543034, 2543036
		Nalgonda, Kurnool	MRGA-NDKD, GNT-DKD, GNT-TEL-RAL, GNT-KCC, DKD-NDL PGDP-NLDA MRGA-GNT-MCLA	08663-2234152 drmgnt@scr.railnet.gov.in	
		Nellore	GDR-VKI	08552-246351, 245427 drmgtl@scr.railnet.gov.in	
6	VI	**Andhra Pradesh** Vishakapatnam, East Godavari West Godavari, Krishna	BZA-VSKP, SLO-COA, BZA-GDV-MTM, GDV-BVRM-NS, BVRM-NDD-CCT0KPLH	0866-2578860 drmbza@scr.railnet.gov.in	CWC, Andhra University Campus, Vishakapatnam – 530 003 Tel. No. 0891-2543034, 2543036
			MDR-KI, MTMI-JPTN	040-27823156 drmsc.railnet.gov.in	SMC, Hyderabad–500 019 Tel No. 040-27908506 27904950
7	VII	**Karnataka** Raichur, Bellary, Mohammadabad, Bidar, Gulbarga	BAY-BVL, MALM-WADI	08552-227882 drmgtl@scr.railnet.gov.in	SMS, HAL Airport, Bangalore – 560017 Tel No. 080-22211118, 22235675
			ZB-	040-27823156	

			KAMALNAGAR, NWG-CT, SUH-WADI	Drmsc.railnet.gov.in	

- **Dissemination of messages within Railway:** On receipt of weather / cyclone warning telegrams in the Control Office, the following action should be taken.

- **Central Control, Railnilayam, Secunderabad – 500 071:**

(i) The Chief Controller shall give the copy of message to all controls, i.e., Engineering Control, Traction Power Control, Traction Loco Control, Power (diesel) Control, Security Control, Commercial Control, Electrical Control, S&T Control/Test Room and Divisional Control Office concerned. It is the responsibility of these controls in their turn to inform the Officers, Supervisors and all concerned pertaining to their Departments for taking necessary steps to be in readiness for meeting any eventualities. They should record the names and designation with the time and date to whom the message has been repeated.

(ii) He should also verify with the Divisional Control that such weather / cyclone warning telegrams received by him have also been received by the Divisional Chief Controllers of the concerned Divisions, so that lapses can be remedied then and there.

1306 ACTION BY THE DIVISIONAL CONTROL OFFICE

(a) The Chief Controller shall give the copy of message to all Controls, i.e., Engineering Control, Traction Power Control, Traction Loco Control, Power (diesel) Control, Security Control, Commercial Control, Electrical Control, S&T Control/Test Room. It is the responsibility of these controls in their turn to inform the Officers, Supervisors and all concerned pertaining to their Departments for taking necessary steps to be in readiness for meeting any eventuality. They should record the names and designations with the time and date to whom the message has been repeated.

(b) The SCOR shall repeat the message to SMs on the section likely to be affected and record the names of SMs on duty to whom the telegram has been repeated.

Note: In respect of sections which are not controlled or when the control phone is interrupted, an "XXR" (immediate) telegram should be issued by the Chief Controller to the Officials referred above.

(i) The preamble of the weather / cyclone warning telegram and the text as received from the Meteorological Department should be reproduced verbatim in the text of the "XXR" telegram, the text of the message should be worded as shown below;

Regional Meteorological Centre …….. (here enter the name of the Meteorological Centre) **XXW/000** (insert whichever class is used by the Meteorological Department) **telegram coded** …….. (insert the code of the original message) **dated** …….. (date of the original message) **reads** ……. (reproduce the text of the Meteorological telegram verbatim).

(ii) A register should be maintained in each Control of each Department i.e., Engineering Control, Traction Power Control, Traction Loco Control, Power (diesel) Control, Security Control, Commercial Control, Electrical Control, S&T Control/Test Room showing full particulars of the receipt and action taken on the weather / cyclone warning telegrams, showing the date and time of receipt of warning telegram, the full text of the telegram and the date and time of despatch of telephonic advices to the Officials concerned and the initials of the SMs on duty to whom the telegram has been repeated.

1307 ACTION BY THE SM

- Intimation to staff: On receipt of weather / cyclone warning advice from the SCOR, the SM should take the following action;

  SM on duty at station where ADENs / SSE/SE-P.Way / SSE/SE-Works / SSE/SE-OHE/PSI are headquartered should immediately arrange to handover the parties concerned a copy of the verbatim telegram received from the SCOR and obtain acknowledgement. If they are out of headquarters, the SM shall advice the controller on duty who will then be responsible for ensuring that the contents of the telegram are communicated verbatim to Engineering and TRD officer at the station.

Date & time of receipt	Text of message in full	Name / Designation of officials to	Signature of the SM	Actual weather condition

		whom message was repeated`		

The office copy of the telegram on which acknowledgement has been taken should also be pasted in the register.

- **Precautions to be taken by the SM, LP/ALP and Guard regarding control of trains during storm and strong wind:**

(i) When the warning message forecasting cyclone, storm or strong wind has been received from the Meteorological Department and/or there is a reasonable doubt that severe storm is going to break out endangering the safety of passenger carrying trains etc., the SM shall, in consultation with the Guard and the LP/ALP of the train regulate the train and also refuse to grant line clear to a train coming to his station until storm abates and he considers safe for the movement of trains.

(ii) Should a train be caught on the run in a cyclone, storm or strong wind of an intensity which in the opinion of the LP/ALP, is likely to endanger the safety of the train he shall immediately control the speed of his train a and bring it to a stop at the first convenient place taking care as far as possible to avoid stoppage of the train at places like sharp curves, high embankments and bridges (including approaches thereof). In controlling the speed and bringing the train to a halt, the LP shall stop his train carefully and without a jerk. He shall restart the train in consultation with the Guard only after the cyclone, storm and wind abates and it is considered safe to proceed.

(iii) The Guard and LP/ALP of the train in co-operation with the railway staff travelling in the train shall try to see that doors and windows of the coaches are kept open by the passengers to allow free passage of the wind through the coaches.

1308 ACTION BY SE/P.WAY

(a) The SE/P.Way on receipt of weather / cyclone warning message should arrange to advise Monsoon Patrolman / Watchmanand Gangmates to be extra vigilant. During the fair season, he should introduce Monsoon Patrolling as soon as possible and also post Watchman as required at all vulnerable locations and bridges by day and as well as by night for a period extending upto 48 hours beyond the period specified in the Weather / Cyclone warning telegram.

(b) The SE/P.Way should be out in his section as far as possible by trolley during period of warning and 48 hours beyond.

(c) **Monsoon Patrolling:** Commencement and termination – if the local condition warrants, the SE/P.Way of the section concerned may introduce or continue night patrolling outside the stipulated dates; duly advising 'all-concerned' (1003 of IRPWM). In other words, he cannot discontinue or terminate the Monsoon Patrolling within the stipulated period.

(d) **Vulnerable locations:** Stationary Watchman should be posted round the clock at every nominated location during the Monsoon period (1014(3) of IRPWM).
Sign board: Sign boards will be fixed during the Monsoon period only, i.e., on both sides of vulnerable points at a distance of 400m on each side (Item 9.8 of Appendix IV of G&SR).

(e) **Monsoon Emergency Reserve Stock:** The locations and the prescribed quantities of Monsoon emergency reserve stock i.e., sand, boulders and empty cement bags. It should be ensured that the materials are made available accordingly, before the onset of Monsoon.

In addition to Monsoon reserve stock mentioned above, the following materisla are to be kept ready on wheels for handling any emergency situations like breaches and wash-a-ways.

(i) 10 covered wagons each filled with boulders and sand at RU, KCC & KZJ.

(ii) RH girders one set each of 16.3m and 13.4m length on BFRs with 50 Nos. of steel cribs (duly secured) at RU, KCC & KZJ.

1309 ACTION BY GANGMATE

On receipt of advice from the SM, the Gangmate should take the following action:

(a) During the fair season, the Gangmate should on his own accord depute two reliable Gangmen with the equipment for patrolling the block section on either side and for alerting the intermediate Gangmate.

(b) During Monsoon period, the Gangmate of the station / yard gang should send two Gangmen in opposite directions to alert intermediate Gangmates, Patrolmen and Watchmen.

(c) "Should there by heavy rain or severe storm during the period, weather during the monsoon or fair season, the Gangmate and Gangmen shall carry out the gang patrol as per instructions contained in para 1001 (3), (7) and para 1002 of IRPWM.

1309 ACTION BY TPC

The TPC of the Division should immediately repeat the weather / cyclone warning message telegram verbatim on control telephone to all concerned AEE, OHE/PSI Depot in-charge of the section likely to be affected for taking adequate steps as to be in readiness for meeting any eventualities, and then circulate the contents of the telegram to the officers concerned in Divisional Headquarters office. The TPC shall always be in a state of readiness to take quick and prompt action to tackle the situation. He will keep continuous liaison with the field officials, headquarters officers, apart from the neighbouring Divisions for seeking help as the circumstances warrant.

The AEE will be in their respective headquarters. Their further movements depending upon the damages caused to OHE/PSI installations due to cyclone will be guided by Sr.DEE/TRD.

All Sr. Supervisors and Officers of the TRD Branch should also keep the TPC informed of their movements. These instructions also apply to other key personnel.

1310 ACTION BY OHE/PSI DEPOT IN-CHARGE

(a) The OHE/PSI Depot in-charge on receipt of weather / cyclone warning shall be in a state of readiness to meet any emergency for arranging emergency staff to be vigilant and be available in Headquarters. They shall be in readiness to move at a short notice.

(b) BD Vehicles, i.e, Tower Car, Wiring Train, Lorries and all breakdown tools, shackles and ladders, generator sets, portable flood lights etc., shall be kept ready for movement at any instant.

(c) OHE material like conductors, insulators, fittings shall be kept ready

1311 ELECTRICAL GENERAL SERVICES WING SHALL ENSURE THE FOLLOWING TO BE IN READINESS

(i) Sufficient stock of fuel to run available DG set for 24 hours.
(ii) Atleast 2 portable DG sets at each Depot in good condition.
(iii) Four numbers of portable weather proof tents including requirement of Electrical and S&T staff.
(iv) List of contractors capable of providing DG sets with operators at site and their telephone numbers and arrangements for deployment at short notice.

1312 ACTION TO BE TAKEN IN THE EVENT OF EAST COAST BEING THREATENED BY CYCLONIC STORMS

(i) Receipt and transmission of message: The Cyclone Warning Centre, VSKP will give adverse weather warning telegrams on depressions, cyclonic storms coming from Bay of Bengal when the storms are still at sea for the coastal area of A.P.

(ii) The cyclone warnings will be issued in two stages. The first warning (cyclone alert) is issued as soon as the cyclonic storm is located at such a distance from the coast that it is expected to cause bad weather over the coast during the next 48 hours.

This is followed by second stage warning (Cyclone warning) message when there is actual threat of cyclone over the area. Subsequently, messages giving the latest cyclonic situation are issued by the Cyclone Warning Centre till the danger to the area is over. Weather bulletins issued by the Cyclone Warning Centre are broadcast daily as a routine from the AIR stations. In storm situation special weather bulletins are broadcast daily are broadcast repeatedly at non-scheduled time also.

(iii) The Chief Controller, BZA Division and Chief Controller, Central Control, Railnilayam, Secunderabad are the two nominated officers to whom the above warnings are issued by the Cyclone Warning Centre, VSKP.

1313 ACTION BY CHIEF CONTROLLER, CENTRAL CONTROL, RAILNILAYAM, SECUNDERABAD

He should be alert and take immediate action as laid down in earlier para 2.7.1. He should also intimate the cyclone warning and alert the Chief Controller, SC and GTL Divisions in case of cyclone is expected to pass over their Divisions.

1314 ACTION BY CHIEF CONTROLLER, BZA DIVISION

He should be alert and take action as laid in earlier paras.

(i) The following Engineering Department Officers of BZA Division shall proceed and be available at stations indicated below: (CGE shall proceed to BZA depending on the severity of the situation at his discretion).

Sr.DEN (South) / BZA	BTTR
Sr.DEN (Central) / BZA	BPP
DEN/E/BZA	BVRM
Sr.DEN (North) / BZA	SLO
St.DEN/Co-ord / GNT	GNT

(ii) The ADENs will be in their respective headquarters. Their further movement when the effect of cyclone is felt will be left to their discretion, depending upon the needs

of the situation and they will be guided in this respect by the CGE who will be directing the operations from BZA or from SC through Sr.DEN/Co-ord/BZA.

(iii) When landline communication fail, the facility available on microwave network and wireless transmission shall be made use of to disseminate the warnings to all concerned. High priority should be given for disposal of cyclone messages.

(iv) **Immediately on receipt of the 'Second Stage Warning on Cyclone',** the Chief Controller, BZA will keep liaison with AIR, BZA and Meteorological Department, VSKP in receiving further bulletins and disseminate the same to all concerned. Arrangements are made by Meteorological Department to broadcast the weather bulletin from the AIR (hourly intervals) and sudden / unexpected developments as soon as it is notified to the radio station. For this purpose, the Chief Controller, BZA should hear the bulletins on the transistor, radio set available in the control office and disseminates the cyclone warnings to all concerned.

(v) DRM/BZA shall depute a Senior Traffic Officer and Senior Engineering Officer to co-ordinate with all other Branches and local Civil Authorities. The said Officers will be responsible for regulation / diversion / cancelation of train services in the areas likely to be affected by cyclone depending on the local situation.

(vi) In case of imminent cyclone threat, it is advisable to cancel through running of trains and regulate the trains in the section at suitable places where catering arrangement are available, under no circumstances the passenger trains should be allowed to be marooned. DRM shall depute a Senior Commercial Officer for monitoring this purpose.

(vii) In case of Districts not affected by the cyclone, de-warning message will be sent.

(viii) AEE/TRD of Division has to station himself in the TPCs room to keep liaison with all other branches. The said officer will be responsible for taking prompt action depending on the situation.

(ix) Control of trains – when communications fail the SM will take similar action as indicated in paras.

1315 ACTION TO BE TAKEN IN CASE OF HOLDUP OF TRAINS DUE TO CYCLONE GENERAL

(i) By the Senior Traffic official nominated by DRM.

(ii) An enquiry office with a PA system is to be opened immediately on BZA platform to relay the information regarding the stranded trains, relief operations and transshipments, supply of food packets etc., DRM shall depute a commercial officer for this purpose.

(iii) He shall make arrangements to post Medical Officer / Personnel at railway stations where trains are stranded and where facilities exist. In outstation or other places, he shall approach the District Collector or the local Special Police Officer who will make necessary arrangements.

(iv) He shall plan for the quick transshipment of stranded passengers in consultation with the RTC where repair to track is likely to take longer time. DRM shall depute a Commercial Officer for this purpose.

(v) **By the SM**: He shall inform Tahshildar, RDO or Sub-Collectors and the Collector of the area regarding the holdup of trains in his station. The SM shall seek the assistance of the local Revenue Authorities in arranging adequate supply of lemon rice and curd rice etc., along with pure drinking water to the stranded passengers; milk and biscuits to children. Commercial staff should make arrangements for supply of food etc.,

1316 EARTHQUAKE: Impact of earthquake on Railway system may be as under:

Damage to track: Track may be damaged in the form of

a. Misalignment

b. Deformation

c. Sinking of track

d. Collapse of / damage of bridges / girders / piers

e. Collapsing of ROBs / RUBs

f. Falling of trees / fixed structures obstructing the track

Damage to service buildings like:

a. Control Office

b. SM Office, Relay Room, Cabins and Gate lodges, etc.,

c. Administrative buildings

d. Residential buildings

e. Platform covers, FOBs, sub-ways etc.,

Damage to S&T installations:

a. Signal posts

b. Microwave tower

c. Telegraph posts and wires

d. Uprooting of Cables

e. Uprooting of location boxes etc.,

Damage to OHE and other Electrical installations:

a. OHE masts

b. Portals

c. TPC

d. Tower Car Shed

e. SP/SSP locations

f. Electric Loco Shed

Damage to C&W, Sick line, Loco Shed:

a. Pitlines

b. Sick lines / shed structure

c. IOH sheds

d. Diesel Loco shed

e. ROH / POH Depots

f. Wagon Depots etc.,

1317 ACTION TO BE TAKEN BY VARIOUS DEPARTMENTS

a. Operating Branch

- Stop all trains
- Inform P.Way, S&T, C&W, TRD Supervisors for checking track, bridges, points, signals, OHE and other installations / structures by moving on a light engine / push trolley / motor trolley in each block section of affected area.
- Inform Civil Authorities regarding any unusual occurrence.
- Arrange stock and power for moving relief / restoration material.

- Arrange additional Operating staff like ASMs, Pointsmen, Guards and Cabinmen from unaffected areas.

b. Engineering Branch

- All P.Way Supervisors including SSE/SE/JE P.Ways, IOWs, BRIs, Trackmen, Keymen and other staff shall report to the nearest SM who in turn will advise Control about the availability of P.Way staff and Supervisors.
- A team Trackmen, Keymen and SSE/SE/JE-P.Way, BRI should be sent on either side of each block section for checking the track structure and bridges.
- The checking team should suitably be instructed to protect any damaged track structure or bridge in the section.
- After checking the whole section, a report detailing the nature of damage, location and requirement of men and material should be submitted to SM, who in turn will advise the control.

c. S&T Branch

- Overhead and cable communication may be affected due to earthquake, immediate efforts should be made to provide alternative means of communications through VHF, Microwave, RE cable, OFC, Satellite phones, etc., between the control and stations.
- SSE/SE-Signals/Tele and ESM/MSM must be available at the stations. After checking all S&T installations, details of the damage and additional requirement of men and material should be given to S&T Control / Test Room.

d. Electrical (TRD) Branch

- On receipt of information about the earthquake, OHE supply on the affection section should be shut down immediately. All the sections in UP & DN directions should be checked thoroughly by Tower Car which shall run at a restricted speed so that it can be stopped before any kind of obstruction.
- After checking each section, feedback should be given to TPC who in turn will advise the position to Dy.CHC.

e. Electrical General Maintenance Branch

- In case of failure of power supply , DG sets should be arranged at important installations like stations, Control Office, etc.,

f. Commercial Branch

- Regular announcements should be made at the stations explaining the calamity and effect of train running.
- Emergency enquiry counters should be opened at major stations and at the affected stations. They should be provided with BSNL and mobile facility.
- Basic amenities like drinking water, food, etc., should be provided to the stranded passengers.
- Additional windows should be opened for refund of tickets.

g. Mechanical Branch

- Relief coaching stock and wagon stock available on the system must be made ready.
- In case of electrified territories, diesel power should be made available.

h. Personal Branch

- Set up of relief cell consisting Welfare Inspectors and other staff to assess losses and damages at stations and colonies.
- For providing speedy relief, co-ordinate with trade unions, Mahila Samithis, NGOs, etc.,

i. Security Branch

- Help Railway officials / employees in relief work at stations and in colonies.
- Protect Railway assets including vital installations and restrict the entry of those areas.
- Render necessary assistance to the affected persons.
- Maintain close co-ordination with Civil Authorities.

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CHAPTER XIV

(Disaster information flow and alerts of disaster & Media Management)

1401 STANDARD OPERATING PROCEDURES (SOPs):

The Ministry of Home Affairs (MHA) as the nodal Ministry is responsible for coordinating response and relief efforts with various Ministries / Departments of the Government of India, State Government and District Authorities. They have prepared the SOPs for handling manmade disasters for which they are earmarked as the lead Ministry for disaster response, relief and mitigation.

All Central Ministries, State Government, District Authorities and other stakeholders will prepare SOPs in consonance with the National and State Plans. The SOPs will be prescribed for activities like search and rescue, medical assistance and casualty management, evacuation, restoration of essential services and communication at disaster sites, etc., The other important activities are provision of food, drinking water, sanitation, clothing and management of relief camps. Detailed SOPs will also be devised by all concerned for dispatch, receipt and deployment of central resources.

1401.1 Levels of Disasters:

The SOPs will determine the levels of disasters and for issuing alerts to electronic messaging systems to various agencies about disasters have been formulated by MHA. These SOPs will be reviewed periodically for disaster response management in case of natural and manmade disasters.

1401.2 Integrated Operation Centre of MHA:

Integrated Operation Centre (IOC) has been set up in the MHA to handle disaster situation on 24x7 basis. IOC is responsible for initiating incident alert messages when a disaster is likely to occur or when it has actually taken place.

1401.3 Categorisation of Alerts:

A standard SOP has been prepared for alerts of events of different types and identifies the situations when alerts are to be sent by the IOC. Specific hazards have different

categories of alerts. Accordingly, a uniform system has been devised by categorization each type of alert in stages – **yellow, Orange and Red.**

1401.4 Action plan for communication of alert messages:

Whenever a crisis is about to be faced, Government of India has laid down systems for warning its respective departments through an 'alert'. It should be understood that mere issue of an 'alert' (yellow or orange) is not an indication of the occurrence of a disaster. This only signifies the existence of a crisis for which provisions of the Crisis Management Plan would come into operation.

The action plan for alert messages lays down as under;

I. All concerned Ministries / Departments / Organisations / Agencies will report events to IOC, MHA.

II. While generating and transmitting alerts to IOC, MHA, the concerned agency will indicate the category of the event as well as its corresponding stage (red / orange / yellow).

III. For natural calamities and other crisis situations categorisation of alerts is as under;

a. Avalanches (Defence Research And Development Organisation)

Category	Description	Stage
Low	Generally favourable condition. Triggering is generally possible only with high additional loads and on very few extreme slopes. Only sluffs possible and reach valley in small sizes. Valley movement is safe. Movement on slopes with care.	**Yellow**
Medium	Partly unfavourable condition. Triggering is possible on most avalanche prone slopes with low additional loads and may reach the valley in medium size. Movement on slopes with extreme care. Valley movements with caution. Avoid steep slopes. Routes should be selected with care.	**Yellow**
High	Unfavourable condition. Triggering is possible from all avalanches prone slopes even with low additional loads and reach the valley in large size. Suspend all	**Orange**

	movements. Airborne avalanches likely.	
All round	Very unfavourable condition. Numerous large avalanches are likely from all possible avalanche slopes even on moderately steep terrain. Suspend all movements. Airborne avalanches likely.	**Red**

b. **Tsunami (Department of Ocean Development):**

Category	Description	Stage
	No yellow stage	
Moderate	When an earthquake of greater than 6.0 is reported and / or a Tsunami watch alert is received from JMA / PTWC	**Orange**
Great	When change in water level after an earthquake is reported by National Institute of Ocean Technology, ITWC would issue a 'tsunami warning' *as per laid down channels	**Red**

* The warning may be withdrawn after a better assessment of the level of rise in water level.

c. **Landslides (Geological Survey of India):**

Category	Description	Stage
IV	Landslides of small dimensions that occur away from habitations and do not affect either human or their possessions. These may occur near infrastructural installations, agricultural and forest lands and may not affect them in a significant manner. These slides may include small incidents that block communication routes for short periods or donot affect the society in a significant manner.	**Yellow**
III	Landslides which are fairly large and affect infrastructural installations like strategic and important highways and roads rail routes and other civil installations like various appurtenant structures of hydro-electric and irrigation projects.	**Orange**

	The landslides that enter large water bodies like reservoirs of hydro-electric projects and could damage some of components of these projects.	
II	The landslides that may occur on the fringes of inhabited areas and result in limited loss of life and property. Landslides which result in blockage of courses of relatively smaller natural drainages. If the blockage is of relatively smaller dimensions its impact would be of lower order. Although a threat potential is there, it may not be immediate	**Orange**
I	Landslides of large dimensions that are located over or in close vicinity of inhabited areas like urban settlements or fairly large rural settlements. Activity on these slides can result in loss of human lives, dwellings on large scale. These slides may also inflict heavy losses on urban infrastructure. The slides that block busy pilgrimage routes during peak times resulting in hardships to thousands of pilgrims and sometimes resulting in loss of human life. Landslides which result in blockage of courses of relatively large natural drainages. If the blockage is fairly large it could lead to formation of very large reservoir of water behind it. Formation of a large landslide dam could result in sudden flooding of areas located upstream. Abrupt breaching of landslide dam would suddenly release enormous quantities of water in the downstream areas leading to flash floods that could result in loss of life and damage to property o large scale.	**Red**

d. Cyclone (IMD):

Category	Description	Stage
Cyclone alert	Issued 48 hours before the commencement of bad weather when a system is located about 500 KMs or more away from the coast. The forecast may not contain information about landfall and hence it is still of informatory type but at the same time meant to trigger preparatory actions. During this stage, disaster managers plan on the course of action required to be initiated once the system moves closer to the coast.	**Yellow**
Cyclone warning	These messages are issued 24 hours before commencement of bad weather and are of a **'serious nature'.** During this stage, the system is monitored closely and the expected place and time of landfall and the districts along the coastal areas likely to be affected are clearly indicated in the warning messages. The location of the system at this stage may still be 300 KMs to 500 KMs away from the coast. Disaster management machinery is expected to be geared up fully during this phase.	**Orange**
Post landfall outlook	During this phase, warning messages are issued about 12 hours before actual landfall and are of a **'very serious nature'.** At this stage, it is expected that the disaster management machinery is in full operational mode to face the impending disaster. All preparedness action should have been completed by this time. MHA would be closely monitoring steps taken by the concerned State Governments regarding evacuation and relief activities like food, sanitation, etc., This phase is fit to be classified as **'great danger'** and all warning messages issued to MHA Control Room	**Red**

	are required to be forwarded to senior officials of the PMO.	

e. **Earthquake (IMD):**

Category	Description	Stage
Slight	M < 5.0	Yellow
Moderate	5.0 < M < 6.9	Orange
Great	M > 7.0	Red

f. **Flood (Central Water Commission):**

Category	Description	Stage
IV	Low flood (water level between warning level and danger level)	Yellow
III	Moderate flood (water level below 0.50m, less than HFL and above danger level)	Yellow
II	High flood (water level less than highest flood level but still within 0.50m of the HFL)	Orange
I	Unprecedented flood (water level equal and above highest flood level)	Red

g. **Railways (Ministry of Railways):**

Category	Description	Stage
Minor	50 or more casualties (inclusive of deaths)	Yellow
Medium	51 – 99 deaths	Orange
Major	100 or more deaths or where additional assistance is sought by the Ministry of Railways	Red

h. **Forest fire (Ministry of Environment and forests):**

Category	Description	Stage
Ordinary	Localized fires which can be controlled by the concerned territorial Conservator of Forests	Yellow
Medium	Where large forest area is under fire, which can be controlled by the State Government and no Central	Orange

	intervention is sought by the State.	
Major	Large fire which may result in substantial loss of human lives, massive environmental degradation or loss of wildlife.	**Red**

1401.5 Action by Divisions /Zones on orange / red alert:

On the issue of an orange alert or of a higher level, the Responders have to be activated as required for relief, etc., as under;

- ✓ Mobilization of Gangmen.
- ✓ Hospitals to mobilize Doctors and Para-medical staff.
- ✓ Civil Defence units to be activated.
- ✓ RPF and RPSF deployment.
- ✓ Scouts and Guides for colony care and passenger guidance.
- ✓ Operation and manning of the DM Control Room.
- ✓ Coordination amongst various stake holders through advance warnings.
- ✓ Communication system to be ensured and back up to be in readiness for immediate use when required.
- ✓ TA Units deployment; In case the existing Railway staff may not be able to maintain train services to be operational, the TA Units have to be mobilized. It takes 2 – 3 days for the deployment of the TA Unit until after issue of their mobilization order. Hence, advance warning is necessary.

1401.6 Monitoring and reporting of effects of disaster:

The Safety Directorate in the Board would be given information regarding orange / red alerts. On the declaration of an incident as a Disaster by a State Government or District Administration, or even by the GM/AGM of the Zonal Railways, the CSO would give time to time updates to the Safety Control in Railway Board of the situation. Assistance of other Departments would be made available by the GM to the Safety Department of the Zonal Railway/s.

1401.7 Standard Operating Procedure (SOP) on Railways:

The Civil Engineering Department at the field level and on the Division gets information through advance warning sent by the respective Government Departments on the possibility of floods, cyclones, earthquakes, landslides, etc., Depending on the gravity of the disaster / crisis / calamity expected, the information would be passed on to the

Divisional Officers through Emergency Control which will act as the ICS. Where train operations have to be suspended or regulated, the Operating Department would suitably advised. After making the train regulation plan, the Divisional Control would advise the Commercial and Security Departments for management of the welfare of passengers. Alerts to the passengers would be issued through the PR Department of the Railways in the print and electronic media.

The DRMs of the Divisions shall ensure coordination amongst the Departments for ensuring running of train services including relief specials as also relief arrangements for the passengers and for the welfare of Railways own staff. Assistance of other Divisions and from the Zonal Railways would be taken through Headquarters of the Zonal Railways, i.e., by involving GM. Coordination with the IOC of MHA and NDMA / NDRF would be through the Emergency Control of each zonal headquarter.

Manmade disasters: Different forms of terrorism fall under the ambit of these disasters. A major role has to be played by the Security Department of the Railways who will coordination with the State Governments and when required, with the paramilitary and other forces. The Security Control of the Division will act as the ICS. The Headquarter Security Control will coordinate with the IOC of MHA. A similar system would be followed as above in organising regulation of train services by the Operating Department at the Divisional, Zonal level and also in Railway Board.

1402 OBJECTIVES – Media Management

- To provide factual information to public with regard to accident.
- To convey any other information this is of useful to passengers.
- To convey specific information which is of use to relatives / dependants of dead and injured?
- To create a positive public opinion.
- To create a healthy relationship with the print and electronic media.

1403 DUTIES OF PUBLIC RELATIONS ORGANISATION

- CPRO and his team will collect whatever information is available and released it to the media within one hour of the accident.
- The information shall include telephone numbers of helpline enquiry booths.
- Photographers with digital cameras and videographers should also be taken to the site of accident.
- Responsible PR Supervisors should be deputed during night shift for interacting with the media, if necessary.
- CPRO will organise press briefings at fixed timings.
- PR Organisation shall monitor various important media channels to keep track of media reporting. Suitable corrections / clarifications may also be issued, if required.

1404 SPOKESPERSON

- GM, DRM and CPRO are competent to interact with press and electronic media.
- Apart from the above, any other officer authorised by GM competent to interact or give interview to press and electronic media.
- They should ensure that only factually correct and confirmed information is relayed.
- No inflated or exaggerated version of any fact should be relayed to the media.

No Railwayman shall express or voice any criticism, or express his personal opinion or views about the accident at any point of time.

1405 INFORMATION TO BE RELAYED TO PRINT AND ELECTRONIC MEDIA

Information to be given to media can be broadly segregated into the following categories:

a. Accident

- Nature of the accident, i.e., date, time, exact location, train number, number of coaches involved, etc.,
- Details of how the accident could have occurred.

- Prima-facie cause of the accident will be relayed to media only with the approval of GM.
- Sabotage, even if suspected will not be relayed to media without the approval of Railway Board.
- Regular reports regarding progress of rescue and relief work.
- Expected time of restoration.

b. Uninjured passengers

- Steps taken to arrange hot beverages, refreshments and other catering arrangements etc.,
- Steps taken for clearing them from the site of accident by alternative transport or special trains.
- Expected time of departure of the unaffected coaches from the site of accident.
- Details of cancellation, diversion and termination of trains from time to time.

c. Injured passengers

- Steps taken by Railways to render immediate medical attention.
- Number of passengers rescued.
- Break-up of the injured passengers (both grievous and simple).
- Name of the hospital where the injured are admitted for treatment.
- List of injured with details such as name, age, sex, compartment number, hospital name where they are undergoing treatment, etc., should be kept with the help centre at the site of accident and at important stations enroute of the train apart from originating and destinating stations of the train. In addition to this, the list shall be available with the Medical Authorities, Commercial Control and other relevant department officials.
- Contact numbers of the injured passengers.
- Communication facilities at the site of accident with landline and mobile services.
- Payment of ex-gratia.
- Facilities given to relatives / dependants and friends of the dead and injured.
- Special trains arranged for transporting the injured and friends/relatives of the injured/dead.

d. Care of the dead

- Number of dead bodies recovered and number identified.
- Railway authorities shall publish the photographs of all the dead bodies by giving number to each dead body.
- Identification of dead bodies consume more time because of the following logistics;
  They may be travelling alone.
  Their companions are injured and are not in a position to identify.
  Their companions are also dead.
- Under the above circumstances, it is possible to identify the dead only when their relatives / friends / dependants arrive at the site of accident.
- This aspect of identification of dead bodies and reasons for delay should be explained to the media.

e. Helpline enquiry booths

- Setting up of enquiry booths.
- Ensuring continuous manning of the both.
- Providing minimum infrastructure like, table, chair, various telephone calls, some registers containing the details of injured and dead, details of trains that are cancelled/diverted/terminated, contact numbers of various officials, passengers injured, FAX facility etc.,
- Internet address of the railway.

f. Press briefings at the site of accident

- DRM or his authorised representative shall collect factual information from the Site Manager and relay the same to the media and headquarters. Thus, an online communication channel will be established to keep media informed of all the important details.
- CPRO or SPRO or PRO shall be available during press briefings in Headquarters.
- There shall be a fixed time for press briefings so that there is no confusion regarding different versions given to separate channels at various points of time.
- Simultaneous press briefings shall be held at the site of accident, from Headquarters and from Divisional headquarters as per the time intimated so that the same version is given by all concerned.

- All media releases will be uploaded on the SCR web addresses and a separate web page will be opened to give specific information with regard to the accident. The priority of information release to various media will be as under:
  - TV Channels
  - News agencies like PTI, UNI etc.,
  - Print media
- Convenience of media shall be taken care of by PR Personnel with assistance commercial representative

CHAPTER XV

1501 ROLE OF SECURITY DEPARTMENT IN DISASTER MANAGEMENT

The security on Indian Railways is being managed by 3 agencies – the Railway Protection Force, State Police and the Government Railway Police. State Police and the Government Railway Police function under administrative control of respective State Governments and their role is prevention and detection of crime [except those covered by the Railway Act and the Railway Property (Unlawful Possession Act] and tackling of law and order problems. Due to this coordination amongst the different agencies it is very essential to effectively tackle Disaster situations.

Railway Protection Force is an 'Armed Force of the Union' constituted by an Act of Parliament, the Railway Protection Force Act 1957, for the protection and security of railway property, passenger area & passengers and for matters connected therewith.

1502 ROLE OF RPF IN DISASTERS

In case of any disaster especially serious train accidents, fire incidents, explosion in trains or on railway premises, terrorist acts, hijacking of train etc. RPF has to play lead role in coordination with other Departments of Indian Railways and various agencies of State and Central Government.

In cases of CBRN Disasters, or a natural calamity, RPF has to provide support services in rescue, rehabilitation and mitigation efforts.

RPF has a major role in crowd control and arranging fire fighting infrastructure by coordinating with the State Governments/District Administration. The deployment of the RPF may be done on need basis to provide relief, rescue and rehabilitation consequent to a Terrorism Disaster. Dog Squad may need to be deployed even for preventive checks against terrorist activities.

1503 CURRENT PREPAREDNESS

As per guidelines of the High Level Committee, Disaster Management Team of RPF personnel have been constituted on each Division of this Railway. The team is equipped with following equipment:

i. Torches and other lighting arrangements.
ii. Nylon ropes and poles for segregating the affected areas from unwanted visitors and spectators.
iii. Loud-hailer for making announcement.
iv. Stretchers and first aid equipment.
v. Wireless sets for inter-communication.
vi. Cameras for photography of clues.
vii. Luminous jackets.

Members of this team have been trained in providing the basic level support in crowd control and functional support in case of Disasters. RPF staff will ensure safe custody and disposal of the luggage of passengers affected by train accidents in coordination with Commercial staff as recommended by the High Level Committee.

Co-ordination with State Police and Civil Authorities is ensured at the Divisional and Zonal level by concerned RPF Officials. Regarding clearance from State Police in case of railway accidents due to suspected sabotage, on a reference made by the DG/RPF, the Ministry of Home Affairs has directed Home Secretaries of the State for taking necessary action. This letter of the Ministry of Home Affairs has already been circulated to all the General Managers vide letter No. 2002/Sec (Cr.)/45/47 dated March 27, 2003 of the Security Directorate.

In liaison with, the National Disaster Management Authority (NDMA), 'training for trainers' has been organised so as to develop in house expertise on training. 30 categories of Security equipments have been identified as required by RPF to upgrade their effectiveness. These equipments need to be procured gradually.

1504 INTEGRATED SECURITY SCHEME

An Integrated Security Scheme has been sanctioned for installation at 195 stations of Indian Railways. The system envisages multi-layered surveillance of vehicles, luggage and passengers in station premises. The system comprises of following broad categories:

- Internet Protocol based CCTV surveillance system with intelligence video analytics,
- Access control,
- Personal and baggage screening system,
- Bomb Detection and Disposal System.

1505 CROWD CONTROL AND MANAGEMENT

For better effectiveness, RPF, GRP and District Police have to act in a synchronized manner in consultation with Magisterial Authorities. In Chapter 10 (Maintenance of Public Order and Tranquility) of the Criminal Procedure Code (CrPC) Part-A deals with 'Unlawful Assemblies', legal procedures are outlined in Sections 129 to 132 of the CrPC for dealing with Unlawful Assemblies. These provisions empower Members and Officers of Armed Forces (RPF is an Armed Force of the Union) to deal with Unlawful Assemblies.

One of the intelligent video analytics to be incorporated in the Integrated Security System is related to signal for crowd density within station premises when it exceeds the prescribed limit. This will enable RPF personnel and railway authorities to get timely information when heavy crowd builds up within station premises and plan follow-up action. Pictures stored on CCTV system will be of immense help in identifying miscreants and in ensuring effective legal action.

1506 DURING FESTIVALS / MELAS – CROWD CONTROL AT STATIONS

Necessary to prescribe preventive protocols, when laid down footfalls defines separately for important stations become extraordinarily high during festivals / melas or other exceptional situations. It may not be out of place to ban all commercial vending and

parcel handling on such occasions, **supplement exits if possible, and bring more are under illumination.**

It is important to press upon the State Governments to give an approximate indication of the number of persons likely to reach railway stations in the days when rush is expected. Even more important is the number of such persons reaching each railway station within one to two hour time slots. Unless this information is given, it would not be possible for railways to plan special trains. The OD flow of the passengers is very important to plan destination wise running of special trains. It **may be kept in mind that often the inward and outward passenger traffic is not equal; there are wide variations**. Further, the inward rush comes in a staggered and spaced interval; the outward rush goes back at one go. It would be essential for the Zonal Railway or Division to impress upon the State Government or the District Magistrate in writing of the peak capacity to clear rush, as also they can do so only direction wise. The District Administration has to regulate and control the entry of more than this number beyond which(in 1 – 2 hours slots) the Railways would be unable to evacuate.

Specific defined areas of jurisdiction for crowd control and duties assigned to GRP / RPF and the City Police needs to be placed on record much before the expected days of rush. Close coordination has to be maintained between the 3 wings of Police / Protection Force (RPF) and Civil Police, GRP and areas of responsibilities well defined.

The **car and other vehicle parking** facility at a station where terror strike is expected **may be discontinued**. **Sale of platform tickets can also banned** for short period of time. RPF and GRP personnel deployed on each platform will monitor crowds and rush build up in the circulating areas, booking windows, station platforms and mainly on the FOBs. Special teams of Commercial Staff will liase with GRP / RPF and relay 2 / 4 hourly position to a centralized location, viz., Commercial Control who will advise the need for

running of special trains to specified destinations to the Operating Department Control Room.

1507 EXPLOSION IN TRAINS AND RAILWAY PREMISES

One of the key components of the Integrated Security System is explosive detection and disposal. It provides for effective detection and disposal capability with RPF. Explosive detection and disposal, being a highly skilled and challenging job, requires Bomb Detection and Disposal Squad comprising of personnel. Such RPF personnel have been identified on each zonal railway and they are being trained in phased manner by the National Security Guard (NSG). Preventive measures to be taken in such situation, have been separately circulated vide Security Directorate Secret letter No.2003/Sec (Spl.) 200/14 dated 16.01.2008.

1508 TERRORIST ACTS & HIJACKING OF TRAINS

Procedures have been outlined in the Crisis Management Plans of the Government of India, of the Ministry of Home Affairs and of the Ministry of Railways to tackle such situations. Above mentioned secret documents are available with concerned Authorities and action has to be ensured in accordance with the provisions mentioned in the above mentioned plans.

Ministry of Home Affairs is the Central Nodal Ministry to tackle hostage or terrorist situations requiring specialized handling. National Security Guard (NSG) has to be requisitioned in such situations. Crisis Management Plan of the Ministry of Railways envisages management of such crisis by the National Crisis Management Committee (NCMC) and Crisis Management Group (CMG) at the Railway Board level and by the zonal management group at the zonal level.

Coordinated efforts have to be ensured by all security agencies present at the spot. Senior most Official available at the spot shall handle situations in accordance with conditions of the crisis at local level and instructions received from concerned Crisis Management Groups at Zonal and National levels. Quick Reaction Teams (QRTs) of RPF

personnel should be available round the clock at major stations which will be of immense help to tackle such situations during initial phases especially in cases of terrorist attacks.

1509 TERRORIST ATTACKS ON A GOODS TRAIN CARRYING INFLAMMABLES:

Railways have an excellent liaison with the Oil companies due to the transport of their commodities such as motor spirits, HSD, Naptha, etc., Traditionally, we have made use of foam-type fire extinguishers alongwith expertise in fire control available with them. Gradually, Railways may have to develop both the expertise through training in the Railways Rescue Training Institute being set up at Bangalore.

1510 CAPACITY BUILDING TO REDUCE DESTRUCTION DUE TO EARTHQUAKES, FLOODS, etc.,:

RDSO has been assigned the task of identifying vulnerable buildings, locations, rail infrastructure including bridges, sensitive locations, waterways, embankments, etc., Based on this, strengthening works would be undertaken by prioritizing essential locations / buildings so as to strengthen railways infrastructure.

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CHAPTER XVI

DO'S AND DONT'S FOR FRONT LINE STAFF

1601 DIVISIONAL CONTROL

DO'S

- Stop movements of all trains into the affected section.
- Arrange for despatch of Medical Vans and Accidents Relief Trains to the site. In case causalities are more than fifty, ARMVs of the adjoining Divisions have to be called for. As a rough thumb rule, the scale of such assistance required would be one from a Division for every additional 50 injuries.
- Inform Divisional Officers, Central Control and controlling SM, Civil Authorities concerned.
- Collect and record systematically all developments at the site of accident.
- Advise Civil, Military, Public and Private Hospitals in the nearby areas to rush doctors, medical aid to the site.
- Arrange for rushing the required Relief & Rescue equipments to the site.
- Inform NGO's and solicit their help.
- Arrange for regulating traffic by diverting or canceling trains.
- Arrange for running duplicate / relief trains for clearing stranded passengers on overriding priority.
- Advise the stations about the changes in the train timings, train diversions etc. so that timely information is given to the public.
- Ensure that list of the injured and the dead is obtained as quickly as possible from the site and relayed to the Zonal Headquarters, concerned stations, officer-in-charge of publicity, etc.,
- Liaison with Commercial Department's emergency team and ensure that information counters are opened at the accident site and at important stations en-route for giving up-to-date information to the public.
- Guide the station staff on the correct method of train working.

DONT'S

- Lose patience.
- Ignore the safety aspects.
- Manipulate the control charts.
- Argue with the station staff.

1602 GUARD

DO'S

- Arrange to protect the adjacent line/s and then the affected line.
- Send information through the quickest means to the Control/SMs on either side.
- Take action to save lives/render first-aid.
- Call for doctors and volunteers on the train, seek their assistance.
- Seek assistance of Railwaymen on the train for attending to the injured and for other relief operations.
- Post a railway employee to man the field telephone to ensure constant flow of information to control.
- Make a quick assessment of the assistance needed and advice control or nearest Station Master.
- Arrange protection of belongings of the passengers and railway property through RPF, GRP and other railway staff.

DONT'S

- Forget to note down the time of accident.
- Forget to preserve and safeguard all clues of possible cause of accident.
- Leave the site until permitted to do so by a competent authority.

1603 STATION MANAGER/STATION MASTER

DO'S

- Ensure that no other trains enter the effected section and take other necessary measures for protecting the site.

- Advice the control about the accident, and type of Medical and other assistance required. Also advise the local Civil Authorities.
- Call for assistance locally from nearby hospitals, dispensaries and medical practitioners.
- Call all the 'off"duty staff including Engineering and S&T staff available in nearby areas and allot them specific duties for relief and rescue.
- Inform to Railway Rescue Volunteers Registered at the Station giving preference to doctor and other medical staff. Also to make arrangement for their transportation to site of accident.
- Arrange to provide all sort of assistance to the affected passengers such as catering, drinking water and issue of complimentary passes, arranging free messages to relatives, etc.
- Arrange for protection of both belongings of the passengers and Railway Property.
- Open information counters and booths for giving information to the public regarding names of the injured, dead etc. and about regulation, diversion of trains etc.
- Utilise STD booths located at stations for giving relevant information.

DONT'S

- Permit any train to enter in the affected section except ART/ARMV.
- Destroy railway records and clues of possible cause of accident.
- Lose patience.
- Argue or misbehave with the victims and other passengers.
- Give any statement to media and press.
- Use shortcuts and unsafe methods in train operation.

1604 LOCO PILOT/ASSISTANT LOCO PILOT

DO'S

- Switch 'on' Flasher Light of Loco and switch off head lights.
- Note down the date & time and also hectometer Number.
- Sound short whistle frequently to want the Loco Pilot of the approaching train.
- Arrange to protect adjacent line and the same line in accordance with GR/SR 6.03 (I & II).

- Arrange to advise from Control in consultation with Guard.
- Secure the Loco properely.
- Assist the Guard in accessing the damage to Loco, Rolling Stock and P.Way and the nature required.

DONT'S

- Leave Loco unmanned.
- Interfere with any gadgets including speedometer chart.

1605 PERMANENT WAY STAFF

DO'S

- Inspect the site and take track reading as prescribed.
- Sketch of the accident site is made and jointly signed with other Supervisors.
- Seize gange diaries, charts, curb registers, LC gate PN exchanged register and optained statement of concerned staff.
- Shall assess the damage to P.Way, sleepers and fittings.
- Condition of track including infringement if any shall be noticed.
- In case of Level Crossing accident any damage to gate equipements and infringement to LC/track shall be noted.
- He shall advise Assistance/Material required for restoration.
- Render any assistance required by 'Site Officer'

DONT'S

- Attend the affected track without clearance from competent authority.

1606 S&T STAFF

DO'S

- Inspect point crossings and S&T gates and assists for acertaining cause of accident.
- Arrange for communication at the accident spot and manning the same.
- Render any assistance enquired by 'Site Officer'

DONT'S

- Attend or disconnect any S&T gear without getting clearance from competent authority.

1607 ELECTRICAL STAFF

DO'S

- Provide addition lighting if required at the accident site.
- Preservation of clues in case of fire in coaches. Any statement from passengers should also be recorded with their names and addresses.
- Adequate number of breakdown staff/tower wagons.
- De-energizing and slewing the OHE, as required for ground/crane operations.
- Restoration of OHE expeditiously.
- Supervise restoration operation.
- Ensure joint observation and measurement of the electric loco involved in the accident, in the prescribed format.
- Render any assistance required by 'Site Officer'

DONT'S

- Leave the accident spot till the restoration completes.
- Attend the restoration work without permission from competent authority.

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CHAPTER XVII

CRISIS MANAGEMENT

1701 DIFFERENCE BETWEEN A CRISIS AND A DISASTR:

A crisis indicates either an impending calamity or the occurrence of an incident which would adversely affect the society and human population.

A disaster is a much higher occurrence of an event which would cause large scale devastation, damage to property and loss of human lives, etc.,

While a crisis may or may not turn into a disaster, the opposite is normally true, but with the condition the crisis situation is more in the initial stage.

1702 BRIEF

1. Indian railways (IR) are the principal mode of transport of the country. For the last 160 years, IR has played a vital role in the overall development of the country and national integration. IR has a vast network of more than 64,000 route KMs moving an average 1.5 MTs of freight and 14 million passengers per day. In any national crisis, where major transport requirements are envisaged, Indian Railways will have to play an important role. However, Indian Railways can also get involved in a Crisis situation on account of a strike of their own employees, or due to internal disturbances, or due to external aggression, or when the flow of traffic gets disturbed.

2. There are broadly two types of crisis situation which the Ministry of Railways may be confronted with:-
   (a) When the crisis develops in the Railways which to be managed with the help and assistance of other Ministries; and
   (b) Where Railways have to help and assist other Ministries in crisis situation.

3. As far as the crisis situation at (1) above are concerned, the following situations are envisaged:

- All India strike of Railwaymen.
- Accidents due to chemical explosion in running train required to be dealt with on National Crisis Basis.
- External aggression,
- Hijacking of train(s), and
- Disruption due to Natural factors like floods, breaches, earthquakes etc.

Regarding (2) above, the Ministries concerned will make their own Contingency Plans bringing out the assistance that the Railways will be required to provide to them.

4. The Contingency Plan is intended to deal with the aforesaid crisis situations. The drill to be followed in the Ministry of Railways (Railway Board) as well as on the Zonal Railways in respect of crisis group, functioning of the Control room, communication etc., are basically the same for all crisis situations and the same general drill will follow and to be supplemented by the special instructions depending upon the nature of the crisis.

1702 MANAGEMENT OF OCCURRENCES

1. To deal with the crisis situation, the following committees shall be activated:–
   (a) National Crisis Management Committee (NCMC).
   (b) Central Management Committee (CMC), and
   (c) Zonal Management Committee (ZMC).

1703 NATIONAL CRISIS MANAGEMENT COMMITTEE (NCMC)

The NCMC is the apex body comprising senior officials of the Government of India to deliberate on the problems at national level. The following officers will represent the Ministry of Railways (Railway Board) in NCMC for the various crisis situations:–

(i)	**All India Railway men's strike**:	Member Staff Member Mechanic (Alternate).
(ii)	**Accident on Railways** :	Member Traffic

		Member Mechanic (Alternate).
(iii)	**Terrorism / security related**:	Member Staff, Member Traffic (alternate)
(iv)	**Disruption due to Natural factors like floods, breaches Earthquakes etc.,**	Member Engineering, Member Traffic (Alternate)
(v)	Crisis where railways have to help other ministries:	Member Traffic Member Staff (Alternate)

(i) **All India Railwaymen strike**: Ministry of Railways is the nodal ministry.

(ii) **Accidents on railways**: Ministry of Railways is the nodal ministry.

(iii) **Terrorism / Security related**: Ministry of Home Affairs is the nodal ministry but Railways have to maintain liaison and flow of information.

(iv) **Natural factors leading to traffic disruption**: Ministry of Home Affairs is the nodal ministry but Railways have to maintain liaison and flow of information for assistance to restore the affected railway system.

(v) **Crisis where Railways have to help other ministries**: Concerned ministries will make their own Crisis Management Plans bringing out the assistance that the Railways will be required to provide to them.

Names, telephone numbers and addresses of the Members/alternate members, who will represent the Ministry of Railways in NCMC are contained in Annexure–I.

1704 CENTRAL MANAGEMENT COMMITTEE (CMC)

The CMC is the Executive Authority responsible for dealing with the crisis and shall work under the broad guidelines and directives issued by NCMC. It shall be in constant touch with the NCMC on the one hand and the concerned Zonal Management Committee on the other. In addition to the concerned officers of the Railway Ministry, help of officers from some other Ministries is to be sought through National Disaster Management Control Room at North Block, New Delhi (Annexure II) for effectively dealing with the various crisis situations. The overall composition of the Central

Management Committee including the names, telephone numbers and addresses of its members for dealing with various crisis situations are given in the enclosed Annexures.

Crisis situation	Convener/ Overall composition of The Central Management Committee
(i) All India Railwaymen Strike	Additional Member (Staff)/ Annexure – III
(ii) Accidents on Railways	Adviser (Safety)/ Annexure – IV
(iii) Hijacking of trains	Director General (RPF)/ Annexure – V
(iv) External Aggression	Director General (RPF)/ Annexure – VI
(v) Disruption due to Natural factors	Additional Member Engineering)/like floods, breaches, earthquakes etc. Annexure - VII
(vi) Where Railways are to assist others	Additional Member (Traffic)/ Annexure – VIII

a. The list/names of the Members of the CMC will be updated and circulated by the **Safety Directorate of Railway Board** every year in January.

b. NDM division of Ministry of Home Affairs is the nodal agency for mustering Assistance from other Ministries. Contract details of NDM control Room and their officers are given in Annexure II who should be contacted at the earliest telephonically and through fax for taking assistance from other Ministries. Ministry of Defense can also be simultaneously contacted for air support and/or for expert help like divers, boats etc. The contact details of the officers of the concerned Ministry can be taken from NDM Control Room for further follow up after the railways communication has been passed onto them.

c. Members of the CMC will assemble in Emergency Control Room of Railway Board in Room No.474P (Telephone Nos. Railway 43399, 43599; P&T 23382638, which is located on the fourth floor of Rail Bhavan, at Raisina Road, New Delhi-110 001.

d. The Zonal Management Committee (ZMC) shall be established at the Zonal Railway Headquarters and would comprise of the following Officers of the Zonal Railway Headquarters.

(i) Principal Chief Engineer	:	Converner
(ii) Senior Dy. General Manager	:	Member/Alternate Convener
(iii) Chief Operating Manager	:	Member
(iv) Chief Mechanical Engineer	:	Member
(v) Chief Electrical Engineer	:	Member
(vi) Chief Signal & Telecommunication Engineer	:	Member
(vii) Chief Security Commissioner	:	Member
(viii) Chief Safety Officer	:	Member
(ix) Chief Public Relations Officers	:	Member
(x) Chief Commercial Manager	:	Member
(xi) Financial Adviser & Chief Accounts Officer	:	Member

e. The Zonal Management Committee will assemble in the Emergency Control Room of the Zonal Railway Headquarters and will keep in touch with CMC till the termination of the crisis.

1705 PROCDURE ON THE OCCURRENCE OF CRISIS

a. Information of the occurrence of crisis, whether on the Railways or outside the Railways, for which Railways assistance is necessary, should be conveyed to the Emergency Control Room at Room No.**476-P** in Rail Bhavan (P&T Phone No. **23382638** and Railway Phone No.**43399, 43599**) which is manned round the clock. The official in-charge of the Emergency Control Room would immediately inform all the Members of CMC by the quickest possible means and give brief information about the nature of the crisis. Simultaneously, the Members of the ZMC of the concerned Railway(s) would

also be informed through the official in-charge of the Emergency Control Room of the Zonal Railway Headquarters.

b. All the Members of the ZMC will assemble in the Emergency Control Room at their respective Railway and the Members of the CMC will assemble in Room No. 476P of Rail Bhavan. The Convener of CMC or his representative will convey the information to the Members of NCMC on the one hand and the concerned ZMC on the other. Members of CMC will co-ordinate with other ministers including National Security Guard (NSG) (if needed) to muster all possible assistance in the most expeditious manner.

c. The ZMC will ensure that all the available information relating to the crisis is furnished to the Convener of the CMC either directly, or through the Central Control.

d. The CMC shall consider the situation and give such guidelines as may be necessary to the ZMC. When a situation is of an extremely urgent nature which does not permit adequate time to consult the CMC, the ZMC shall handle the situation in the best possible manner and as per the extant instructions laid down for dealing with the crisis situation.

e. As soon as the report about the crisis is received, the Emergency Control Room working in the Rail Bhavan (Room No.**474 P**) will be upgraded and will be manned round the clock under the charge of an Emergency Officer, not below the rank of Joint Director in each shift.

f. The main functions of the Emergency Control Room will be as under:-
   (a) To get situation reports on a continuous basis from the site;
   (b) To keep all the concerned Officers of the various disciplines in the Railway Board as also in the concerned Ministries informed of the developments;
   (c) To convey instructions and guidelines to the Officers In-charge of Relief Operations at site;
   (d) In case where Railways have to help and assist other Ministries in crisis situations, the Central Control Office will maintain continuous liaison with the Nodal Ministry dealing with the crisis situation, and arrange assistance from the Railways as per the requirements and in coordination with the Nodal Ministry.

g. The Emergency Control Room at Rail Bhavan will have the names and telephone Nos. of all the Members of the CMC to deal with the various crisis situations. On being informed about the development of the crisis situation by the Official In-charge of Emergency Control Room, the Joint Secretary, Railway Board, will make available adequate numbers of transport and Typists/Stenographers for working in shifts, round the clock with the Emergency Control Room for efficient discharge of its functions.

h. **MEDIA**

In order to avoid any panic and also with a view to conveying correct information to members of public, the ZMC and CMC will nominate senior officers of the Public Relations Department, at all three places, i.e. the crisis area, the ZMC. Headquarters and CMC Headquarters to co-ordinate the activities of Media and for issuing information bulletins at proper intervals.

1706 GENERAL INSTRUCTIONS FOR DEALING WITH VARIOUS CRISIS SITUATIONS

A. ALL INDIA RAILWAY MEN STRIKE:

- The composition of the Central Management Committee to deal with the crisis situations is given at **Annexure – II**
- Instructions will be conveyed to all the ZMCs to implement the 'Strike Scheme' (already available with the Zonal Railways) at all levels.

B. ACCIDENT ON RAILWAYS

- The composition of the CMC to deal with this crisis situations will be as per **Annexure-IV**
- The Railways have issued elaborate instructions for dealing with the crisis arising out of train accidents. The duties required to be performed by the staff and officers are exhaustively covered in the Accident Manual issued by the Railways.
- However, there are certain crisis situations where assistance of a more elaborate nature may be necessary from outside Ministries or other agencies e.g. fire in train carrying petroleum products, chemical explosions on the Railways, large

scale sabotage involving blowing up of bridges and tracks, which may have to be tackled at the National Level. Under such situations, Railways need to take the help of other Government and Non-Government Agencies for their expertise. Contact details of all such agencies should be included in the Disaster management Plane of Zonal railways and divisions which should be updated once every year in January. In addition to the hard copies, Railways should also have the web-based electronic versions of Disaster management Plans on their Railnet server for expeditious search of the key information at the time of Crisis.

- Sabotage would normally result in three types of situation:-
  (a) Sabotage of track/bridge.
  (b) Sabotage of track/Bridges resulting derailment of a passenger train, and
  (c) Sabotage or explosion on the Railway Platform(s) or adjacent Railway Premises.

Under these situations, the instructions contained in the Railway Accident Manual would be applicable with suitable modifications as required by local circumstances. In these situations the GRP and Civil Police would pay a more important role as they would be investigating the criminal case relating to sabotage/explosion, which would need a lot of assistance from the railway authorities. While Co-ordination among different railway agencies would be done by the senior-most railway officer present at the site, he should specifically nominate a senior RPF officer to coordinate with the police agencies.

In cases of large-scale incidents of sabotage or explosion on railways, requiring assistance from Ministry of Home Affairs, Cabinet Secretariat and the State Governments, Director General, Railway Protection Force, will coordinate on behalf of the Railways.

- Railway 'Red tariff book' lays down elaborate rules regarding carriage of explosives and dangerous goods and is updated from time to time. These rules lay down various precautions to be taken regarding acceptance, packing, handling, labeling, storage, types of wagons to be used, shunting and delivery of such goods. These rules have been framed in consultation with the Chief Inspector of Explosives, who also has a right of inspection, search, seizure etc. of such dangerous goods. This publication is available

with all the Railway Stations and lists out the commodities under the following 7 heads:-

(i) Explosives,

(ii) Gases; compressed, liquidified, or dissolved under pressure,

(iii) Petroleum and other inflammable liquids,

(iv) Inflammable solids,

(v) Oxidizing substances,

(vi) Acids and other explosives, and

(vii) Poisonous (toxic) substances.

- The Action Plan/Guidelines framed by the respective Ministries in respect of accident(s) involving radio-active elements, poisonous chemicals etc, while in storage or in transit with the Railways, would be followed. The necessary directions in this regard will be incorporated in the Contingency Plan in due course on receipt of the relevant details from the concerned Ministries.

1707 HIJACKING OF TRAIN

- The composition of the C.M.C. to deal with this crisis situation is given at Annexure-V.
- **INFORMATION**

  On receipt of information about hijacking of a train(s) at any railway establishment(s), it should be immediately passed on to the concerned Divisional Railway Control Room, which in turn will immediately pass it on to the Emergency Control Room of the Zonal Railways Headquarters, and the Emergency Control Room of the Railway Board at Rail Bhavan.

  Liaison Officer nominated at the Zonal Railway Headquarters will immediately pass on the information to Headquarters NSG at CGO Complex New Delhi to enable the TASK FORCE to move by the fastest mode of transport, to carry out detailed rescue and planning.

  NSG Duty officer in the Control Room which is operational round the clock can be advised on the following telephone numbers:-

  Telephone Nos. 24360021 (Control Room), **24361093 (O); 26175520 (R)**

  Task Force should continue to carry out planning and rehearsals concurrently while negotiations with the hijackers are in progress.

Simultaneously, Disaster Management Control Room in Ministry of Home Affairs, North Block, and New Delhi which is operational round the clock must be advised. **(Annexure – II).**

- The Divisional Railway Control Room will also simultaneously communicate the information regarding the crisis to the following:
  (i) All Branch Officers of the Division including Security.
  (ii) District Magistrate concerned;
  (iii) District Superintendant of Police concerned;
  (iv) Divisional Medical Officer (Railways), and if necessary, to District Civil Surgeon concerned.
  (v) Chief Fire Officer of the District concerned.

- The Officer In-charge of the Emergency Control Room of the Zonal Railways Headquarters would immediately pass on this information to all Members of the Z.M.C. The convener of the Z.M.C., besides passing on immediately the information regarding the crisis and the developments threat to Convener of C.M.C. will also pass on the same to the following:
  (i) Chief Secretary,
  (ii) Director General of Police.
- The Officer In-charge of the **Emergency Control Room at** Railway Board will immediately pass on the information to Convener and other Members of C.M.C. The Convener his representative will convey information regarding the crisis situation to the Members of N.C.M.C.

1708 ISOLATION AND CORDONING OF THE CRISIS AREA

The Divisional Railway Authorities in coordination with the District Magistrate and District Police Authorities, will immediately make arrangements for isolating cordoning of the crisis area. They will also keep Units of Emergency Services, like Fire and Medical, available at the spot to meet the exigency. The local authorities including Police and RPF must not take any action, which could precipitate the situation especially if the hijackers appear to be desperate and determined. The situation thereafter would be handled by Z.M.C. and C.M.C.

1709 NEGOTIATIONS

Since negotiations in such situation required a special skill, the C.M.C. will requisition the services of skilled negotiators through N.C.M.C. The negotiation team would be organised and handled by NSG.

1710 REQUISITION OF THE TASK FORCE

- While the negotiations with hijackers are in progress, the C.M.C. which would be in constant communication with N.C.M.C. would give, if considered necessary, requisition for the Task Force to N.C.M.C. The Task Force i.e., N.S.G. would be provided only with the approval of N.C.M.C. In case it is decided to despatch Task Force to the crisis area, the C.M.C. will make immediate arrangements to provide information, as given at **Annexure IX,** to the Task Force. The C.M.C. will also make arrangements for providing necessary assistance to the Officer In-charge of the Task Force in respect of transport, accommodation and other facilities at the spot. The details of assistance required by the Task Force are at **Annexure-X.** Thereafter, the Task Force will take charge of the situations/s.
- Situation will only dictate the composition of the Task Force, hence no set composition is recommended.

1711 COMMUNICATION

- Initially the Divisional and later on Z.M.C. and C.M.C. will ensure that an efficient communication net work is established between crisis area and Z.M.C. Headquarters between Z.M.C. & C.M.C. Headquarters and between C.M.C. & N.C.M.C. Headquarters. Once the Task Force (N.S.G.) takes over, it will establish its own channel of communication from the crisis and will keep in touch with C.M.C. and N.C.M.C.
- After the Task Force (NSG) takes over, communications are to be maintained as follows:-

  Railways to continue operating their exiting channel from Crisis Area. Task Force to be in communication with Headquarters (NSG) Ops *to* RS Harris, and
- The Railway will provide STD facilities to the Task Force Commander wherever operating.

- Once the NSG start their operations, NSG Operation Commander will give directions and will be totally in command. As far as secrecy etc is concerned, this will be the responsibility of the NSG. Railway communications system can at best be a parallel communication system, as a standby to used as and when required.

- The composition of the CMC to deal with the crisis situation is given at **Annexure-VI.**
- The Railway Ministerial War Book contains instructions for dealing with the situations that may arise out of a war which, inter-alia, include the modality of regulating transport including inland water transport during the War Situations, Railways will initiate action to mobilise stock for the movement of troops and equipment, to regulate other traffic as required and protect their vulnerable installations in accordance with the guidelines given in the War Book, a copy of which is available with all the Zonal Railways and Production Units etc. The ZMC as well as the Sub-Committees at the Divisional level will monitor the movement of the troops and material in coordination with the Defence and State authorities.

1712 DISRUPTION DUE TO NATURAL FACTORS LIKE FLOODS, BREACHES, EARTHQUAKES etc.

The composition of the CMC to deal with the crisis situation is given at **Annexure-VII.**

1713 CONTINGENCY PLAN WHERE RAILWAYS HAVE TO HELP AND ASSIST OTHER MINISTRIES IN CRISIS SITUATION:

- Ministry of Railways will provide emergency support and assistance to other Ministries mostly in regard to rail transportation. For this purpose Ministry of Railways has issued an Emergency support Function Plan (ESF) vide 2003/Safety (DM)/6/3 dated 25.10.04 nominating Quick response Teams (QRTs) at the Ministry level and Zonal railway level as well. QRT at the level of Ministry of railways is CMC for dealing with the crises situation to help other Ministries is given at **Annexure-VIII.**

- The CMC will obtain directions from NCMCs and organise the necessary relief operations through field level QRTs.

- The concerned Ministry will make their own Contingency Plan bringing out the assistance required from the Railways, which will be mobilised.

1714 DRILL FOR HANDLING CRISIS:

The CMP is intended to deal with the aforesaid crisis situations only. The drill to be followed in the Ministry of Railways (Railway Board) as well as on the Zonal Railways in respect of crisis group, functioning of the Control Room, Communication, etc., are basically the same for all crisis situations and the same general drill will follow, to be supplemented by the special instructions depending upon the nature of the crisis.

ANNEXURE-I

NAME AND ADDRESSES OF THE MEMBERS/ALTERNATIVE MEMBERS FROM THE MINISTRY OF RAILWAYS IN NCMC

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Member Staff	All Indian Railwaymen Strike	23385100	26884922 9810099318 (Mobile)	214, Rail Bhavan New Delhi	No.5, RB Bungalow, Hospital Road, Moti Bagh-I New Delhi	Member
	Member Traffic	All Indian Railwaymen Strike	23382427	23740016 9810561144 (Mobile)	228, Rail Bhavan, New Delhi	204, Yamuna Rest House, SE Road, New Delhi	Alternate Member
2	Member Traffic	Accident on Railways	23382427	23740016 9810561144 (Mobile)	228, Rail Bhavan, New Delhi	204, Yamuna Rest House, SE Road, New Delhi	Member
	Member Engineering	Accident on Railways	23383879	26873277 9818515590 (Mobile)	223, Rail Bhavan New Delhi	Bungalow No.1,S.P. Marg, New Delhi	Alternate Member
3	Member Staff	Hijacking of train	23385100	26884922 9810099318 (Mobile)	214, Rail Bhavan New Delhi	No.5, RB Bungalow, Hospital Road, Moti Bagh-I New Delhi	Member
	Member Traffic	Hijacking of train	23382427	23740016 9810561144 (Mobile)	228, Rail Bhavan, New Delhi	204, Yamuna Rest House, SE Road, New Delhi	Alternate Member
4	Member Traffic	Hijacking of train	23382427	23740016 9810561144 (Mobile)	228, Rail Bhavan, New Delhi	204, Yamuna Rest House, SE Road, New Delhi	Member

	Member Mechanical	**Disruption due to Natural factors**	23381477	23740027 9810099317 (Mobile)	217, Rail Bhawan, New Delhi	205, YRH, S.E. Road, New Delhi	**Alternate Member**
5	Member Engineering	**Disruption due to Natural factors**	23383879	26873277 9818515590 (Mobile)	223, Rail Bhavan, New Delhi	Bangalow No.1,S.P. Marg, New Delhi	**Member**
	Member Mechanical	Disruption due to Natural factors	23381477	23740027 9810099317 (Mobile)	217, Rail Bhavan, New Delhi	205, YRH, S.E. Road, New Delhi	**Alternate Member**

ANNEXURE–II

IMPORTANT CONTACT NOS. FOR DEALING ON DISASTER MANAGEMENT

(a) NDM Control Room, Room No.–12, North Block

Tele No.	23092885, 23092348, 23092923, 23093563, 23093564, 23093566, 23093571
Fax	23093750

(b) Mr. Ashim Khurana, Joint Secretary, NDM Division,
Ministry of Home Affairs and Central Relief Commissioner

Tele No.	23092456
Mobile	9810093411

(c) Mr. Naga Bhushan Rao (IFS), Director NDM–II

Tele No.	23092705 (O)
Mobile	9891878732

(c) Mr. R.K.Singh, Deputy Secretary, NDM–I

Tele No.	23092961 (O)
Mobile	9811061089

5. Ministry of Defence

Director/Air/Ministry of Defense	23011872 (O)
Director/Ministry of Defense	23011896 (O)
Joint Sexretary/Air/Ministry of Defense	23011410 (O)
Control Room of Defence Ministry (INSP) Department of Ops Lgs, INCP HQ IDS Ministry of Defense, Gate No. 11, South Block, New Delhi – 110011 (INCP – Interim National Command Post)	23005133 23005226 (fax) 24605226 (fax)

ANNEXURE-III

CMC COMMITTEE FOR THE CRISIS SITUATION ALL INDIA RAILWAYMEN STRIKE

Sl No	Name of the Member with designation	Name of the Ministry	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Addl. Member, staff	Ministry of Railways	23382674	23360309 9818798384	208,Rail Bhavan, New Delhi	256/3B, Panchkuiya Road, New Delhi	Convener
2	Adviser (I.R.)	Ministry of Railways	2333086	23369817	401, Rail Bhavan, New Delhi	302/I-B, Chelmsfort Road, New Delhi	Alternate Convener
3	Addl.Member (Finance)	Ministry of Railways	23382438	24675204 9818798386	207, Rail Bhavan, New Delhi	57 S.P.Marg, New Delhi	Member
4	Director General, Railway Protection Force	Ministry of Railways	23382209	24699899 9810096981	440, Rail Bhavan, New Delhi	C-I/22 Humayun Road, New Delhi	Member
5	Addl Member (Traffic)	Ministry of Railways	23382427	23367399 9818798393	264, Rail Bhavan, New Delhi	2, ORH, State Entry Road, New Delhi.	Member
6	Add. Member (Mechanical Engineering.)	Ministry of Railways	23382975	23366635 9818798388	319, Rail Bhavan, New Delhi	Room No.208 Rail Niwas, New Delhi	Member
7	Shri R.K.Sarin, Addl. Member, (Electrical Engineering.)	Ministry of Railways	23388122	5313356 9818798383	115, Rail Bhavan, New Delhi	B.29 Sector 41, Noida	Member
8	Add. Member, (Civil Engineering.)	Ministry of Railways	23382607	23348309 9818798381	125, Rail Bhavan, New Delhi	57-B, S.P. Marg, New Delhi-21	Member
9	Addl. Member (Comml.)	Ministry of Railways	23382112	26474874 9818798394	473, Rail Bhavan New Delhi	18, Hemkunt Colony, Nehru Place, New Delhi	Member

10	Director, Public Relations	Ministry of Railways	23381332	26168671 9810046271	302, Rail Bhavan, New Delhi	1338 Sector 12 R.K.Puram	Member
11	AM (Signal)	Ministry of Railways	23382122	26118383 9818798391	119, Rail Bhavan New Delhi	H.No.4 S.P.Marg	Member
12	AM (Tele)	Ministry of Railways	23383815	24616123 9810048970	153, Rail Bhavan New Delhi	D-I/96, Ravindra Nagar, New Delhi.	Member

ANNEXURE – IV

CENTRAL MANAGEMENT COMMITTEE FOR THE CRISIS SITUATION- ACCIDENT ON RAILWAYS

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Advisor /Safety	Ministry of Railways	23381344	24942067 9818798390 (Mobile)	353,Rail Bhavan, New Delhi	4,Chatra Marg Miranda House Teacher Flat, Delhi University Delhi	Convenor
2	Addl. Member (T)	Ministry of Railways	23382427	23369817 9818798393 (Mobile)	264,Rail Bhavan, New Delhi	2, ORH State Entry Road, N.D.	Alternate Convenor
3	Director General Railway Protection Force	Ministry of Railways	23382209	24699899 9810096981 (Mobile)	440,Rail Bhavan, New Delhi	C I/22, Humayun Road, N.D.	Member
4	Addl. Member (Civil. Engineering.)	Ministry of Railways	23382607	23348309 9818798381 (Mobile)	125,Rail Bhavan, New Delhi	ORH 6, S.E.Road, N.D.-53	Member
5	Addl. Member (Mechanical	Ministry of Railways	23382975	23366635 9818798388	319,Rail Bhavan,	Room No.208 Rail Niwas,	Member

	Engineering.)			(Mobile)	New Delhi	N.D.	
6	Addl. Member (Elec. Engineer.)	Ministry of Railways	23388122	5313356 9818798383 (Mobile)	115,Rail Bhavan, New Delhi	B 29 Sector 41 Noida	Member
7	AM (Tele)	Ministry of Railways	23383815	24616123 9810048970 (Mobile)	153,Rail Bhavan, New Delhi	D-1/96, Ravindra Nagar, N.D.	Member
8	AM (Signal)	Ministry of Railways	23382122	26118382 9818798391 (Mobile)	119,Rail Bhavan, New Delhi	H.No.4, S.P.Marg, N.D.	Member
9	DG(RHS)	Ministry of Railways	23383638	26116330 9810048950 (Mobile)	348,Rail Bhavan, New Delhi	27, S.P.Marg, New Delhi	Member
10	Director Public Relations	Ministry of Railways	23381332	26168671 9810046271 (Mobile)	320,Rail Bhavan, New Delhi	1338 Sector 12 R.K.Puram N.D.	Member

ANNEXURE-V

CENTRAL MANAGEMENT COMMITTEE FOR THE CRISIS SITUATION – HIJACKING OF TRAINS

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Director General, Railway Protection Force	Ministry of Railways	23382209	24699899 9810096981 (Mobile)	440, Rail Bhavan New Delhi	C-II/89, Chanakya Puri, New Delhi	Convener
2	ADG (RPF)	Ministry of Railways	23385188	26266124 9810337619 (Mobile)	437, Rail Bhavan New Delhi	F-7, Hudco Place, Andrews Gang	Member
3	AM (Tele)	Ministry of Railways	23383815	24616123 9810048970	153, Rail Bhavan	D-I/96 Ravindra Nagar,	Member

				(Mobile)	New Delhi	New Delhi	
4	DG (RHS)	Ministry of Railways	23383638	26116330 9810048950 (Mobile)	348, Rail Bhavan New Delhi	27, S.P.Marg, New Delhi	Member
5	Addl. Member (Comml.)	Ministry of Railways	23382112	26474874 9818798394 (Mobile)	473,Rail Bhavan New Delhi	18, Hemkunt Colony, Nehru Place, N.D.	Member
6	Addl. Member (Mechanical Engineering	Ministry of Railways	23382975	23366635 9818798388 (Mobile)	319, Rail Bhavan New Delhi	Room No.208 Rail Niwas, N.D.	Member
7	AM (Signal)	Ministry of Railways	23382122	26118382 9818798391 (Mobile)	119, Rail Bhavan New Delhi	H.No.4, S.P.Marg, New Delhi	Member
8	Addl. Member, (Civil Engineering.)	Ministry of Railways	23382607	23342968 9818798381 (Mobile)	125, Rail Bhavan New Delhi	57-B, S.P. Marg, New Delhi-21	Member
9	AM (Tele)	Ministry of Railways	23383815	24616123 9810048970 (Mobile)	153, Rail Bhavan New Delhi	D-I/96 Ravindra Nagar, New Delhi	Member
10	Director/PR	Ministry of Railways	23381332	26168671 9810046271 (Mobile)	302, Rail Bhavan New Delhi	1338 Sector 12 R.K.Puram, N.D.	Member

ANNEXURE-VI

CENTRAL MANAGEMENT COMMITTEE FOR THE CRISIS SITUATION-

EXTRNAL AGGRESSION

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Director General, Railway Protection Force	Ministry of Railways, Railway Board	23382209	24699899 9810096981 (Mobile)	440, Rail Bhavan New Delhi	C-II/89, Chanakya Puri, New Delhi	Convenor
2	Addl Member (Traffic)	Ministry of Railways, Railway Board	23382427	23369817 9818798393 (Mobile)	264, Rail Bhavan, New Delhi	2, ORH, State Entry Road, New Delhi.	Member
3	Addl. Member (Comml.)	Ministry of Railways, Railway Board	23382112	26474874 9818798394 (Mobile)	473, Rail Bhavan New Delhi	18, Hemkunt Colony, Nehru Place, N.D.	**Member**
4	Addl. Member, (Civil Engineering.)	Ministry of Railways, Railway Board	23382607	23348303 9818798381 (Mobile)	125, Rail Bhavan New Delhi	57-B, S.P. Marg, New Delhi-21	**Member**
5	Addl. Member (Mechanical Engineering.)	Ministry of Railways, Railway Board	23382975	23366635 9818798388 (Mobile)	319, Rail Bhavan New Delhi	Room No.208 Rail Niwas, N.D.	**Member**
6	Executive Director (Coaching)	Ministry of Railways Railway Board	23383624	24678085 9810197415 (Mobile)	360, Rail Bhavan New Delhi	2 C Sarojini Officers' Flats New Delhi.	**Member**
7	Addl. Member (Elec. Engineer.)	Ministry of Railways,	23981227	5313356 9818798383	115,Rail Bhavan,	B 29 Sector 41 Noida	**Member**

		Railway Board		(Mobile)	New Delhi		
8	Director/PR	Ministry of Railways, Railway Board	23382122	26168671 9810046271 (Mobile)	302, Rail Bhavan New Delhi	1338 Sector 12 R.K.Puram, N.D.	**Member**
9	Director, Rail Movement	Railway Board	23018335	24678047 52341(Rly)	514/B, Sena Bhavan, New Delhi	13 C Rly colony Sarojini Nagar	**Member**

ANNEXURE–VII

CENTRAL MANAGEMENT COMMITTEE FOR THE CRISIS SITUATION –

NATURAL DISASTERS

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	Addl. Member (Civil Engineering.)	Ministry of Railways	23382607	23348309 9818798381 (Mobile)	125, Rail Bhavan, New Delhi	57–B, S.P. Marg, New Delhi–21	Convener
2	AM (Traffic Transportation)	Ministry of Railways	23382427	23369817 9818798393 (Mobile)	264, Rail Bhavan, New Delhi	2 ORH State Entry Road	Member
3	Addl Member (Mechanical Engineering.)	Ministry of Railways	23382975	23366635 9818798388 (Mobile)	319, Rail Bhavan, New Delhi	Room No. 208 Rail Niwas, N.D.	Member
4	Addl. Member,(Electrical Engineering.)	Ministry of Railways	23381227	5313356 9818798383 (Mobile)	115, Rail Bhavan, New Delhi	B 29 Sector 41 Nodia	Member
5	Addl. Member, (Comml.)	Ministry of Railways	23382112	26474874 9818798394 (Mobile)	473, Rail Bhavan, New Delhi	18 Hemkunt Colony, Nehru Palace, New Delhi	Member
6	AM (Tele)	Ministry of Railways	23383815	24616123 9810048970 (Mobile)	153,Rail Bhavan, New Delhi	D–I/96 Ravindra Nagar, N.D.	Member
7	AM (Signal)	Ministry of Railways	23382122	26118382 9818798391 (Mobile)	119, Rail Bhavan, New Delhi	4, S.P.Marg, New Delhi	Member
8	Director General, Railway Protection Force	Ministry of Railways	23382209	24699899 9810096981 (Mobile)	440, Rail Bhavan, New Delhi	C–II/89, Chanakya Puri, New Delhi	Member

9	DG (RHS)	Ministry of Railways	23383638	26116330 9810048950 (Mobile)	348, Rail Bhavan, New Delhi	27, S.P.Marg, New Delhi	Member
10	Director, Public Relations.	Ministry of Railways	23381332	26168671 9810046271 (Mobile)	302, Rail Bhavan, New Delhi	1338, Sector, 12, R.K.Puram New Delhi.	Member

ANNEXURE-VIII

CENTRAL MANAGEMENT COMMITTEE FOR THE CRISIS SITUATION WHERE RAILWAYS HAVE TO HELP AND ASSIST OTHER MINISTERS

Sl No	Name of the Member with designation	Name of the Crisis	Telephone Nos.		Addresses		Remarks
			Office	Residence	Office	Residence	
1	AM (Traffic)	Ministry of Railways Railway Board	23382427	23369817 9818798393 (Mobile)	264, Rail Bhavan New Delhi	2 ORH State Entry Road	Convener
2	Addl. Member (Comml.)	Ministry of Railways Railway Board	23382112	26474874 9818798394 (Mobile)	473, Rail Bhavan New Delhi	18, Hemkunt Colony, Nehru Palace, N.D.	Alternate Convener
3	Addl. Member, (Mechanical Engineering.)	Ministry of Railways Railway Board	23382975	23366635 9818798388 (Mobile)	319, Rail Bhavan New Delhi	Room No. 208 Rail Niwas, N.D.	Member
4	Addl. Member (Civil Engineering.)	Ministry of Railways Railway Board	23382607	23348309 9818798381 (Mobile)	125, Rail Bhavan New Delhi	57-B, S.P. Marg, New Delhi-21	Member
5	Addl Member, (Electrical Engineering.)	Ministry of Railways Railway Board	23381227	5313356 9818798383 (Mobile)	115, Rail Bhavan New Delhi	B 29 Sector 41 Noida	Member
6	AM (Tele)	Ministry of Railways Railway Board	23383815	24616123 9810048970 (Mobile)	153, Rail Bhavan New Delhi	D-I/96 Ravindra Nagar N.D.	Member
7	Director General Railway Protection Force	Ministry of Railways Railway Board	23382209	24699899 9810096981 (Mobile)	440, Rail Bhavan New Delhi	C-I/22, Humayun Road, New Delhi	Member
8	ED (Safety)	Ministry of Railways Railway Board	23381344	24942067 9818798390 (Mobile)	353, Rail Bhavan New Delhi	4, Chatra Marg, Miranda House, Teachers Flat, Delhi University,	Member

						Delhi	
9	,Director, Public Relations	Ministry of Railways Railway Board	23381332	26168671 9810046271 (Mobile)	302, Rail Bhavan New Delhi	1338, Sector 12, R.K.Puram, New Delhi.	Member

ANNEXURE-IX

HIJACKING OF TRAINS

The information required can be categorised as under: The information to be furnished has to be specific and clear with visual orientation (road maps etc) necessary pre-arrangements for which should be institutionalised well in advance before the crisis actually strikes.

(a) **Information required by Task Force:**

(i) Location of train.

(ii) If moving, location where Railway authority plan to stop hijacked train.

(iii) Is intervention contemplated on moving train? If so, availability of ***heliports*** and allied facilities, since Heliborne intervention may have to be resorted to.

(b) Information about the terrorists:

(i) Number of terrorists

(ii) Identity of terrorists including dress worn or any other specific details which could help in their identification.

(iii) Details of weapons being carried including explosives/grenades, if any.

(iv) The group to which the terrorist belong, including their involvement in any previous activity.

(v)Rough position of the terrorists in the coach.

(c) Information about the coach/compartment

The details of coach in which the hostage are held to include the following:

(i) Type of Coach/Compartment e.g. First Class, Air Conditioned sleeper, etc.

(ii) No. of sub compartments.

(iii) No. of doors and window including type of window e.g. glass of double glass.

(iv) No. of toilets.

(v)Information about vestibules.

(vi) Whether the Coach/Bogie has been detached or is along with the train.

(vii) If along with the train, the number of bogies in the train and the bogie number from the engine.

(d) (i) No. of Hostages
(ii) Status of Hostage/Hostages
(iii) Age and Sex of the Hostages
(iv) Location within the coach

(e) Details about the site

(i) Details of the area where the Coach/Train is halted/isolated
(ii) Vintage points in terms of building etc. in the close vicinity for deploying of snipers
(iii) Whether the train/Coach is on the platform or is in open space.
(iv) Cover available for approaching the site.

(f) Details of Assistance available from Railways
(i) Availability of flood lights including generator.
(ii) Availability of Oxyacetlene Cutters.
(iii) Railway Telecommunication.
(g) Demands of terrorists including the dead line set by them for negotiations.

ANNEXURE-X

HIJACKING OF TRAINS

Assistance required by the N.S.G.

(a) 3 Rooms with communications for setting up Ops Room Complex for the following:

(i) Common Control Center.
(ii) Ops Room
(iii) Room for Task Force Cdr.
(iv) Dark Room.
(v) Rest Room approximately 150 persons.
(vi) Arrangements for food as available to the other Railway employees at the site.

Provision of rest facilities operations room and dark room etc will depend on the situation. If suitable covered area is not available, NSG will manage with their own tented accommodation for which only some open space will be necessary.

(b) Transport *to* move to outstation: As a rough guideline, following would be required:

(i)	Cars	…..	2
(ii)	Jeep/Light Vans	…..	2
(iii)	Matadors	…..	3
(iv)	Busses	…..	2
(v)	Medical vehicles	…..	2

(c) Detailed layout of the coach

(d) Details of the location where the coach/train has been stopped.

(e) One senior contact officer from the Railways based in Delhi, officially designated as the representative for coordination with the NSG. His name should be in intimate to the NSG.

(c) Chief Security Commissioner on the Zonal Railways and Addl. DG/RPF (Headquarters) in Railway Board will function as Liaison officers and would brief the Task Force about all aspects of Hijacking.

RAILWAY BOARD (STD-011)

Designation	Office		Resident		Mobile
	Rly. (030)	BSNL(011)	Rly. (030)	BSNL(011)	
Minister	44740	23386645 23381213	44741	23012625 23012777	----
CRB	44700	23384010 23382753	44701	26884922	9810099310
FC	44702	23382754	44703	26886851	9810099315
ME	44706	23383879	44707	26883923	9910487474
ML	44710	23385100	----	----	9810099323
MM	44708	23381477	44709	24675513	9810099317
MT	44712 44726	23382776	44901	26877379	9810561144
MS	44704	23382762	23676	23740027	9810099318
Secy. RLY.BD.	44714	23385227	55014	26881117	9810099312
G. BRANCH	43776	2338-9773	43426	2330-3766	
Safety Cell	43399 43599			23303399 23303599	23382638 (Fax)

IMPORTANT TELEPHONE NUMBER AND E-MAIL ADDRESSES OF SAFETY DIRECTORATE, RAILWAY BOARD

Designation	Rly. (Code-090)030	DOT (Code-011)	Mobile	E-Mail Address
Advisor (Safety)	43302	23381344	9818798309	advsafety@rb.railnet.gov.in

Director (Safety) – I	43667	23387009	9910487334	dsfty@rb.railnet.gov.in
Director (Safety) – II	43446	23389987	9810017905	dsfty2@rb.railnet.gov.in
Director (Safety) – III	43239	23385836	9910487542	dsfty3@rb.railnet.gov.in
Jt.Director (Safety)	43574	23070944	9910487540	dsfty4@rb.railnet.gov.in

CHAPTER XVIII

DISASTER MANAGEMENT TRAINING

1801 DM TRAINING ON RAILWAYS:

18.01.1 National Institute of DM (NIDM):

NIDM has been envisaged as apex body on DM training and research in the country under the DM Act 2005. NIDM runs several multi-disciplinary training programmes including the programmes on transportation related disasters in which railway officers have also been invited to attend. Services of NIDM may be made use of, if required, for training railway officials in DM at IRITM, Lucknow. Most of the States have also DM Training Institutes funded by the Centre.

18.01.2 DM Training on Zonal Railways and divisions:

With the enactment of the DM Act, Indian Railways have also taken several initiates to revamp DM training. Presently, training on DM of various tiers of railway officials does not envisage neer concepts like integration of disaster agencies, etc., Till now any training on the subject of DM implied subjects connected with train accidents only. There was no training given for natural calamities or for terrorism related items. With the adoption of this concept, the training requirements for lower, middle and higher management officials of the railways need to be re-oriented t cover these concepts. Hence, the subjects of DM are most vast and varied. However, even tome of the railway staff need are given training only on the older older concept, i.e., on a limited syllabi of management of a train accident. Amongst the staff which falls in the category are the frontline staff (and their supervisors) either travelling on the train or available on line.

It has also not yet been possible to narness availability and strengths of railway on-board staff who are the first railway responders during a serious accident. With this in view, Board have decided to revamp the raining on DM being imported during a serious train accident. With this in view, Board have decided to revamp the training on DM being imparted to several tiers of railway officials through railway training institutes as indicated below;

S. No.	Categories of Officials	New training methodology and schedule
1	Top level management (GMs, PHODs, DRMs and other SAG/S4 Officers)	5 – day DM modules are to be delivered at IRITM/LKO @ once every 3 months. Frequency of training: Once every five years for SG/SAG officers and above.
2	Middle level management (SG & JAG Officers)	Some of the latest and relevant topics are to be included in the AMP and MDP programmes being delivered at RSC/BRC. IRITM/LKO will also deliver special module being developed by them @ one course every month. Frequency of training: Every SG/JAG officer need to undergo the module once every 5 years either at RSC as regular MDP/AMP course or special DM module at IRITM.
3	Lower level management (SS & JS Officers including serving Group 'B')	DM training at IRITM/LKO @ one course every month. Frequency of training: Once every5 years.
4	Probationers and Group 'B' Officers attending induction courses.	Topics listing detailed instructions are to be covered during the regular training programme at RSC/Vadodara. Frequency of training: As part of the course.

5	Supervisors of all frontline departments (Mechanical, Electrical, Engineering, Traffic Commercial & Operating and S&T)	One week course at ZRTIs @ one every month. Passing this course is compulsory for promotion to SE and above. Frequency of training: Once in 5 years.
6	Railway staff on board passenger carrying train (TS, Dy.TS, TTEs & Catering staff of Commercial, Coach Attendants and AC Mechanics, some of the selected coach cleaners of Mechanical, some of the RPF Escorting staff and catering staff of contractor wherever outsources)	DM being a multi-disciplinary effort during field operations, training in groups of such on-board staff is more desirable and efficient then training them category wise. Role of on-board staff has been a matter of great criticism in most of the serious train accidents. On-board staff are the first railway representatives to respond to any untoward incident and their empowerment will improve railways response in a big way. Such staff is to be trained in appropriate multi-disciplinary groups at such locations in the Divisions where there is concentration of such staff to obviate the need for their hostel accommodation, non-availability for longer periods, etc., Such training can be imparted at the selected country-wide locations to cover maximum number of staff in short period of time. This training can also be imparted in the Customer Care Institute. Only few select staff of Mechanical, Electrical (AC), RPF is to be undergo this training who are deputed to escort trains. This training will be made mandatory in a phased manner for any staff to go on-board a passenger train. The staff of catering contractor is also be imparted this training in Phase-2 to leverage their physical presence. Frequency of training: Once every 3 years.
7	Nominated ARMV and ART staff of Mechanical and Medical Departments.	Composite training of Mechanical and Medical staff for relief and rescue operations is planned to be given at upcoming DM Railway Institute, Bangalore.

		Doctors and paramedics nominated for ARMVs and other rescue operations should be exclusively trained on trauma care management either at some nominated specialized institutions or in-house. IRITM is one of the training institutes under consideration. Frequency of training: Once every 3 years.
8	DM team of RPF staff and other RPF personnel associated with relief rescue operations.	As per recommendation No. 46 of HLC on DM there should be a DM team of RPF on each Division comprising about 15 men in different ranks. Such teams should be trained in providing necessary support on relief rescue operations. The existing 5 day training module should be appropriately revised to make it suitable to achieve the above objective. Each of the above teams should be trained on this module at RPF Academy at Lucknow. In addition, training module may be appropriately developed separately for RPF Officers and staff and should be imparted t RPF Academy at Lucknow. The respective training modules should include role of RPF at the accident site, security at the railway premises like railway stations, trains, etc., Frequency of training: Once every 3 years for DM team of RPF. Once every 5 years for other RPF Officers and staff.
9	RPF Officers	DM training for RPF Officers may be also organized in IRITM till such time the capability in RPF Academy is developed.

NOTE: Mechanical (Traction) is the nodal Directorate in Railway Board for train accident management which includes all aspects of policy on ART/ARME/Cranes and rescue, extrication, firefighting equipment, etc., A nodal training institute for specialized rescue / extrication, etc., for Officers and Sub-ordinates is being set up in Bangalore; the work on this institute is being coordinated by Mechanical (Traction) Directorate, Railway Board.

IRITM/LKO has been nominated as the nodal centre for training on general aspects of DM for the senior and middle level officers (including senior management level Officers). Training modules are being set up at ZRTI/Udaipur and Bhuli for DM training of other Railway Officials.

Respective training instructions on each Zonal Railway will ensure that the modules prescribed above are institutionalised and officials are imparted training to build the capacity on DM on human resource front.

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CHAPTER XIX

MANAGEMENT OF RAIL DISASTER IN TUNNEL / DEEP CUTTING OR IN A WATER BODY

1901 Expertise to handle rail disasters in tunnels, etc.,:

The Railways have no expertise or infrastructure to handle a train disaster if it occurs in a tunnel or in a deep cutting not approachable by land. No machinery or earth moving equipment is available on IR which would be mobilised for this job. Help of other stakeholders or of NDRF has to be taken for this.

1902 Ventilation arrangements in tunnels:

Adequacy of ventilation arrangement and its efficient operation is always a matter of concern especially in very long tunnels. There are ventilation systems installed with alarms to warn the control room in case of any mishap.

In case a train stalls in long tunnel due to derailment / fire or any other unusual condition, automatically alarm will be sounded in the control room to alert the ventilation operator / controller or if Guard / LP of a train or any other person gives such call on 'emergency' telephone, the ventilation operator should control the ventilation in tunnel as per the procedure given.

1903 Lighting system in tunnels for use in emergency:

Depending on length of the tunnel, emergency lighting arrangements may be provided to give immediate assistance in handling a disaster.

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CHAPTER XX

NDMA GUIDELINES ON INCIDENT RESPONSE SYSTEM (IRS)

2001 Disaster risk in India:

India is vulnerable, in varying degrees to a large number of natural as well as manmade disasters. As stated in the National Policy on DM, 2009, in India, 58.6% of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectors (12% of the land) is prone to floods and river erosion; of the 7,516 KMs long coastline, close to 5,700 KMs is prone to cyclones and tsunamis; 68% of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches. In the context of human vulnerability to disasters, the economically and socially weaker sections of the population are the ones that are most seriously affected.

2002 Overview of Incident Response System (IRS):

The IRS is an effective mechanism for reducing the scope for ad-hoc measures in response. It incorporates all the tasks that may be performed during DM irrespective of their level of complexity. The main purpose of these guidelines is to lay down the roles and responsibilities of different functionaries and stakeholders at State and District levels and how it coordinates with the multi-tiered institutional mechanisms at the national, state and district level will be done. It also emphasizes the need for proper documentation of various activities for better planning, accountability and analysis. It will also help new responders to immediately get a comprehensive picture of the situation and go in for immediate action.

2003 IRS Organisation:

The IRS Organisation functions through Incident Response Teams (IRTs) in the field. In line with our administrative structure and DM Act of 2005, responsible officers have been designated at the state and district level as overall in-charge of the incident response management. The responsible officers may however, delegate responsibilities to the incident commander, who in turn will manage the incident through IRTs. The

IRTs will be pre-designated at all levels; state, district, sub-division and Tehsil/block. On receipt of early warnings, the responsible officers will activate them. In case a disaster occurs without any warning, the local IRT will respond and contact responsible officers for further support, if required. The nodal officer has to be designated for proper co-ordination between the district, state and national level in activating air support for response.

2004 Features of IRS:

IRS is categorized with features like management by objectives, unity of command and chain of command, organizational flexibility, span of control, unified command, accountability, rescue management, etc.,

2005 Summary of action points:

IRS constitutes an important part of the disaster response at the state and district level. These guidelines will help the states and districts in their disaster response. It will also help to reduce chaos and confusion during response. The important thing is to get the team members trained in their respective roles. A time bound strategy with fixed responsibilities is essential to achieve this objective.

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CHAPTER XXI

NDMA GUIDELINES ON SCALING, TYPE OF EQUIPMENT AND TRAINING OF FIRE SERVICES

2101 Emergent needs and recent initiatives:

Recent and earlier fire incidents have clearly demonstrated some of the major shortcomings in our fire fighting capabilities along the length and breadth of the country. The recent fire incident in a hospital in Eastern India has added another dangerous possibility and dimensions to fire accident. Unless there is a conscious and planned effort in all the states, the fire fighting capabilities of the country are not likely to improve and an unacceptable number of deaths along with huge loss of property will continue to occur. T prevent such unwarranted deaths and loss of property there is an urgent need therefore, to start a planned and determined move towards revamping and fire services in India.

2102 Enactment of fire Act in every state:

It is sad that in many states even today a comprehensive Fire Act does not exist. Considering the increasing vulnerabilities to fire all over the country, it is of utmost importance that every state enacts its own Fire Act so that fire vulnerabilities in the state are adequately dealt with and unacceptable loss of life and property is prevented. The Government of India had prepared a draft model fire bill and circulated to all the states way back in 1958. The states which have not enacted their own Fire Act should immediately enact a suitable Fire Act within a year.

2103 Fire hazard response and mitigation plan:

Fire hazard response and mitigation plan should include a calendar of activities for mass awareness and inspection of fire fighting facilities and equipment especially in schools, busy shopping malls, high rise buildings and residential clusters to reduce the fire accidents by controlling it in time. Fire hazard response and mitigation plan broadly includes availability of infrastructure, health care system, industrial locations, school and educational institutions, resource and institutions that can help and support the fire

hazard response system, risk and vulnerability assessment, identify the role of the Government Departments, NGOs, expert agencies, continuous evaluation and monitoring is necessary.

2104 Training:

The aim of training is to ensure that all fire service personnel are given the necessary exposure to develop the knowledge, skills, attitude, physical fitness, vision and mental alertness that they require to carry out their jobs efficiently and provide every opportunity for career development. The role of Fireman in fire services is to extinguish fire, rescue trapped persons, provide medical first aid and also respond to the various manmade fire accidents and natural disasters. The roles cannot be performed well until and unless sufficient training is imparted to the fire service personnel. The type of training, duration, etc., will depend upon the level of entry.

2105 Scaling of fire stations, equipment and manpower:

Operational efficiency of any fire service depends to a large extent upon the location of fire stations in relation to the entire area and population which is required to be protected by the fire station. In the cities with population of more than one million, the type of hazard may be termed as either high or moderate. In the areas of high fire risk, the scale the type of fire station and additional firefighting and rescue equipment should be determined by an actual survey of the area by fire experts. The key to proper response in disasters lies equally in a good communication set up. the fire services need to have all possible connectivity like telephone, fax, computerized voicelogger, GIS, HAM Radio, static and mobile wireless sets like Tetra system and satellite based communication. It is recommended that a standard 3 watch duty system should be introduced in fire services in which the first watch should be on duty for 24 hours at a stretch. On being relieved by the second watch, the fire watch should be on 4 hours off duty and again come on duty for 8 hours on the third day. Similarly, the second watch on being relieved by the third watch should remain off duty for 24 hours and come on 8 hours duty on the third day and so on.

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CHAPTER XXII

NDMA GUIDELINES ON TRAINING AND CAPACITY BUILDING OF CIVIL DEFENCE AND SISTER ORGANISATION

2201 Objective:

The main objective of the guidelines are to promote awareness on various types of disasters and their challenges besides improving competency and skill level of Civil Defence trainers and volunteers on DM and to enable trainees to develop action plans on DM, mitigation and risk reduction at all stages, building the capacity of Civil Defence personnel to work as master trainers, etc.,

2202 Response to accident related and other disasters:

Every year about 90,000 people in India succumb in road accidents and about 70,000 major and minor accidents occur across the country. Further, every year about 140 accidents occur on IR which operate nearly 12,000 trains and carry more than 20 million passengers every day. The number of deaths due to train accidents is around 200 per year. The main objective of the guidelines is to educate people and the government, road and rail authorities about safety measure, improved capacity to respond to such hazards.

2203 Riots / Violence – DO's and DON'Ts:

Take down all the emergency phone numbers of Police, Fire Brigade, Red Cross volunteers trained in first aid, psychological support, health, develop communcal harmony within the Railway fraternity both in office and in the colonies. Also, we need to avoid discussions / debate of controversial subjects or sensitive topics particularly on religion, etc.,

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CHAPTER XXIII

(OFFICERS NOMINATED TO REPORT TO DISASTER CONTROL, RAILNILAYAM AND TO PROCEED TO THE SITE OF ACCIDENT)

Zonal Headquarter-level

Department	To report to Disaster Control (Main Line)		To report to Disaster Control (Branch Line)		To proceed to Spot		
	Passenger carrying trains	Goods	Passenger carrying trains	Goods	Passenger carrying trains	Goods ML	Goods BL
Engineering	CTE **Stand-by** CE/TM or CE/TP	Dy. CE-Tr.I **Stand-by** Dy. CE-Tr. II	CTE **Stand-by** CE/TM or CE/TP	Dy. CE-Tr.I **Stand-by** Dy. CE-Tr. II	Will be nominated by PCE on case to case basis		
Mechanical	CME/Plg **Stand-by** CWE	CRSE **Stand-by** CMPE/Dsl	CME/Plg. **Stand-by** CWE	Dy.CME/C&W **Stand-by** Dy.CME/WS	CRSE **Stand by** CMPE/Dsl	CRSE **Stand-by** CMPE/Dsl	Divisional Officers
Electrical	CELE (OHE) **Stand-by** Dy.CEE/Loco CEGE(Non-	CELE(OHE) **Stand-by** Dy.CEE/Loco CEGE(Non-OHE)	CELE(OHE) **Stand-by** Dy.CEE/Loco CEGE(Non-	CELE(OHE) **Stand-by** Dy.CEE/Loco CEGE(Non-	CEDE(OHE) **Stand-by** Dy.CEE/TRD CESE	CEDE(OHE) **Stand-by** Dy.CEE/TRD CESE	CEDE (OHE) **Stand-by** Dy.CEE/ TRD

	OHE) **Stand-by** Dy.CEE/Plg.	**Stand-by** Dy.CEE/Plg.	OHE) **Stand-by** Dy.CEE/Plg.	OHE) **Stand-by** Dy.CEE/Plg.	**Stand-by** Dy.CEE/TRD	**Stand-by** Dy.CEE/TRD	CESE **Stand-by** Dy.CEE/ TRD
Operating	CPTM **Standby** Dy.COM/Chg	CPTM **Standby** Dy.COM/Chg	Dy.COM/Chg **Standby** STM/Chg	Dy.COM/Chg **Standby** STM/Chg	**Depending upon the severity of the accident, COM will nominate, if required**		
Commercial	CCM/PS **Stand-by** Dy.CCM/G Dy.CCM/PRS	CCM/PS **Stand-by** Dy.CCM/CL&PO	CCM/PS **Stand-by** Dy.CCM/FS Dy.CCO	….	….	….	….
Security	ASC/CIB & IPF/CIB	ASC/CIB & IPF/CIB	ASC/CIB & IPF/CIB	ASC/CIB IPF/CIB	*CSC/Dy.CSC (*major accidents only)	….	….
Medical	CHD/Dy.CMD	CHD/Dy.CMD	CHD/Dy.CMD	CHD/Dy.CMD	CMD **Stand-by** CHD	….	….
S&T	Dy.CSTE/Tele **Stand-by**	Dy.CSTE/Tele **Stand-by**	Dy.CSTE/Tele **Stand-by**	Dy.CSTE/Tele **Stand-by**	CSE (within station limits) CCE (Outside	CSE (within station limits) CCE (Outside	CSE (within station

	SSTE/Tele *CSE/CCE to give information to Signal Directorate	SSTE/Tele *CSE/CCE to give information to Signal Directorate	SSTE/Tele *CSE/CCE to give information to Signal Directorate	SSTE/Tele *CSE/CCE to give information to Signal Directorate	station limits) **Stand-by** CSTE/P or CSTE/Plg.	station limits) **Stand-by** CSTE/P or CSTE/Plg.	limits) CCE (Outside station limits) **Stand-by** CSTE/P or CSTE/Plg.