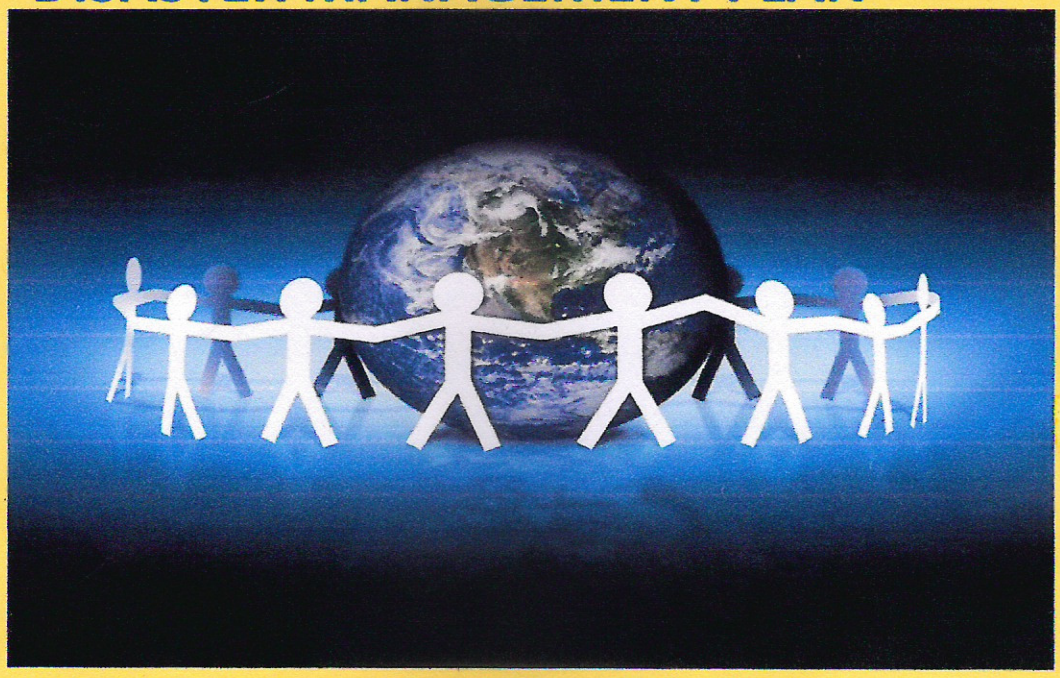
आपदा प्रबन्धन योजना

DISASTER MANAGEMENT PLAN



संरक्षा विभाग

SAFETY DEPARTMENT

पूर्वोत्तर रेलवे, गोरखपुर

NORTH EASTERN RAILWAY, GORAKHPUR

जनवरी- 2025

JANUARY,2025

SAFETY DEPARTMENT
North Eastern Railway Gorakhpur
January 2025

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DISASTER MANAGEMENT PLAN

PART I

Chapter - 1

INTRODUCTION

1.1 Background

Indian Railways came into existence with a running of the train from Bori Bunder to Thane in 1853. Ever since then handling train accidents has been a priority area for the railways. With the main reason for building up of the rail network by the British Empire being the transportation of the military requirements through the Indian Railways, the railway organization worked hand in hand with the army authorities. Sharing of the Indian Railways' and Army Cranes as also their Medical Vans in times of a train accident was an accepted system for handling disasters (rail accidents).

With the gradual growth of Indian Railways and its transition to transportation of passengers and other goods including raw material for industries etc the railway gradually built up its own infrastructure of Cranes, Accident Relief Trains (ARTs), Accident Relief Medical Equipments (ARMEs). Till the beginning of the year 2005, a disaster on the railway in effect meant a serious train accident; other items of disaster viz. Floods, Earthquakes etc were handled independent of the safety organization on the zonal railways. Disaster preparedness of the Railways, mainly pertaining to handling train accidents, had been gone into by a High Level Committee (HLC) in the year 2002/03 whose recommendations, where relevant, have been kept in view in the preparation of Railways Disaster Management Plans.

The situation has now changed with the promulgation of the Disaster Management (DM) Act in 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 Indian Railways Disaster Management Plan has to be prepared on the principles now incorporated in the Act of sharing resources of all Government Departments alongwith Railways own resources available to handle serious train accidents, other mishaps, terrorism related crisis and natural calamities etc.

1.2 Recommendations of High Level Committee on Disaster Management:

1. Various committees have been appointed on the Indian Railways. A high level committee (HLC) was constituted in Sep'02 to review Disaster Management on the Railways. The terms of reference of this committee were "to review the existing DM system over Indian Railways related to train accidents and natural calamities and to suggest improvements". Despite the above Terms of Reference incorporating on item of natural calamities the high level committee had mainly gone into DM system over Indian Railways related to train accidents; natural calamities were hardly considered for review of relief/rescue arrangements with the railways. The report of this committee was published by Railway Board vide letter no. ERB-I/2002/24/44 dated 17.9.02.

Till 31.3.2014, 99 recommendations have been implemented (including 8 deleted by appropriate authority) out of a total of 111 recommendations on all the Zonal Railways. Four

recommendations have been modified and 13 equipments have been recommended to be added to the ARMV/ART.

The recommendations had varying time frame of implementation with maximum being 36 months. Implementation of some of the recommendations has been delayed as the associated policy decision, research and development and vendor identification took some time. With the change in national scenario, some of the recommendations were reviewed to fall in line with the latest concept of participation by all stakeholders during disasters.

2. The Ministry of Railways appointed another committee in the year 2004 headed by Shri I.I.M.S. Rana, retired Chairman Railway Board, to re-examine the entire gamut of facilities available with the railways to handle disasters including natural calamities, earthquakes, cyclones, floods etc. This committee submitted its interim report in 2004; before it could submit a detailed report, it was wound up.

3. Another Disaster Management Review Committee was appointed on 27.02.07 under the Chairmanship of Mr. G. Narayan, an ex. IPS officer, with Terms of Reference to audit the current preparedness of all types of disasters/hazards for prevention, mitigation, rescue, relief and rehabilitation; integration of disaster reduction concept into development planning; and to recommend areas of multi-stakeholder partnership and citizen participation to establish a coordinated mechanism for disaster reduction, response and rehabilitation etc.

Report of the Disaster Management Review Committee (Headed by Shri G. Narain), was submitted on 22.12.08 and at presently it is being implemented at Zonal Railway and Board.

Chapter-2

CONCEPT OF DISASTER ON RAILWAYS

2.1 Disaster defined in Railways' context :

The concept of a Disaster was, till the year 2005, not adequately and comprehensively defined on Indian Railways. It was accepted that a Disaster situation implies, on the railways, to cover only cases of serious rail/train accidents.

As late as the year 2008, even CAG's report on DM on Indian Railways has erred in the concept of disaster and has gone to examine the relief/rescue/mitigation and preparedness of Indian Railways based on the earlier concepts and has reviewed the facilities for handling disasters available with the Railways only on the report/recommendations of the HLC on DM of Mr. S. Dhasarathy.

The definition of DM as given by the Government of India was legislated for the first time in the Disaster Management Act, 2005. The broad principles of disaster for any department of the government changed to the concept of any incident which could not be handled with alone by that department i.e. if it was beyond the coping capacity of a particular department, the incident could be termed as a disaster. With this came the concept of the departments of Government of India as also the State governments required to join hands to extend whatever facilities were available with them to provide relief/rescue and mitigation on the occurrence of a disaster.

In the DM plan, this concept of disaster, which has now evolved, has been adopted. The zonal railways have to ensure that, down the line, this definition is understood.

2.2 Strengths of the Railways to handle a Disaster :-

In handling disasters, Indian Railways is in a unique position as it has a number of strengths not available with many other departments of Government of India. These include :

- Railways own Communication Network.
- Operating Control on each Division linked with each Station.
- Territorial Army Units.
- Uniformed force of RPF/RPSF
- Railways' own Medical Infrastructure
- Civil Defence Organization
- An army of Gangmen spread out all over the Indian Railways.
- Scouts and Guides.
- Dedicated Rescue/Restoration and Medical Equipment on Rails.

Each of the above can be made use of to handle adversities depending upon requirement to handle the disaster.

Railway's weaknesses/shortcomings to handle Disaster :

There are, however, a few weaknesses in the Railways which are very essential in handling a specific type of Disaster as under :

· Absence of Tunnel cutting equipment – in case of collapse of a rail Tunnel, expertise and related equipment on this aspect is totally lacking.

· Non-availability of trained divers for extrication of passengers and/or casualties (dead bodies and drowning/drowned passengers) from a train fallen down on the sea/river/lake etc. Help of sports persons can be taken for this; the time of their mobilization is a factor to be kept in view.

· Non-availability of cranes operated from a ship/barge for lifting of the coaches/bogies from a water body.

· Ability to handle a CBRN Disaster and major fire.

· Limited resources to handle a terrorist attack on a train and/or a station, other

railway premises etc.

2.3 Types of Disasters

Disaster in the Railway context was traditionally a serious train accident, caused by human/equipment failure, which may affect normal movement of train services with loss of human life or property or both. This is now extended to include natural and other man made disasters. Different types of disasters are described alongwith a few examples, below :

(a) Natural Disaster

Earthquakes, Floods, Cyclones, Land Slides, Tsunami etc.

(b) Train Accident related Disaster

Collisions (with a huge number of casualties), Train marooned (flash floods), derailments at a bridge over a river, and coaches falling down; train washed away in cyclone, derailment of a train carrying explosives or highly inflammable material, tunnel collapse on a train, fire or explosion in trains, and other miscellaneous cases etc.

(c) Man made Disasters

Acts of Terrorism and Sabotage, i.e. causing deliberate loss of life and/or damage to property,

which includes :-

Setting fire to a Train, Railway installations etc., bomb blast at Railway Station/Train, Chemical (Terrorism) Disaster, Biological and Nuclear Disaster, tampering with Railway fittings to cause a serious accident, terrorism/security related crisis etc.

2.4 Changed Philosophy of Disaster Management in the Railways

With the enactment of the Disaster Management Act, 2005 followed with several other developments on the national level, DM philosophy has also changed to adopt the latest concepts.

NEW PHILOSOPHY

- Serious train accidents, not the only events termed as disasters.

- Other events could also lead to disasters, e.g. Internal security related events like terrorist attack at station/train, marooning of train due to flash flooding, long disruption of traffic due to natural factors like earth-quake, cyclone, floods etc.

- No more Relief, Rescue and Rehabilitation Centric.

- Holistic Approach adopted to incorporate :-

  - Prevention
  - Mitigation
  - Preparedness
  - Rescue, Relief
  - Rehabilitation

New Philosophy gives more Emphasis on Prevention and Mitigation as under:

- Prevent and mitigate disasters

- Audit Existing Systems for Disaster Resistance, Disaster Prevention and Mitigation on the basis of NDMA's and self prepared guidelines

- Disaster Management in Developmental Planning – New activities should be disaster resistant

- Preparedness, Rescue, Relief and Rehabilitation - Dimensions of DM

- Expertise based response from all stake holders

- Pooling of resources of all agencies, e.g. local administration, community, defence, hospitals and other Govt. orgnisations.

2.5 Definition of a Disaster on Railways :

Based on the definition of the Disaster Management Act 2005, Ministry of Railways has adopted the following definition of Railway Disaster:

"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 Organizations."

2.6 Nodal department for Disaster Management on Indian Railways :

The preparation of the Disaster Management Plans on Indian Railways and on the Zonal Railways in co-ordination with the different Departments of the Railway, other Central/State Govt. agencies, NGOs, Private agencies, etc. has to be done by the Safety department in the Railway Board, on the Zonal Railways and Divisions..

2.7 Authority to declare a Disaster on Railways :

On Zonal railway GM,AGM or PCSO (When GM/AGM not available) for declearing an untowards in accident as Disaster.

2.8 Important Provisions in the DM Act, 2005 Concerning Railways :

Sections 35, 36 & 37 of the DM Act, 2005 detail the responsibilities of Ministries and Departments of Central Govt. as per which a number of measures/actions are to be taken either on their own or in consultation with NDMA. Drawing up mitigation, preparedness and response plans, capacity building, data collection and identification and training of personnel in relation to Disaster Management is one of the key responsibilities.

Chapter-3

DISASTER MANAGEMENT ACT

3.0 The Disaster Management Act, 2005

3.1 Salient Features

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

Disaster has been defined in this Act as under:

"Disaster 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"

Disaster Management has been explained in this Act as under:

"Disaster Management means a continuous and integrated process of planning, organising, coordinating 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 or disaster;
- Assessing the severity or magnitude of effects of any disaster;
- Evacuation, rescue and relief;
- Rehabilitation and reconstruction"

3.2 Important Provisions in the DM Act :

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) Coordination of actions of the Ministries or Departments of the Government of India, State Governments, National Authority, State Authorities, governmental and non-governmental organizations in relation to disaster management;

b) Ensure the integration of measures for prevention of disasters and mitigation by Ministries or Departments of the 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 take necessary measures for preparedness to promptly and effectively respond to any threatening disaster situation or disaster;

e) Cooperation and assistance to the State Governments, as requested 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.

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 its 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 polices, 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 disaster management.

ii) Carrying out rescue and relief operation in the affected area;

iii) Assessing the damage from any disaster;

iv) Carrying out rehabilitation an 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 disaster management.

Section 37

(1) Every Ministry or Department of the Government of India shall-

a) prepare a disaster management 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 roles and responsibilities in relation to preparedness and capacity-building to deal with any threatening disaster situation or disaster;

(iv) Its roles 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 roles and responsibilities specified 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) & (iv)

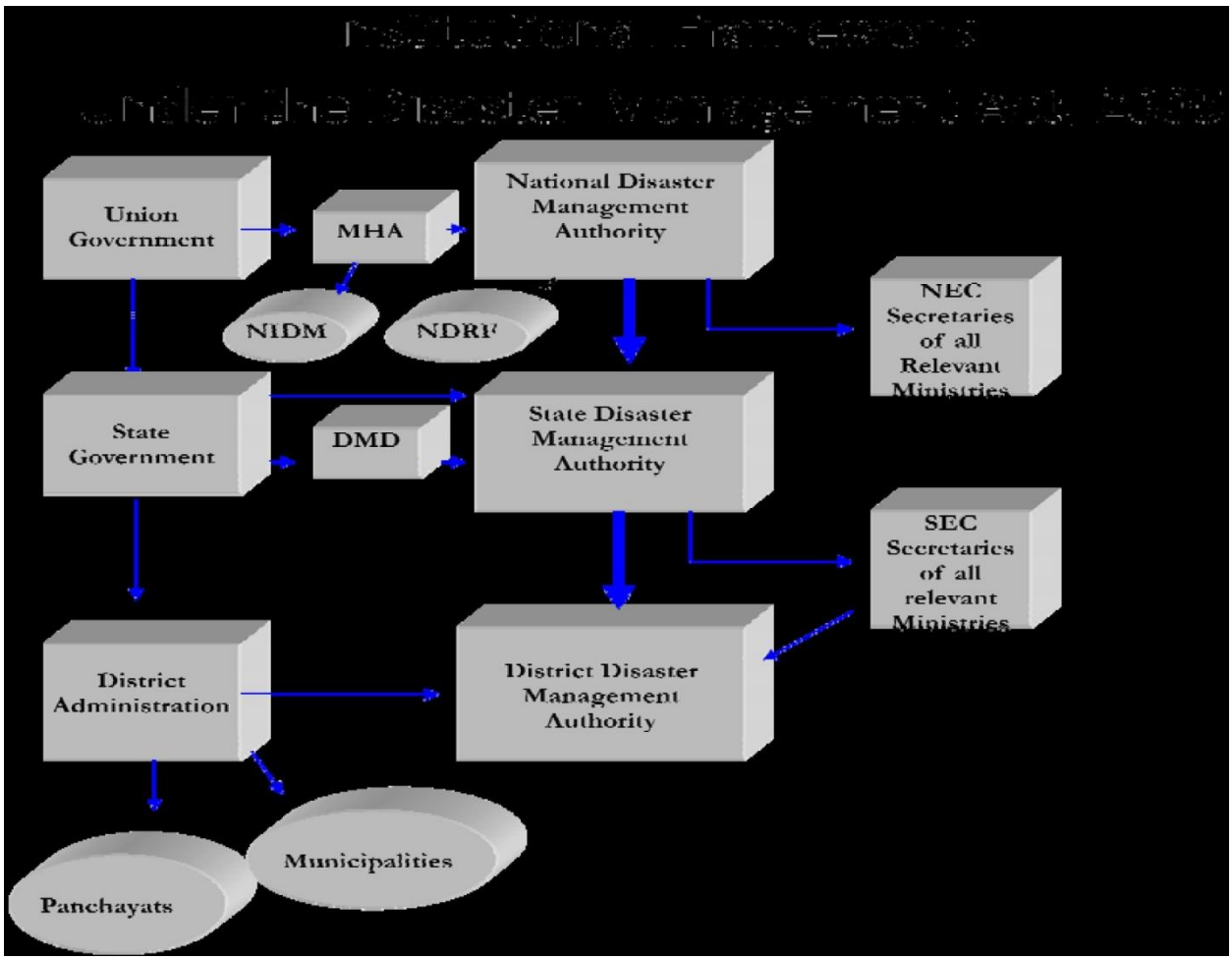
b) Review and update annually the plan referred to in clause (a);

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 disaster management 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.

NATIONAL AUTHORITY/NDMA

4.0 The Disaster Management Act, 2005, provides the powers, roles and jurisdiction of a National Authority as under :-

4.1 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 disaster management for ensuring timely and effective response to disaster.

Without prejudice to generality of the provisions contained in sub-section (1), the National Authority may—

a) Lay down policies on disaster management;

b) Approve the National Plan;

c) Approve plans prepared by the Ministries or Departments of Government of India in accordance with the National Plan;

d) Lay down guidelines to be followed by the State Authorities in drawing up the State Plan;

e) Lay down guidelines to be followed by the 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;

f) Coordinate the enforcement and implementation of the policy and plan for disaster management;

g) Recommend provision of funds for the purpose of mitigation;

h) Provide such support to other countries affected by major disasters as may be determined by the Central Government;

i) 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;

j) Lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management;

4.2 Constitution and Role of NDMA :

It is constituted under the DM Act as the apex body in the country to deal with disaster management holistically. Hon'ble Prime Minister is the ex-officio Chairperson of the Authority and presently 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 disaster management for ensuring timely and effective response to disaster.

State and Districts have also been mandated to constitute State and District Disaster Management Authorities respectively on the line of NDMA.

4.3 Constitution of Advisory Committee by National Authority :

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

4.4 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 Gov having administrative control of the disaster management, who shall be Chairperson, ex-officio ;

(b) The Secretaries to the Government of India in the Ministries or Departments having 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 disaster management in the country.

The National Executive Committee may-

· Act as the coordinating and monitoring body for disaster management;

· 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 disaster management plans by 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 by 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 programme for disaster management for different levels of officers, employees and voluntary rescue workers;

· Coordinate response in the event of any threatening disaster situation or disaster;

· Lay down guidelines for, or give directions to, the concerned Ministries or Departments of the Government of India, the State Government and the State Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster;

· Require any department or agency of the Government to make available to the National Authority or State Authorities such men or material resources as are available with it for the purposes of emergency response, rescue and relief;

· Advise, assist and coordinate 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 disaster management;

· 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 disaster management;

· Perform such other functions as the National Authority may require it to perform.

4.5 National Plan :-

There shall be a drawn a plan for Disaster Management for the whole of the country to be called the National Plan;

The National Plan shall be prepared by the National Executive Committee having regard to the National Policy and in consultation with the State Governments and expert bodies in the field of Disaster Management to be approved by the National Authority;

The National Plan shall include-

· Measures to be taken for the prevention of disasters, or the mitigation of their effects;

· Measures to be taken for the integration of mitigation measures in the development plans;

· Measures to be taken for preparedness and capacity building to effectively respond to any threatening disaster situations or disaster;

· role and responsibilities of different Ministries or Departments of the Government of India in respect of measures specified in clauses (a), (b) and (c).

The National Plan shall be reviewed and updated annually.

Appropriate provisions shall be made by the Central Government for financing the measures to be carried out under the National Plan;

Copies of the National Plan referred to in sub-sections (2) and (4) shall be made available to the Ministries or Departments of the Government of India and such Ministries or Departments shall draw up their own plans in accordance with the National Plan.

Guidelines for minimum standards of relief :

The National Authority shall recommend guidelines for the minimum standards of relief to be provided to persons affected by disaster, which shall include-

a) The minimum requirements to the provided in the relief camps in addition to shelter, food, drinking water, medical cover and sanitation;

b) The special provisions to be made for widows and orphans;

c) Ex gratia assistance on account of loss of life as also assistance on account of damage to houses and for restoration of means of livelihood;

d) Such other relief as may be necessary;

Relief in loan repayment, etc.

The National Authority may, in cases of disasters of severe magnitude recommend relief in repayment of loans or for grant of fresh loans to the persons affected by disaster on such concessional terms as may be appropriate;

4.6 Broad functions of NDMA are as under:

- Lay down policies on disaster management;
- Approve the National Plan;
- Approve plans prepared by the Ministries or Departments of Govt;
- Lay down guidelines to be followed by the State Authorities;
- Lay down guidelines to be followed by the different Ministries or Departments of the Government of India;
- Coordinate the enforcement and implementation of the policy and plan for disaster management;
- Recommend provision of funds for the purpose of mitigation;
- Lay down broad policies and guidelines for the functioning of NDMA;

4.7 Guidelines issued by NDMA and Action thereon

Till 2013, 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 (Terrorism) Disaster, Landslides and Snow Avalanches and Preparation of State Disaster Management Plans etc. These guidelines are available on the NDMA website at http://ndma.gov.in. These Guidelines are statutory and mandate all the stake-holders 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.

4.8 Guidelines on Chemical Disasters are very relevant for the Railways, as we transport a number of hazardous chemicals by rail. 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.

4.9 Guidelines on Chemical (Terrorism) Disaster 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 a disaster.

4.10 Guidelines on Nuclear and Biological Disasters call for the railways to take stipulated precautions in the transportation of Radio-active substances and Chemical (Biological) items.

4.11 Guidelines on Preparation of State Disaster Management Plans concern the zonal Railways to the extent that co-ordination mechanism between the State Govts and the Railways

should be institutionalised 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.

4.12 Guidelines on Management of Earthquakes, Cyclones, and Floods broadly necessitate zonal Railways to survey their existing infrastructure with respect to earthquake, floods and cyclone preparedness based on the vulnerability maps and to take necessary action for making the infrastructure resistant to such disasters. All new construction should henceforth necessarily be disaster resistant.

Zonal Railways will review their new projects as well as the existing infrastructure to fall in line with NDMA guidelines. Action to be taken by the Railways/PUs on these guidelines are briefly summarized at annexure I. The Action Plan including the prevention and post disaster response for cyclones is very similar as floods. Zonal railways should also keep the effect of cyclones and landslides in mind while reviewing preparedness on each item covered under NDMA guidelines. A multi-disciplinary team comprising of various departments such as Civil, S&T, Electrical, Mechanical, Medical, Security, Personnel and Finance will be constituted for this purpose by the respective zonal railways. Sr. ED/CE/RDSO has been nominated by the Board to monitor this work. CSOs will coordinate with PCEs and other concerned officers to see that necessary action is taken in a time bound manner which should be part of the disaster management plan of the railways both at the zonal and divisional levels.

4.13 Guidelines on Medical Preparedness and Mass Casualty Management envisage train based casualty transport and evacuation system with following highlights:

1. In MCE (Mass Casualty Evacuation), wherever required Railways needs to provide transportation facility for MCE. Where required, special trains may be run from the nearest coaching terminal to the disaster site to facilitate relief.

2. The railway disaster plan will provide crucial support to the community and local administration during mass casualty emergencies. This plan will include accidents involving transportation of hazardous materials.

Railway Board examined the workability of the NDMA guidelines and held meeting with NDMA officials on 30.4.09. Suggested changes in the guidelines as agreed to by NDMA are now to be suitably incorporated in the HQ and Division Level DM Plans of Zonal Railways. Necessary instructions on the above have been issued vide Board's letter No.2003/Safety(DM)/6/3 Pt dated 21.5.09 is at Annexure II.

4.14 Guidelines on Chemical Disasters :-

Railway's guidelines/instructions relevant to the zonal railways have been issued (Annexure III) for taking necessary action and incorporating suitable provisions in their respective DM Plans. These guidelines will add to the existing safeguards listed in the Red Tariff on handling, storage and transportation of hazardous material.

Chapter - 5

DISASTER MANAGEMENT PLAN OF RAILWAYS –PERIODICAL REVIEW

5.0 Disaster Management Plan of Zonal Railways (HQ/Divisional levels)

5.1 Preparation of DM Plans on Zonal Railways

Zonal Railways will prepare Disaster Management Plans at HQ and Divisional Levels as per the provision of Disaster Management Act, 2005 as detailed in the earlier chapters and this DM Plan of the Indian Railway (prepared by Railway Board). These Plans will encompass all types of disasters that can occur on the Railway system. It is reiterated that the High Level Committee on Disaster management Constituted in 2003 had mainly dealt with the upgradation of Railways relief/rescue facilities to handle train accidents. These are, therefore, only of limited use and relevance in the DM plan now to be framed based on the new concept of a Disaster as given in the DM Act, 2005. The Plans of the Zonal Railways should detail for all types of disasters, the preventive, mitigation and preparedness measures being taken by the railways and also the rescue, relief and restoration systems in place to meet with them.

NDMA guidelines, instructions issued by the Boards office from time to time and the action plan as framed by the zonal railways will form the backbone of the Plans. These plans must be dovetailed with the State and District Disaster Management Plans wherever the same have been prepared. Zonal Railways will keep their focus on the developments happening in their local area in the Government, non-govt. and private sector to build on the expertise-based all inclusive approach as envisaged in the Disaster Management Act, 2005.

For ensuring the uniformity and best possible use of the information, the effort needs to be made to broadly format these plans as under:

- **Divisional Disaster Management Plans** will contain divisional specific information. It will generally contain divisional action plan for dealing with all types of railway disaster. It not be restricted to have a detailed inventory only of Railway and non-Railway resources as envisaged in High Level Committee's Report on Disaster Management. It should focus mainly on further new developments of sharing of resources with all stake holders. It should also have, thereafter, divisional specific information like road maps, etc. Information common to all divisions of a Zonal Railway may be replicated uniformly in DM Plans of all divisions of the Zonal Railway. Divisional Specific information need not be contained in headquarter DM Plan.

- **Headquarter level Disaster Management Plans** will have information common to all divisions of Zonal Railway. It will generally contain Railway's action plan for dealing with all types of railway disaster. Action items along with their progress will be detailed for all type railway disasters. Contrary to the divisional Plan this will be most centric towards prevention, mitigation and preparedness than rescue and relief. Information like formation of relief and rescue teams at the accident site, Disaster Management Control Management, Duties of various officers/officials etc. in addition to the information specific to headquarter will be contained in this plan. Information common to all divisions of a Zonal Railway may be replicated uniformly in DM Plans of all divisions of Zonal Railway.

5.2 Periodical Review of Disaster Management Plans :

The DM Plans is to be reviewed and updated at least once a year, i.e. January. In the review changes in policy issued by NDMA/NEC and by the Central Governments and Railway Board are to be made. The DM Plans of the State Governments and of the Districts need to be gone into periodically and changes incorporated in the respective DM Plans of Zonal Railways/ Divisions.

5.3 Safety Deptt. - Nodal Deptt for Compilation/Updating of DM Plans:-

Safety department on the Zonal Railways is responsible for compilation of DM Plans at HQ and Divisional Levels which also need to be reviewed in January every year These Plans will also to be hosted on the rail-net server of the zonal railways in an interactive format so that the information can be shared and its retrieval is simpler.

Chapter - 6

6.0 Disaster Management Training on the Railways

6.1 National Institute of Disaster Management (NIDM)

National Institute of Disaster Management (NIDM) has been envisaged as apex body on Disaster Management training & research in the country under the Disaster Management 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 have also been sought for training railway officials in Disaster Management at IRITM, Lucknow. Most of the states also have DM training institutes funded by the Centre.

6.2 DM Training on Zonal Railways and Divisions

With the enactment of the Disaster Management Act, Indian Railways have also taken several initiatives to revamp Disaster Management training. Presently, training on disaster management of various tiers of railway officials does not envisage newer concepts like integration of disaster management into developmental planning, leveraging on the strengths of other non-railway agencies etc. Till now any training on the subject of Disaster Management 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 needs to be re-oriented to cover these concepts. Hence the subjects of Disaster Management are more vast and varied. However, even today some of the Railway staff need to be given training ony on the older concept and on a limited syllab of Management of a train accident. Amongst the staff which falls in this category as the frontline staff (and their superiors) either traveling on the train or available on line.

It has also not yet been possible to harness availability and strengths of railway on-board staff who are the first railway responders during a serious train Accident. With this in view, Board have decided to revamp the training on disaster management being imparted to several tiers of railway officials through Railway Training Institutes as indicated below Issued vide Training dtes. letter no E(MPP)2009/3/1 dated 20.1.09 (annexure V):

6.3 Categories of Officials New Training methodology and schedule

1 Top Level Management (GMs, PHODs, DRMs and other SAG Officers) 3-day Disaster Management Modules are to be delivered at IRITM/LKO @ once every 3 months. Frequency of Training:Once every five years for 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 every month.Frequency of Training:Every SG/JAG officer need to under go the module once every five 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 officers). Disaster management training to be imparted at IRITM/LKO @ one course every month **Frequency of Training**:Once every five years.

4 Probationers and Group B officers attending induction courses Topics as per annexure 4 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, Engg., S&T, Traffic Comml. & Optg.)One-week course at ZRTIs @ one every month. **Passing this course is compulsory for promotion to SE and above**.Frequency of Training:Once every five years.

6 Railway Staff on board passenger carrying train (TS, Dy.TS, TTEs & catering staff of Commercial Department, Coach attendants and AC Mechanics from Electrical Departments, some of the selected coach cleaners of Mechanical Departments, some of the RPF escorting staff and catering staff of contractor wherever out-sourced). Disaster Management being a multidisciplinary 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 railway 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 multidisciplinary 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 Institue. Only few select staff of Mechanical, Electrical (AC), RPF is to 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 to be imparted this training in Phase 2 to leverage their physical presence. Frequency of Training:Once every three years.

7 Nominated ARMV and ART staff of Mechanical and Medical departments

Composite training of Mechanical and Medical Staff for relief and rescue operations training to be imparted at disaster management railway institute(IRIDM) at Bangalore. However, there has not been much of headway in the last 5 years in this matter, as a result of which training to ARMV and ART staff remained neglected. Such staff are to be trained at STC/Bangalore, till the institute which is being set up for disaster management training module or rescue operations, to augment and facilitate their training till such time regular DM institute comes into existence. Facilities at STC/Kharagpur may also be utilized for such training. Doctors and paramedics nominated for ARMVs and other rescue operations should be exclusively trained on trauma care management either at some nominated specialised institutions or in-house. Frequency of Training:Once every three years.

8. Disaster management team of RPF staff & other RPF personnel associated with relief rescue operations.As per recommendation no. 46 of HLC on disaster management there should be a disaster management 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 at 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 three years for disaster management team of RPF.Once every five years for other RPF officers and staff.

IRITM, Lucknow has been nominated as the nodal centre for training on Disaster Management for the officers. Special training modules are being setup at ZRTI at Udaipur and Bhuli and STS, Bangalore for Disaster Management training of other railway officials.

For the rescue, extrication and other essential aspects of fire fighting, crane operation etc, another Training Institute is proposed at Bangalore.

Respective Training Institutions as well as zonal railways will ensure that the modules prescribed above are institutionalized and officials are imparted training to build the capacity on disaster management on human resource front.

CHAPTER - 7

MEDICAL PREPAREDNESS – MCE AND MOBILE RELIEF ARRANGEMENTS

7.0 Guidelines on Medical Preparedness

The Medical Department of the Indian Railways fulfil the needs of working and retired railway employees through its network of 121 hospitals having 13,770 indoor beds and 678 health units/poly clinics/lockup dispensaries, and 144 recognized hospitals and 54,337 personnel.

This infrastructure is spread across all Zonal Railways and Divisions across the length and breadth of India providing comprehensive prevention and promotion of health care services alongwith curative and rehabilitative services under a single management structure.

7.1 Network of Mobile Medical Infrastructure :

The Indian Railways has an established network system capable of handling train accidents alongwith emergency medical response and casualty evacuation. The system is based on an infrastructure consisting of 172 Accident Relief medical Vans (ARMV) – Scale I (Unit of accident relief trains situated at an average distance of every 50-100 km on main lines and 200 km on branch lines), 325 Accident Relief Medical Equipment (ARME) – Scale II (situated at every 80-100 km on either side of ARMV – Scale I and consisting of three sets of Portable Medical Kit of Accidents (POMKA). POMKAs are also available at all health units, sub-divisional and divisional/zonal hospitals. Trained manpower of medical and all other departments of the Indian Railways provide first aid, immediate and necessary emergency medical treatment to save the life and limbs of persons involved in train accidents and arrange rapid evacuation to the nearest government/private hospital by the first available means of transport. There is a well-rehearsed action plan to handle railway accidents.

The system is committed to the primary goal or meeting the needs of the Ministry of Railways, though this resource may be available in a limited manner for assistance of the district administration for mass casualty management.

7.2 The main stakeholders in the Medical Preparedness and Mass Casualty Management (MPMCM) are the Ministry of Health and Family Welfare, Ministry of Labour and Employment, Employees State Insurance Corporation, Ministry of Defence, Ministry of Railways, State Governments and Union Territories and private health care providers.

The NDMA's guidelines on Mass Casualty Management (MCM) have been prepared to provide directions to the Central Ministries, Departments and State Authorities for the preparation of their detailed Medical Preparedness Plans. These guidelines call for a proactive, participatory, well-structured, fail-safe, multidisciplinary and multi-sectoral approach at various levels.

Each organization of the Government may be made aware of risks, vulnerabilities and effects of various natural and man-made disasters including peripheral emergencies in terms of mortality and morbidity; short and long-term health effects including the socio-economic problems faced by the community during, and in the aftermath of MCE. The need for creation of an institutional mechanism and system is essential. This would result in enhancing capacities and capabilities of hospital and health care workers. So also is the need for strengthening existing procedures that allow emergent activities to meet the challenge of surge capacity because of mass casualty events is elaborated. The different mass casualty events and other potential disasters including Chemical, Biological, Radiological and Nuclear (CBRN) emergencies which may lead to MCE are to be made aware of to the Medical Management of the concerned departments which have their own medical establishments; Railways falls within the ambit of this item.

A review of the existing health framework, preparedness of the Ministry of Health and Family Welfare, Ministry of Defence, Ministry of Railways and Ministry of Labour and Employment

in relation to their capacity for handling casualties caused by various disasters is to be done so as to share each others strengths and capabilities. Ministry of Health and Family Welfare is assigned with legislative capacity for a number of subjects including all matters relating to the medical, dental, nursing and pharmacy professions and education; mental health; standards for drugs; prevention of food adulteration; and prevention and control of epidemics. Its capacities and programmes have been discussed in detail.

Medical preparedness of Ministry of Defence, Ministry of Railways and ESIC have also elaborated in the NDMA's guidelines. A brief outline of the arrangements with the state health departments is enumerated; there is also a bird's eye view of the health care infrastructure of the private sector, Indian Red Cross Society, certain Non-Governmental Organisations and various laboratories. Among the various International initiatives, the role of the recently operationalised International Health Regulations in limiting the spread of epidemics and other public health emergencies by the Member States has been highlighted.

Medical preparedness aims at preventive and mitigation measures. Preventive measures include upgrading public health laboratories and establishing an integrated Disease Surveillance Programme (IDSP). Preparedness for Emergency Medical Response (EMR) for the management of mass casualties at the incident site and, their quick and safe evacuation by ambulance services is an important step in this direction. Inadequacy and lack of appropriate capabilities and capacities in existing medical arrangements have to be appreciated. The need for hospital disaster preparedness plans alongwith the non-availability of medical logistics in critical care have been highlighted by NDMA in their guidelines which need to be followed up. The cold chain system in blood transfusion services needs to be established all across the country. The requirement of specialised facilities for CBRN management has also been highlighted by NDMA.

NDMA's guidelines are comprehensively given for a legislative and regulatory framework, preventive measures, preparedness, capacity development, hospital preparedness, specialised health care and laboratory facilities, role of alternative systems of medicine and identification of the dead, psychosocial care and mental health services and Research and Development for MPMCM. The roles and responsibilities of various stakeholders at the centre state and district levels are also described. The salient highlights in the guidelines include :

· Preventive measures like strengthening of epidemic control programmes, immunisation, HIV control etc., development of minimum standards of food and water; IDSP and its integration at all levels converged to develop an effective Early Warning System (EWS) operable at all levels.

· The Medical First Responders (MFRs) of mobile medical teams will be fully trained in triage and resuscitation; well-equipped and supported by all emergency services and material logistics.

· Emergency medical evacuation requires development of an Integrated Ambulance Network (IAN) including road, aerial and water ambulance networks integrated with self-propelled Accident Relief medical Vans (SP-ARMVs) of the railways at various levels. As the evacuation of large number of casualties cannot be done by and ARME (or SP-ARMEs) the Railways have adopted the concept of mobilization special train for MCE. It will work in conjunction with Emergency Response Centres (ERCs), ESIC medical services and related emergency functionaries with laid down Standard Operative Procedures (SOPs) for all stakeholders.

· Full-fledged containerised mobile hospitals will be acquired and attached with hospitals earmarked by states/districts.

· Capacity development will include training of all stakeholders including doctors, nurses, paramedics and other resource persons in triage and Basic Life Support (BLS), and development of specialists.

· Hospital preparedness should aim at planning the use of hospital resources in a well coordinated and simple way with defined roles for all medical personnel. Such activities will be drafted in the hospital DM plan which will be a part of the Zonal/Divisional DM plan. The plan will be rehearsed twice a year using mock drills.

NDMA's guidelines include items related to response, rehabilitation and recovery, PPP, post-disaster documentation, media management and important medical management aspects which need to be integrated into the district DM plans. The major guideline include :

· Mock drills will be based on the simulation of worst scenario in the identified vulnerable areas to check the preparedness level of the MFRs.

A specific reference in NDMA's guidelines include item for medical preparedness for handling CBRN emergencies besides the basic aspects of medical preparedness. It covers the following areas :

· Specific education and skill based training of MFRs and necessary community awareness about various Dos and Don'ts to deal with CBRN incidences in a participative approach.

· SOPs for CBRN management at the incident site, triage, personal protection, decontamination, resuscitation, and casualty evacuation followed by management of victims at the hospital level.

· The necessary resource inventory in terms of Personal Protective Equipment (PPE), various detectors, decontamination and decorporation agents, antidotes, essential medicines, specialised mobile laboratories and ambulances fitted with CBRN filters. Special CBRN stores and necessary laboratory facilities will be established at various levels.

7.3 Use of Medical Vans/Special Trains by Railways :

· The infrastructure of ARMVs available with the Railways has been over rated in the NDMAs Guidelines. There are a number of constraints both in the movement of the ARMVs as also in the space available for MCE. Bulk evacuation of 50 casualties or more by the ARMV would not be possible with the present design of the ARMV. It is not desirable to increase the size of the ARMV as it would then become further away from the site creating difficulty in the evacuation of injured.

· The paras mentioned in Item 4.3.2 in NDMA's Guidelines on Medical Preparedness and MCE under the heading of "Transportation and Evacuation of Casualties", subject Item IX, page 35, Item (a) to (g), needs to be modified the ARMVs would not be able to evacuate the casualties in large numbers as mentioned in the Guidelines. Along with mass evacuation of casualties there may be a need in some cases of disasters for large scale evacuation of humans. The ARMV is too small to cater to this need.

We have two coaches in the ARME; one of the coaches is mainly used for stocking cold cutting equipment, jacks etc. The other coach provides elementary level hospital facilities for a limited no. of injured persons. A portion of one coach is for accommodation of Railway Staff, Paramedical staff and Doctors etc. Any increase in capacity of the ARME to take care of enhanced need of evacuation of a large no. of chemical casualties will require much more equipment(including PPE) , more space in the ARME along with a heavy component of trained man power to look after chemical casualties.

As an alternative the Zonal Railways have to arrange special trains consisting of AC and/or non-AC coaches to run from the nearest coaching terminal to the site for evacuation. Railway and

non-Railway Medical Teams may be deployed in these special trains along with a portable kit of medicines etc. (POMKA) to attend to the injured during the process of evacuation.

In case there are more than one closely located affected areas, on different rail routes even 3 or more special trains can be run, each to cater to a respective area. This cannot be done by ARME's as these are few in nos.

Each different type of casualty requires a specialized training to handle it. The Railway Medical Department neither has the training nor can they digress from their principle function of providing medical care to the railway men and their families including to retd. staff/families. During a Chemical Disaster, as the public areas are far away from station premises it may not be possible to run the ARME or a special train to the location close to the site. In some situations due to effect of Chemical Gases (as was the case in Bhopal Gas tragedy of Union Carbide) even the Loco Pilot/Guard and the Medical Teams may not find it possible to reach the site in the immediate period of post-Disaster.

Railways is not be expected to be a main stake holder in the DM Plan of CTD. They can at best be involved in the evacuation of casualties by a special train (A/c and non A/c coaches) from the nearest station closer to site to a station serving Hospital, nearby. Skeleton First Aid facility can be extended by the Railways Medical Team in this special train. In any case it would take a maximum of 5/6 hours for the special train to evacuate the causalities once it reaches near the site to reach the station serving the Hospital.

7.4 In the NDMA's Guidelines on Medical Preparedness and MCE, under the head of Medical Preparedness (Page 31) in Item 3.3.3 (i) a no. of duties are defined to be done by the Medical First Responder (MFR). It is specifically mentioned that adequate no. of Personnel, Protection Equipment (PPE) should be available with the mobile teams, various first responders and rescue services. Further, in item (ii) (b) , it is mentioned for evacuation of chemical victims the use of Rail Ambulances is currently non-existent.

As the different MFR's are neither defined nor separately listed in the NDMA's guidelines, it is clarified that the Railways are not to be treated as MFR. NDMA has clarified in a review meeting that the MFR would be NDRF and along with trained personnel of State Governments and District Administration. This may be specifically clarified in the Zonal and Divisional DM Plans as to who is considered as MFR.

MEDICAL PREPAREDNESS IN HOSPITALS

HOSPITAL DISASTER MANAGEMENT PLAN

8.0 Network of Hospitals : Indian Railways has a vide network of Hospitals in the country.

8.1 Aim of Hospital Disaster Management Plan : The aim of a hospital disaster plan is to provide prompt and effective medical care to the maximum possible, in order to minimize morbidity and mortality resulting from any MCE.

8.2 Hospital DM Plan :

We may incorporate this in the DM Plan of the Railways. It should be clarified that:-

"The Hospital DM Plan comes into effect only if the competent authority so authorised declares on the Zonal Railways an incident as a disaster. It can also come into effect if any Central/State Govt. agency declares a major incident a Disaster, and where the Medical facility of the Railways shall be required to give assistance."

8.3 Objective and Goals of a Hospital Disaster Plan :

The main objective of a hospital disaster plan is to optimally prepare the staff and institutional resources of the hospital for effective performance in different disaster situations.

The hospital disaster plans should address not only the mass causalities which may result from MCE that has occurred away from the hospital, but should also address the situation where the hospital itself has been affected by a disaster –fire, explosion, flooding or earthquake.

In the NDMA's Guidelines on Medical Preparedness and MCE, in item 4.3.6 (page 59) under the heading "Hospital Preparedness" a number of duties have been specified for Hospitals. There is a need to lay down a system that there should be sharing of facilities amongst Hospitals in big cities which have a no. of them. Some of them may be earmarked as "Specialty Hospitals"; others only as a General Hospital to treat General Causalities. The Railway Hospitals need not be in the category of a "Specialty Hospital" as they do not have specialized expertise for specific diseases.

In case of MCE away from the hospital and not affecting the hospital the further goals are:

(i) To control a large number of patients and the resulting problems in an organized manner.

(ii) By enhancing the capacities of admission and treatment.

(iii) By treating the patients based on the rules of individual management, despite there being a greater number of patients.

(iv) By ensuring proper ongoing treatment for all patients who were already present in the hospital.

(v) By smooth handling of all additional tasks caused by such an incident.

(vi) To provide medications, medical consultation, infusions, dressing material and any other necessary medical equipment.

In case of incidents affecting the hospital itself the further goals of the plan would be :

(i) To protect life, environment and property inside the hospital from any further damage-

l By putting into effect the preparedness measure.

l By appropriate actions of the staff who have to know their tasks in such a situation.

l By soliciting help from outside in an optimal way.

(ii) To re-establish as quickly as possible an orderly situation in the hospital, enabling a return to normal work conditions.

8.4 Principles of a Hospital Disaster Plan

(i) Predictable: The hospital disaster plan should have a predictable chain of management.

(ii) Simple : The plan should be simple and operationally functional.

(iii) Flexible: (Plan should have organizational charts)

The plan should be executable for various forms and dimensions of different disasters.

(iv) Concise: (Clear definition of authority)

The plan should specify various roles, responsibilities, work relationships of administrative and technical groups.

(v) Comprehensive : (Compatible with various hospitals)

It should be comprehensive enough to look at and network various other health care facilities along with formulation of an inter-hospital transfer policy in the event of a disaster.

(vi) Adaptable : Although the disaster plan in intended to provide standard procedures which may be followed with little thought, it is not complete if there is no space for adaptability.

(vii) Anticipatory : All hospital plans should be made considering the worst case scenarios.

(viii) Part of a Regional Health Plan in Disasters: A hospital cannot be lone entity making its plans in isolation. The hospital plans have to be integrated with the regional (district/taluka) plan for proper implementation.

8.5 Categorization of Emergencies

(Reference:http://whoindia.org/en/Section33/Section34/Section38 51.htm)

In order to find out what constitutes a disaster or unmanageable incident for the hospital, the hospital needs to calculate its normal capacity, beyond which it has to act according to the disaster plan. The mass casualty emergencies can be categorized in one of the following ways:

Based on the Number of Casualties :

Here the categorization is based on the number of casualties coming to a hospital in a given time and the ability of the hospital to cope with those casualties. Categorization will differ from hospital to hospital and depend on several factors, such as the number of doctors and nurses available and the availability of supplies and support services. Assessment of the capacity

of a hospital to respond to a given emergency situation can be assessed by the following two ways:

(i) Hospital Treatment Capacity (HTC) is defined as the number of casualties that can be treated in the hospital in an hour and is usually calculated as 3% of the total number of beds.

(ii) Hospital Surgical Capacity (HSC) is the number of seriously injured patients that can be operated upon within a 12 hour period i.e., HSC= Number of operation rooms x 7 x 0.25 operations/ 12 hours.

Note: Above categorization is for a 1,000-bed tertiary hospital, and modifications can be made depending on the bed strength and staff strength (doctors, nurses and support staff) for individual hospitals.

Category 1: Upto 30 patients belonging to a single accident or any other emergency, coming to a hospital casualty at one time.

Category 2 : 30 to 50 patients belonging to a single accident or any other emergency, coming to a hospital casualty at one time.

Category 3 : More than 50 patients belonging to a single accident or emergency coming to a hospital casualty at one time.

Based on the Type of Casualities:

Here the categorization is based on the number of seriously injured patients belonging to the same emergency coming to the hospital at one time.

Category a : Patients in critical condition

Includes cases of head injuries, thoracic injuries, abdominal injuries, fractures of major bones with profuse bleeding etc. These patients require immediate resuscitation and supportive measures. About 10% of these are beyond salvage.

Category b : Patients in serious but not life threatening condition

Include polytrauma cases of a less serious nature, for example, fractures and crush injuries of limbs without major blood loss, facial injuries, spinal injuries, etc.

Category c : Walking wounded

These patients may have minor injuries requiring cleaning the wounds, dressing and / or limb fractures requiring closed reduction and immobilization.

Based on this categorization it is advisable to further classify the contingency plan in to three classes :

CLASS A

The plan can be put into practice without any disruption to the normal and routine work of the institution.

CLASS B

The plan can be put into practice with minor disruption to the day-today functioning of the hospital and with some readjustments. The plan may be upgraded to C if the number of causalities increases.

CLASS C

There would be definite disruption of routine worm. Major readjustments would be required in hospital functioning, inpatient treatment, duty arrangements, laboratory and operation theatre scheduling and increased demand on stores, pharmacy etc.

A HOSPITAL CONTINGENCY PLAN IN UNIQUE TO EACH HOSPITAL AS IT DEPENDS ON ITS BED STRENGTH, STAFF AND OTHER RESOURCES

8.6 The Disaster Manual :

The plan should also be written down as a document in the form of a 'disaster manual'. The reporting, recording, coordinating and evaluating activities associated with DM should be specified in this disaster manual. The disaster manual should incorporate the following:

(i) Medical Command Authority (unified incident command).
(ii) Control centre location.
(iii) Disaster alert codes.
(iv) QRTs formation, responsibilities and movement details.
(v) Responsibilities of individuals and departments.
(vi) Job action cards.
(vii) Chronological action plan.
(viii) Details of resource mobilization for logistics and manpower.
(ix) Details of operational areas (patient care areas). This should include the existing patient care areas(reception and triage areas, emergency and resuscitation areas, definitive care areas, intensive care areas, etc.) the plan should also label certain areas which are free in the hospital area which can be used optionally as patient care areas during the initial surge of patients.

(x) Hospital triage criteria.
(xi) Documentation details.
(xii) Communications (intra and inter hospital).
(xiii) Networking including capacities and capabilities of health facilities.
(xiv) Pre-hospital transports.
(xv) Security arrangements.
(xvi) Police networks.
(xvii) Evacuation details.
(xviii) Medico-legal responsibilities.
(xix) Disposal of the dead (role of mortuary services and forensic departments in identification, storage and disposal of the deceased).

8.7 Phases of Hospital Disaster Planning

I. PRE-DISASTER PLANNING

It is recommended that all hospitals involved in emergency care of patients embark upon planning for the worst at the earliest. It is always good to have a ready working plan before the next disaster strikes.

a. Formation of Hospital Disaster Committee

The formation of disaster committee for the hospital is the first step in making a disaster plan for the hospital. The members of the disaster committee should be from the following basic facilities of the hospital.

The following positions may not confirm to each and every hospital. It is therefore left to the discretion of individual hospitals and their administration to formulate their own disaster

committees. In general these should be senior doctors/ officials of the hospital having considerable administrative experience.:

(i) The hospital administration.
- s The director/ principal/ dean/ head of institution/ medical superintendent.
- s Member/ Members from hospital management board.

(ii) The chiefs/ heads of various clinical departments supporting the emergency services: e.g., casualty and emergency services, orthopaedics general surgery, medicine, neurosurgery (if present), cardio-thoracic surgery (if present), anesthesia.

(iii) The chiefs/ heads of various ancillary departments e.g., radio-diagnosis, transfusion medicine/ blood bank, laboratory services/pathology, forensic medicine.

(iv) The chief nursing superintendent/matron.
(v) The finance department.
(vi) The stores and supplies department.
(vii) The hospital engineering department.
(viii) The public relation and liaison office.
(ix) The chief of security of the hospital.
(x) The sanitation department.
(xi) Hospital kitchen/dietary services.
(xii) The social welfare department(if present).
(xiii) Hospital unions.

b. Formulation of Central Command System (Incident Command System)
In order to ensure effective control and avoidance of duplication of action there should be a hierarchical chain of command. It will also ensure effective coordination of the planning and execution of all activities after the disaster plan has been activated.
Incident command system earlier approved by MHA is being reviewed and modified and will be issued soon. We recommend that administrators of all hospitals will adopt the same and will be backed by adequate organizational setup.

The advantages of the ICS are many. It has a predictable chain of management; flexible organization charts allowing flexible response to specific emergencies; prioritized response checklists; accountability of position function; improved documentation for better accountability and cost recovery; a common language to promote communication and facilitate outside assistance; cost-effective emergency planning within health care organization.

c. Delineation of Jobs According to Command System.
- The titles used in the disaster plan are carried by functions not individual people.
- The Job Action Sheets.
- These action sheets should be detailed and chronological (immediate, urgent and later).
- Stored safely.
- Colour coded as a pocket book or laminated sheets.

d. Planning for Activation of Additional Hospital Areas in case of need The areas which should find a mention in a hospital disaster plan are:

(i) Command centre
(ii) Communications office/ paging hotline area/telephone exchange.
(iii) Security office/ police picket (chowki).
(iv) Reception and triage area.
(v) Decontamination area (if needed).

(vi) Minor treatment areas.
(vii) Acute care area (emergency department).
(viii) Definitive care areas (OTs, wards).
(ix) Intensive treatment area and activation of High Dependency Units.
(x) Mortuary.
(xi) Holding area for relatives/ non-injured.
(xii) Areas for holding media briefings. (separate media/ PRO/spokesperson room).
(xiii) Area for holding patients in case a part of the hospital is evacuated.

All these areas should be mapped on the outlay map of the hospital. The normal capacities of the existing areas should be mentioned on these maps. Enhanced admission of patients requires an enlargement of suitable spots, if necessary even by changing their function.

To increase the capacity of hospitals a surge of additional beds for newly arriving patients should also be considered in the plan. This can be achieved by the following action:

- Discharge elective cases.
- Discharge stable recovering patients.
- Stop admitting non emergent patients.
- Convert waiting/non-patient care areas into makeshift wards.

e. Public Information and Liaison Planning

A single spokesperson for the MCE needs to be identified in advance; press and media briefings need to be regularly scheduled away from the hospital(s) but with supporting medical expertise.

f. Security Services in Disaster (Liaison with Local Police)

Security services have to be operational at very early stages. Some of their duties are:
(i) To secure the driveways for authorized parties, namely ambulances, police vans, hospital staff vehicles.
(ii) Traffic control and blocking access to certain areas helps to avoid chaos in the case of a mass accident. Cooperation with police forces will be necessary.
(iii) To restrict and strictly control entry to the hospital.
(iv) To direct the entry for authorized persons into appropriate areas, e.g., for relatives or media people.
(v) To protect personnel and patients.

g. Logistics Planning

(i) Communications (inter/intra hospital)

- A communication centre should be set up to handle and coordinate all internal communications.
- Telephone lines should be made available for outgoing and incoming calls. One line will be designated as the open line to the external command centre.

(ii) Transportation (to and from other health care facilities)

Both intra-mural and extra-mural transport services should be predetermined.

(iii) Stores Planning – Commissioning of a Dedicate Disaster Store.

It is recommended that adequate stores of linen, medical items, surgical items should be kept separately in the emergency/ casualty and should be marked 'Disaster Store'.

(iv) Personnel Planning – Medical and Non-Medical

Medical Staff : Duty roster for standby staff should be available in the control room/ command centre.

Nursing Staff: List of nursing staff which may be made available at short notice. Mobilization of additional nursing staff from non-critical areas.

Other Staff : Duty roster including those on standby duty of all ancillary medical services (e.g., radiology, laboratory, blood bank) and also other hospital services (e.g., house keeping, sanitation, stores, pharmacy, kitchen, etc.)

Volunteers : The role which volunteers will assume in the course of a disaster should be predetermined, rehearsed, coordinate and supervised.

(v) Finances

An important aspect of any management plan is the financial management. It is recommended that the disaster plans are made in close association with the financial advisors of the hospital/ institution. This will make them more cost-effective and avoid unnecessary and repeated expenditure.

h. Operations Planning

(i) Essential Medical/ non-Medical Staff Activation (In Different Areas)

- Reception and triage area : Initial registration and triage should be done in this area hospital.
- Registration officer at the registration desk.
- Triage officers/ nurses.
- Adequate number of stretcher/ trolley bearers.
- Hospital attendants.
- Triage criteria for disasters and the patients will be colour coded according to the kind of treatment they deserve e.g., ONE immediate Resuscitation (RED); Two Potentially Life Threatening Injuries (YELLOW); THREE Walking Wounded (GREEN); FOUR Dead (BLACK)

- Decontamination area (if needed).
- Acute care area (emergency department).
- Definitive care areas (operation theaters, wards).
- Intensive treatment area activation and High Dependency Units.
- Minor treatment areas.
- Laboratory services.
- Radiology services.
- Mortuary services (care for the dead). The mortuary should be situated away from the main entrance of the hospital. It should be adequately staffed with a senior forensic specialist / any designee appointed for that purpose.
- Patients pronounced Dead On Arrival (DOA) should be tagged with a disaster tag and the body should be sent to the mortuary.
- Alternate morgue area should be identified.
- Medical records should be notified as to the identification of the patient.
- The bodies will be removed via a separate gate to the hospital in knowledge of the mortuary in-charge.

- Be sure that the appropriate paperwork is done.
- Holding area for relatives/non-injured: A hospital social services staff member will stay with the family members.
-

(ii) Essential Nursing Staff Activation

(iii) Other Ancillary Services

- Hospital dietary services (kitchen).
- Sanitation services.

8.8 Phase of Staff Education and Training

Once the disaster plan is ready the next phase would be the education and training of the staff of the hospital about the disaster plan and specific roles of each staff member in case of disaster.

a. Concept of Common Language in Disaster Situation

(i) Everyone knows his/ her job.

(ii) Work continues in an orderly fashion without confusion.

b. Introduction of Disaster Management Training to Hospital Leadership

Training of Railways Medical Department :

It is desired by the National Plan that the Railways should train their Doctors in the treatment of specific injury from CBRN disasters as also keep medicines for the same in their hospitals. Railways may alternatively get the Training for Trainers of Medical deptt. So that this could be proliferated to other Doctors on all Indian Railways in a nominated Railway Training Institute.

A presentation is made to all administrators, department heads and managers regarding the implementation of the hospital disaster plan.

c. Introductory Lessons for all Hospital Staff

An orientation and education programme for personnel who participate in implementing the emergency preparedness plan. Education should address the following:

(i) Disaster Drills

As a part of the emergency management plan, every hospital is required to have a structure in place to respond to emergencies. This structure is routinely tested during drills.

(ii) Table Top Drills

Table top exercises are a paper drill intended to demonstrate the working and communication relationships of functions found within the disaster organizational plan.

(iii) Partial evacuation/ non-evacuation Drills

Hospital evacuation drills in case of an internal disaster.

(iv) Revision of Hospitals Disaster /Emergency Plan

Continuous revisions should be made in the hospital disaster management plan taking leads from the regular disaster drills in the hospital.

(v) Continuing Staff Education

8.9 Phase of Disaster

a. Disaster Activation – Alert and Mobilisation Phase

(Plans for alerting the disaster committee, staff, other facilities via phones/ paging and mobilizing resources to appropriate activated areas).

b. In-Hospital Response Phase

(Small multi-casualty incident, using only main emergency department patient care).

c. Hospital Support Phase

(Large multi-casualty incident using additional areas of the hospital as overflow zones. Also utilizing other definitive care areas of the hospital like the OTs, ICU, High Dependancy Units, pediatric/ maternal facilities).

d. Damage to Hospital Phase

(Structural assessment plans, damage control plans and evacuation plans are activated).

e. Catastrophic Disaster in City Phase
(e.g., earthquake/ serial bombings, hundreds of patients coming to hospital-inter-hospital transfer protocol plans come into force).

f. Deactivation of Disaster Alert
(Demobilisation phase).

8.10 Post-Disaster Debriefing

Debriefing is a process in which the disaster committee sits down after the disaster has been deactivated and tries to figure out how things went. It can be best described as a critical self review of the hospital's own performance during a disaster. What went right is taken cognizance of and what went wrong will be corrected and incorporated in the disaster plans.

Chapter - 9

MANAGEMENT OF CYCLONES

9.1 Cyclone vulnerability in India

A long coastline of about 7,516 km of flat coastal terrain, shallow continental shelf, high population density, geographical location, and land physiological features of its coastal areas makes India, in the North Indian Ocean (NIO) Basin, extremely vulnerable to cyclones and its associated hazards like storm tide (the combined effects of storm surge and astronomical tide), high velocity wind and heavy rains.

Though the frequency of Tropical Cyclones (TCs) in the NIO covering the Bay of Bengal and the Arabian Sea is the least in the world (7% of the global total), their impact on the east coast of India as well as the Bangladesh coast is relatively more devastating. This is evident from the fact that in the last 270 years, 21 of the 23 major cyclones (with a loss of about 10,000 lives or more) worldwide occurred over the area surrounding the Indian subcontinent (India and Bangladesh). This is primarily due to the serious storm tide effect in the area.

Thirteen coastal states and Union Territories (UTs) in the country, encompassing 84 coastal districts, are affected by tropical cyclones. Four states (Tamil Nadu, Andhra Pradesh, Orissa and West Bengal) and one UT (Puducherry) on the east coast and one state (Gujarat) on the west coast are more vulnerable to hazards associated with cyclones.

About 8% of the area in the country is prone to cyclone-related disasters. Recurring cyclones account for large number of deaths, loss of livelihood opportunities, loss of public and private property and severe damage to rail infrastructure.

9.2 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 warning dissemination system by strengthening the Last Mile Connectivity (LMC) of cyclone warnings and advisories. Railways need to obtain advance warnings from the systems developed.
- **Component B:** Cyclone risk mitigation investments. On the Railways, along 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 Zonal Railways and Divisions is essential to be able to obtain it at short notice.

9.3 Coordination by Railways regarding Cyclones Risk Management, Advance Warnings and Mitigation :-

The Zonal Railways in the high risk zone of cyclones (four states – Tamil Nadu, Andhra Pradesh, Orissa 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 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 state 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.

Chapter - 10

MANAGEMENT OF FLOODS

10.1 Vulnerability to Floods

Floods have been a recurrent phenomenon in India and cause huge losses to lives, properties, livelihood systems, infrastructure and public utilities. India's high risk and vulnerability is highlighted by the fact that 40 million hectares out of a geographical area of 3290 lakh hectares is prone to floods. On an average every year, 75 lakh hectares of land is affected, 1600 lives are lost and the damage caused to crops, houses and public utilities is Rs. 1805 crores due to floods.

Eighty percent of the precipitation takes place in the monsoon months from June to September. The rivers bring heavy sediment load from the catchments. These, coupled with inadequate carrying capacity of the rivers are responsible for causing floods, drainage congestion and erosion of river-banks. Cyclones, cyclonic circulations and cloud bursts cause flash floods and lead to huge losses. The fact that some of the rivers causing damage in India originate in neighbouring countries, adds another complex dimension to the problem.

10.2 Institutional Framework

As per the constitutional provision, Flood Management (FM) is a state subject and as such the primary responsibility for flood management lies with the states.

There is a need to be set up a central organisation to lay down policy and implement FM measures in consultation with the states and other stakeholders as floods are not confined to one state and flooding in one state leads to flooding in adjoining states. Accordingly, it has been proposed to set up River Basin Organisations to deal with the management of water resources at river basin level. It is also proposed to set up a National Flood Management Institute (NFMI) at an appropriate location in one of the flood prone states, to impart training to engineers, administrators, personnel of the police departments, Non-governmental Organisations (NGOs) and Community Based Organisations (CBOs) etc.

The MOWR alongwith other department is responsible for the technical aspects of FM besides others. The Ministries of Agriculture, Civil Aviation, Environment and Forests, Health, Space, Earth Sciences, Mines, Railways etc. also have important role in management of floods in their respective fields.

10.3 Indian Meteorological Department

The IMD established in 1875, is responsible for the National Meteorological Services and the principal government agency in all matters relating to meteorology, seismology and allied subjects. The IMD is mandated as follows :

- **To warn against severe weather phenomena like tropical cyclones, north-westerly dust storms, heavy rains and snow, cold and heat waves etc., which cause destruction of life and property.**

For the convenience of administrative and technical control, there are six Regional Meteorogical Centres (RMCs) located at Mumbai, Chennai, New Delhi, Kolkata, Nagpur and Guwahati.

10.4 Activities for Minimising Flood Risk and Losses

(a) By Central/State Governments :

These activities include identification and marking of flood prone areas on maps, preparation of close contour and flood vulnerability maps, formulating plans for expansion and modernisation of flood forecasting and warning systems, identification of priority flood protection and drainage improvement works, identification of reservoirs for review and modification of operation manuals and rule curves and undertaking special studies on problems of river erosion.

(b) Increase in Water Ways :

Examining adequacy and if required, increasing the water ways of bridges/culverts under railway embankments (and roads) by the Ministry of Shipping, Road Transport and Highways (MOSRTH), Ministry of Railways, Ministry of Defence, National Highways Authority of India, Border Road Organisation and State governments.

10.5 Action Plan for Alignment, Location, Design and Provision of Waterway on Railways Embankments :-

Roads and Railway embankments cut across the drainage lines and may lead to increase in vulnerability of the area, through which they pass and to flooding and drainage congestion, if they are not properly aligned, located and designated. In-adequate waterway in the form of vents/culverts/bridges/ causeways is another cause of increase in vulnerability to floods. Further, breaches in them may result in huge loss of life and properties. Insufficient height of embankments may result in overtopping and breaches.

The Ministry of Shipping, Road Transport and Highways (MOSRTH), MOR, MOD, NAHI, BRO, State Governments/SDMAs will ensure that national highways, state highways, district and other roads are aligned, located and designed properly with respect to height and width and provided with adequate waterway in the form of vents, culverts, bridges and causeways so as to make them flood safe and not increase the vulnerability of the area to flooding and drainage congestion.

The safety of existing roads/railway embankments against floods will also be checked by the MOSRTH, MOR, MOD, NHAI, BRO and state governments/SDMAs/DDMAs and if found inadequate, measures by way of increasing height and width and augmenting water way by constructing additional bridges/culverts/causeways or by adding more spans to existing ones, will be taken up.

10.6 Flood Forecast :-

Forecasts (stage/inflow) are issued whenever the river stage at the Flash Flood site exceeds or is likely to exceed a specified level called warning level of the site which is fixed in consultation with the concerned state government. The warning level is generally 1 m below the danger level of the site, although there is no-common format designed for issuing flood forecasts by various fields divisions, as forecasts are issued according to the users convenience. In the forecast, the current date and time of issue of forecast, present water level/inflow and anticipated water level/inflow with corresponding date and time are normally included.

10.7 Dissemination of Flood Forecasts and Warnings

On reaching a critical point, the final flood forecasts are then communicated to the user agencies such as the concerned administrative and engineering authorities of the state/central governments including railways, defence and other agencies connected with flood protection and DM by special messenger/telegram/wireless/ telephone/fax/e-mail.

10.8 The Central Water Commission's Flood Forecasting Network in India :

The CWC's FF network covers most of the flood prone inter-state river basins in the country. The CWC is presently issuing flood forecasts for 175 stations of which 147 stations are for river stage forecast and 28 for inflow forecast.

SN	Division	Section	State	K.M.	cause

10.9 Flood Prepardness :-

Based on NDMA's guidelines, a lot of data is to be collected by the Civil Engineering Directorate, Railway Board, so as to plan flood protection works and to reduce vulnerability. Board has asked RDSO to compite the Flood vulnerable areas in Formation, Cutting Bridges and Buildings etc. vide Questionnaire in Annexure after chapter 12.

10.10 Action Plan :-

The following Action Plan should be followed by the Zonal Railway :-

Flood/weather forecasting in consultation with IMD and other agencies like CWC, State Government, local bodies etc.

Development of system of collecting data using modern techniques, Monitoring of land slides, flood danger to bridges, bridge approaches causing interruption to traffic.

Identification of flood prone areas, RAT, RAW and information prone to erosion and marking them on railways system map. Monitoring of behaviour of rivers which pose danger to railway embankment.

Documentation of records of flood and breaches.

Flood Insurance of Railway properties – A pilot project to be taken by each Railway through help of suitable consultants.

Mechanism for coordination with State Government and other Central Agencies on flood control and erosion etc.

Sanction and execution of Anti Erosion works of track, formations, bridges etc.

Improvement to water ways of bridges in track formation (if necessary) including sanction and execution of works.

Development of Flood Shelters for staff and passenger at suitable locations in the areas prone to repeated floods.

Implementation of Bye-laws for buildings in flood prone areas including modifications of Works Manual.

Training on Flood Management to officials in various Railway Training Schools and institutions by devising suitable syllabus.

- Emergency response team on floods.
- Emergency equipments and relief logistics.
- Medical Preparedness Plan.

Vulnerable location in N.E. Railway

1.	LJN	Kawapur -Tulsipur in Gorakhpur - Gonda (Loop)	UP	161/89	Bank cut near Br No 141 (1x6.1m) Box due to water logging & rain.
2.	BSB	Ballia – Bansdih in Aunrihar-Chhapra	UP	61/1-5	Track settled due to heavy rain.
3.	BSB	Ballia – Bansdih in Aunrihar-Chhapra	UP	60/4-5	Track settled due to heavy rain
4.	LJN	Raibojha –Mihinpurwa in Gonda – Mailani (MG)	UP	110/4-116/0	Settlement of one approach of Br No (7x24.4+4x18.3) due to heavy water flow on the Track
5.	LJN	Parsa-Soharatgarh in Gorakhpur - Gonda (Loop)	UP	98/2-3	Due to overflow of nearby Banganga river & heavy rain, both approaches of Br.No.59 (3x6.1m)S settled.
6.	IZN	Khatima-Banbasa in Pilibhit - Tanakpur	UK	39/5-8	Settlement of bank due to water Over Flow
7.	LJN	Tikunia-Manjhrapurab in Gonda – Mailani (MG)	UP	186/5-187/3	Due to unprecedented rain, heavy water discharged from Nepal. Gates of Gopiya barrage opened resulting settlement of bank due to heavy water flow on the track
8.	LJN	Bichhia-Nishangarha in Gonda – Mailani (MG)	UP	156/2-157/3	Due to heavy water discharge from Nepal, gates of Gopiya barrage opened resulting settlement of bank due to heavy water flow on the track
9.	LJN	Mihinpurwa-Raibojha & approaches of Br. No. 55(7x24.4+4x18.3) in Gonda-Mailani (MG)	UP	110/8-117/1	Due to heavy water discharge from Nepal, gates of Gopiya barrage opened resulting settlement of bank due to heavy water flow on the track
10.	IZN	Khatima-Banbasa in Pilibhit - Tanakpur	UK	39/7-41/9	Settlement of bank due to water Over Flow
11.	LJN	Paliakalan-Bhirakheri in Gonda – Mailani section (MG)	UP	238/3-8 237/5-6	Settlement of bank due to seepage of water through bank & ballast profile.
12.	LJN	Paliakalan-Dudwa in Gonda – Mailani section (MG)	UP	231/0-233/2	Water flow over the track ballast due to flood in Suheli river.
13.	IZN	Kathgodam-Haldwani	UK	82/9-11	Due to heavy discharge from Gola barrage, water logging & rain cut occurred.
14.	IZN	Kathgodam-Haldwani	UK	87/13-16	Due to heavy discharge of water from Gola barrage, 10m bank slope washed away
15.	LJN	Paliakalan-Dudwa in Gonda – Mailani section (MG)	UP	226/1-2	Water flowing over the track.
16.	LJN	Paliakalan-Dudwa in Gonda – Mailani section (MG)	UP	229/0-1 229/9-10 230/4-5	Water flowing above cess.
17.	LJN	Paliakalan-Dudwa in Gonda – Mailani section (MG)	UP	229/0-230/5	Due to cutting of Railway bank by the outsiders.
18.	LJN	Paliakalan-Dudwa in Gonda – Mailani section (MG)	UP	226/1-2	Track settled due to heavy rain.

Chapter - 11

MANAGEMENT OF EARTHQUAKES

11.1 Earthquake Risk in India :

India's high earthquake risk and vulnerability is evident from the fact that about 59 percent of India's land area could face moderate to severe earthquakes. During the period 2006 to 2015, 10 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 our ability to prepare ourselves and effectively respond to earthquakes is inadequate. India witnessed several earthquakes like the Sikkim earthquake of 2006, the Kashmir and Gujrat earthquake of 2007, the West Bengal and Maharashtra earthquake of 2008, the Andmand Island earthquake of 2009, the Nikobar Island earthquack 2010, the Sikkim earthquake 2011, Sikkim earthquake 2013. In April and May 2015 eartquake in Nepal but effected many part of India.

11.2 Nodal Ministry :-

The Ministry of Earth Sciences (MoES), as the nodal ministry will prepare the Earthquake Management Plan covering all aspects like earthquake preparedness, mitigation, public awareness, capacity building, training, education, Research and Development (R&D), documentation earthquake response, rehabilitation and recovery.

11.3 Monitoring Seismic Activity and Safety Codes :-

The Indian Meteorological Department (IMD) will be the nodal agency for the monitoring of seismic activity. The Bureau of Indian Standards (BIS) will be the nodal agency for preparing earthquake-resistant building codes and other safety codes. AII such key stakeholders, including central ministries and departments and State Governments/SDMAs will develop detailed DM plans, recognising 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 alongwith all 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.

11.4 Structural Safety Audit and Strengthening :-

The NDMA Guidelines emphasise the need for carrying out the structural safety audit of existing lifeline structures 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 India and consequently the prioritised 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 regulations 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.

11.5 Institutionalisation Earthquake-Resistant Design and Construction :

The Railways alongwith all central ministries and departments and State Governments will facilitate the implementation and enforcement of relevant standards for seismically safe design and construction of buildings, bridges, flyovers, ports and harbours, and other lifeline and operationally important structures falling within their administrative control.

11.6 Need for Seismic Strengthening of Existing Structures :

There are approximately 12 crores buildings in the country in seismic Zones III, IV and V. A review of the vulnerable buildings on the Railways needs to be similarly done. Out of these how many are critical to Railways operational needs have to be separately identified. Most of these buildings are not earthquake-resistant and are potentially vulnerable to collapse in the event of a high intensity earthquake. As it is not practically feasible or financially viable to retrofit all the existing buildings, these Guidelines recommend the structural safety audit and retrofitting of select critical lifeline structures and high priority buildings. Such selection will be based on considerations such as the degree of risk, the potential loss of life and the estimated financial implications for each structure, especially in high-risk areas, i.e. in seismic Zones III, IV and V, where structures have to conform to IS-1893 specifications.

11.7 Preparedness by Railways :

The review of earthquake vulnerability and of structural audit of existing critical structures (operationally essential) is coordinated by CE Directorate in Railway Board. RDSO has been assigned the job of collection of data and prepare a plan for developing the specification etc for new buildings and identify existing ones which need retro-fitment. On the Zonal Railways and the Divisions the subject is to be coordinated by the PCE and Sr. DEN's.

Action to be taken by the Railways/PUs on these guidelines are briefly summarized in Annexure in a tabular form to facilitate this review. Zonal Railway, may also keep the effect of Cyclones and Landslides in mind in such vulnerable areas while reviewing preparedness on each item covered in NDMA guidelines.

A detailed study will have to be done by RDSO to work out the actual requirements and investment planning, if any, that may be needed to fulfill the end objectives. For effective handling of the information and details of a railway, each division is to be taken as a unit.

National Disaster Management Guidelines on Management of Earthquakes' alongwith National Disaster Management Guidelines on 'Management of Floods' (August 07) were sent to RDSO for co-ordinating implementation on Indian Railways, as decided by Board (ME, ML, MM, FC & CRB).

Sr. ED(Civil)/RDSO was to submit action plan of all the railways and Production Units to Railway Board by 25.01.08. This has been delayed substantially; there is a need for RDSO to prepare the Action Plan as early as possible.

ANNEXURE-I

Summary of NDMA Guidelines on Earthquakes and Floods

Railway Infrastructure **Earthquake Proneness Review**

Flood Proneness Review

Railway Track Formation (incl. station Yards, bridges/culverts, ROBs/RUBs, etc. Buildings housing signaling gears like RRI, SSI etc.Buildings in open line maintenance work centers like loco sheds, Coaching depots etc.Station buildings Control room, other important office building, etc. High-rise residential buildings, other important residential buildingsRailway hospitals New Construction Must be earthquake resistant Existing Infrastructure- Identify existing railway infrastructure falling under various seismic zones.- Review for earthquake resistant adequacy based on age, foundation and other details.- Retrofit/rebuild to make it earthquake resistant.- Training of Engineers (at various levels)- associated with design and construction of railway infrastructure.- Any other item that railway may like to add.

New Construction: Railway Station building should be located in such a fashion that they are above the levels corresponding to a 100 year frequency or the maximum observed flood levels. Similarly they should also be above the levels corresponding to a 50 year rainfall and the likely subversion due to drainage congestion.Government offices buildings should be above a level corresponding to a 25 year flood or a 10 year rainfall with stipulation that all buildings in vulnerable zones should be constructed on columns or stilts.Railway track at levels well above the likely flood levels. Existing Infrastructure:Co-ordination with flood/rain forecasting agencies to get early warning so as to introduce patrolling. Speed restriction etc. as per the provisions in Railway's SR.Inspections of Railway Affecting Works – to be streamlined and timely ensured.Review of waterways for adequacy and alignment and measures to modify, if needed.Status Note on the lessons learnt from the previous flood situations in the past 5 years.Bye-laws for buildings in flood plains.Making existing and new buildings and infrastructure capable of withstanding fury of floods.Any other item that railway may like to add.

Annexure -II (a)

Position relating to existing Buildings (NDMA Guideline on Earthquakes)

S No	Divn.	Description of Building	Location	Description of deficiency for earthquakes	Retrofitting or replacment	Board approach for retrofitting	Approx. cost(Rs.Lakhs)	Whether work would be done under GM"spower or shall be sent to Rly Bd. for sanction	Remak

Annexure -II (b)

Position relating to Bridges (NDMA Guideline on Earthquakes)

S No	Divn.	Description of Bridge	Location	Description of deficiency	Retrofitting or replacment	Board approach for retrofitting	Approx. cost(Rs. Lakhs)	Whether work would be done under GM"spower or shall be sent to Rly Bd. for sanction	Remak

CHAPTER - 12

MANAGEMENT OF LANDSLIDES AND SNOW AVALANCHES

12.1 Nodal agency of Government of India :-

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

As per the Disaster management Act, the responsibility to cope with natural disasters is essentially that of state governments and the role of the central government is a supportive one in terms of supplementing physical and financial resources.

12.2 Landslide Risk

Landslides are one of the natural hazards that affect at least 15 percent of the land area of our country –an area which exceeds 0.49 million km. Landslides of different types are frequent in geodynamically active domains in the Himalayan and Arakan-Yome belt of the North-Eastern parts of the 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 the Union Territory of Puducherry and Andaman and Nicobar Islands are affected by this hazard. The phenomenon of landslides is more pronounced during the monsoon period.

12.3 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 landslides includes :

i) Surface measurements of landslide activity.
ii) Sub-surface measurements of landslide activity.

12.4 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 National Disaster Management Authority, District Administration, Border Roads Organisation, Snow and Avalanche Studies Establishment, and academic institutions active in carrying out research in this field.

Till the Kashmir Project is fully completed the Railway infrastructure is not likely to be except at a few locations in Himachal Pradesh.

12.5 Oganisations Associated with Landslide Hazard Management

The is a need to set up a central organisation that will deal exclusively with all the fields of landslide management in a comprehensive manner has been accepted by Government of India. The central government through the Ministry of Mines will, therefore, set up a centre for landslide research, studies and management in one of the landslide prone states to ensure a wider view of landslides as a component of the

environment and bring the existing pool of expertise in earth sciences (coastal stability, seismology and meteorology included) to bear upon this new initiative.

On the Railways, RDSO has still to undertake any study to identy vulnerable areas of rail infrastructure prone to landslide hazards.

12.6 Action Plan :-

Although management of landslides requires coordinated and multi-faceted activities among many stakeholders in the total disaster management cycle, one important recommendation for follow up by Civil Engineering Dte., Railway Board is the landslide hazard zonation mapping in macro and meso scales after identification and prioritization of the areas in consultation with the Border Roads Organization, State Governments and local communities.

CHAPTER – 13

MANAGEMENT OF BIOLOGICAL DISASTERS

13.1 Causes of Biological Disasters :-

Biological disasters might be caused by epidemics, accidental release of virulent microorganism(s) or Bioterrorism (BT) with the use of biological agents such as anthrax,

smallpox, etc. The existence of infectious diseases have been known among human communities and civilisations since the dawn of history. The classical literature of nearly all civilisations record the ability of major infections to decimate populations, thwart military campaigns and unsettle nations. Social upheavals caused by epidemics have contributed in shaping history over the ages.

In recent times travelling has become easier. More and more people are travelling all over the world which exposes the whole world to epidemics. As our society is in a state of flux, novel pathogens emerge to pose challenges not only at the point of primary contact but in far removed locations. The Marburg virus illustrates this. The increased interaction between humans and animals has increased the possibilities of zoonotic diseases emerging in epidemic form.

13.2 Biological Warfare (BW) and Bio-Terrorism (BT) :-

The historical association between military action and outbreaks of infections suggest a strategic role for biological agents. The advances in bacteriology, virology and immunology in the late 19th century and early 20th century enabled nations to develop biological weapons. The Biological and Toxin Weapons Convention, however, resolved to eliminate these weapons of mass destruction. Despite considerable enthusiasm, the convention has been a non-starter.

13.3 Mitigation :-

The essential protection against natural and artificial outbreaks of disease (bio-terrorism) will include the development of mechanisms for prompt detection of incipient outbreaks, isolation of the infected persons and the people they have been in contact with and mobilisation of investigational and therapeutic countermeasures. In the case of deliberately generated outbreaks (bio-terrorism) the spectrum of possible pathogens is narrow, while natural outbreaks can have a wide range of organisms. The mechanism required however, to face both can be similar if the service providers are adequately sensitised.

13.4 Nodal Ministry and support of other Ministries :-

The response to these challenges will be coordinated by the nodal ministry-Ministry of Health and Family Welfare (MOH&FW) with inputs from the Ministry of Agriculture for agents affecting animals and crops. The support and input of other ministries like Ministry of Home Affairs, Ministry of Defence, Ministry of Railways and Ministry of Labour and Employment, who have their own medical care infrastructure with capability of casualty evacuation and treatment, have an important role to play. With a proper surveillance mechanism and response system in place, epidemics can be detected at the beginning stage of their outbreak and controlled.

13.5 Handling CBRN Disaster – Training :

For handling and to provide medical relief for all CBRN disaster which (include a Biological Disaster) and mitigation of BW and BT affected Railway staff, need to be incorporated in the DM Plan.

Training of a skeleton numbers of Medical Doctors in each Divisional Railway Hospital to manage CBRN casualties is to be planned.

CHAPTER - 14

MANAGEMENT OF CHEMICAL DISASTERS

14.1 Guidelines by 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.

14.2 Salient features of NDMA; Guidelines :

The growth of chemical industries has led to an increase in the risk of occurrence of incidents associated with hazardous chemicals (HAZCHEM). A chemical industry that incorporates the best principles of safety can largely prevent such incidents. Common causes for chemical accidents are deficiencies in safety management systems and human errors, or they may occur as a consequence of natural calamities or sabotage activities. Chemical accidents result in fire, explosion and/or toxic release. The nature of chemical agents and their concentration during exposure ultimately decides the toxicity and damaging effects on living organism in the form of symptoms and signs like irreversible pain, suffering, and death. Meteorological conditions such as wind speed, wind direction, height of inversion layer, stability class etc. also play an important role by affecting the dispersion pattern on toxic gas clouds. The Bhopal Gas tragedy of 1984 – the worst chemical disaster in history, where over 2000 people died due to the accidental release of the toxic gas Methyl Isocyanate, is still fresh in our memories. Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. A small accident occurring at the local level may be a prior warning signal for an impending disaster. Chemical disasters, though low in frequency, have the potential to cause significant immediate or long-term damage.

14.3 Genesis of National Disaster Management Guidelines on Chemical Disasters

Effective Chemical Disaster Management (CDM) is possible by the adoption of preventive and mitigation strategies as most chemical disasters are preventable in comparison to natural disasters that are difficult to predict and prevent.

The main stakeholders in the management of chemical disasters are Ministry of Environment and Forests (MoEF; the nodal ministry); Ministry of Home Affairs (MHA); Ministry of Labour and Employment (MoLE); Ministry of Agriculture (MoA); Ministry of Shipping; Road Transport and Highways (MoSRT & H); Ministry of Defence (MoD); Ministry of Chemicals and Fertilizers (MoC&F); Ministry of Petroleuum and Natural Gas (MoP &NG). Department of Atomic Energy (DAE);

In the NDMA's Guidelines comprehensive instructions for installations and storages (including isolated storages of HAZCHEM) that contain good engineering practises for safety, accident reporting, investigation and analysis cheklists and safety promotional activities as important tools for effective CDM, are provided.

In the guidelines are instructions related to chemical accidents during transportation of HAZCHEM. The areas covered include:

- Preparation of a highway DM plan.
- Modification of rules pertaining to transport emergencies.
- Specific roles and responsibilities of MAH units, transporters, drivers, authorities and aspects related to emergency communication systems and training of various stake holders.
- The need for the development of an efficient pipeline management system.

The approach to implementation of the NDMA's Guidelines are highlighted alongwith the key points for ensuring the implementation of the plans prepared by the central ministries, departments and states.

14.4 Role of Railways – Transport of Hazchem :

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 etc.) 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 and different zonal railways need to prepare themselves based on the type and extent of hazardous material being handled and transported by them.

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

1. Explosives
2. Gases, Compressed, liquefied or dissolved under pressure
3. Petroleum & other inflammable liquids
4. Inflammable solids
5. Oxidising substance
6. Poisonous (Toxic Substances)
7. Radio-active substances
8. Acids & other Corrosives.

Chapter I to VIII respectively 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 authorised 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) are 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.

14.5 Monitoring Movement of Hazchem :

Dedicated communication system is to be established for Rail Transportation to monitor movement of Toxic Chemical Agents. A mechanism is to be developed like a Geographic Information system (GIS) for continuous monitoring of such Transport Vehicles along their route. This may require to be dove-tailed with the FOIS network of the Railways, once the TMS/FOIS is extended for booking (preparation of RRs) and movement of chemical items in wagons to be included in FOIS.

14.6 Rescue Relief and Restoration Operations:

Railway's expertise in dealing with the mis-happenings 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 coordination with those agencies and

Organisations 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. 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.The contact details of agencies & organizations which have expertize in dealing with hazardous materials are given on page No.167.

14.7 Preventive Action the Rail Route of Movement of Hazchem:

Divisions located on "Hazchem Rail Transportation Highway" have to be in close touch with specialized service available with IOC/GAIL and Pvt. Chemical Factories and NGOs to be able to call upon their men and fire fighting fire extinguishers etc. at short notices.

Vulnerability on this Highway needs to be reduced by the removal of Jhuggies from close to the track (say till at least 30 m away). This is essential as in the casr of derailment of a Naptha loaded (or even POL Tank Wagon etc) train, there is a high possibility of spillage of the dangerous products and its spread over a wide area .These product arehighly prone to catch fire and even explode,resulting in fire in the Jhuggies etc.

CHAPTER - 15
MANAGEMENT OF CHEMICAL (TERRORISM) DISASTERS

15.1 Introduction :-

A terrorist attack involving chemical agents differs from a normal terrorist attack as it results in specific effects on health and can cause fatal injuries, create panic, and

affect the morale of the community. The targets of terrorists include market places, densely populated areas, public functions, important dignitaries, water and electricity supplies, restaurants/food plazas, malls, places of entertainment, busy railway stations in metros and critical and sensitive military, civil and economic institutions.

Chemical terrorism is an act of violence to achieve professed aims using chemical agents. These chemical agents include poisonous gases, liquids or solids that have a deleterious effect on the biotic and non –biotic environment. Due to the relatively easy availability of hazardous chemicals in Major Accident Hazard units, storages and during transportation, terrorists can procure chemicals or even try to sabotage the facilities or transport vehicles as it offers them an easier and often more catastrophic method of anti-national activity. The mode of dispersal used for chemical agents would range from dissemination of aerosolised material to contamination of food and water.

15.2 NDMA's Guidelines :-

The possibility of a chemical terrorism attack can be minimised by spreading general awareness and building the capacity of the community, institutions, and governmental and non-governmental organisations.

The approach followed in the NDMA's Guidelines lays emphasis on :

i) Security and surveillance measures for installations manufacturing/ using/storing chemicals.

ii) Strengthening intelligence regarding the movement of chemicals.

iii) Preparedness for counter-terrorism measures :

(a) Issues regarding the safety of chemicals and risk reduction strategies etc.

(b) Strengthening of response through rescue and emergency medical resources.

(c) Preparedness of all emergency functionaries in terms of protection, detection,

decontamination, decorporation, capacity building and infrastructure development.

(d) Community-centric mechanism for the management of chemical (terrorism) disasters.

15.3 CTD Preparedness Plan :-

Implementation of the Guidelines at the national level shall begin with the preparation of a detailed action plan (involving programmes and activities) by the nodal ministry (MHA) that shall promote coherence among different CTD management practices and strengthen mass casualty management capacities at various levels. The concerned ministriel like MoD, MoEF, Ministry of Railways (MoR), MoL&E (through Employees' State Insurance Corporation (ESIC), MoA etc., will also prepare their respective CTD preparedness plan as a part of all hazard DM Plans. The Railways has an important role in the management of mass casualties in the event of national calamities, they should also cater for developing additional capacities besides meeting their own requirements in their preparedness plan.

15.4 Preparedness for Emergency Response :

Preparedness for an emergency response at the incident site requires protection, detection, and decontamination. SOPs are required for all the emergency responders working under the overall supervision of the incident commander. SOPs will be included for field decontamination. A well-orchestrated medical response to CTD will be possible only by having a command and control function at the divisional level by the Medical Department. The CMO/CMS will be the main coordinator for the management of CTD.

15.5 Guidelines on Chemical Disasters :-

Railway's guidelines/instructions relevant to the zonal railways have been issued (Annexure III) for taking necessary action and incorporating suitable provisions in their respective DM Plans. These guidelines will add to the existing safeguards listed in the Red Tariff on handling, storage and transportation of hazardous material.

15.6 Training for the Responders :-

The Medical Department of the Railways has little or no expertise in the effects of different chemicals. This needs to gradually developed initially in a skeleton number (one or two) of Doctors and Para-medis in each Divisional Railway Hospital through training.

15.7 Medical Preparedness for CBRN :-

This is covered already in the chapter 8 under the heading "Medical Preparedness – MCE and Mobile Relief Arrangements".

CHAPTER - 16

MANAGEMENT OF NUCLEAR AND RADIOLOGICAL EMERGENCY (DISASTER)

Any radiation incident resulting in or having a potential to result in exposure and/or contamination of the workers or the public in excess of the respective permissible limits can lead to a nuclear/radiological emergency.

After due consideration of the nature and consequences of all the nature and consequences of all the possible scenarios, these radiological emergencies have been broadly classified into the following five categories :

i. An accident taking place in any nuclear facility of the nuclear fuel cycle including the nuclear reactor, or in a facility using radioactive sources, leading to a large-scale release of radioactivity in the environment.
ii. A 'criticality' accident in a nuclear fuel cycle facility where an uncontrolled nuclear chain reaction takes place inadvertently, leading to bursts of neutrons and gamma radiations.
iii. An accident during the transportation of radioactive material.
iv. The malevolent use of radioactive material as a Radiological Dispersal Device by terrorists for dispersing radioactive material in the environment.
v. A large-scale nuclear disaster, resulting from a nuclear weapon attack (as had happened at Hiroshima and Nagasaki) which would lead to mass casualties and destruction of large areas and property.

Normally, nuclear or radiological emergencies (referred to in points (i) to (iv) above)are within the coping capability of the plant/facility authorities. A nuclear emergency that can arise in nuclear fuel cycle facilities, including nuclear reactors, and the radiological emergency due to malevolent acts of using Radiological Dispersal Devices are the two scenarios that are of major concern. The impact of a nuclear disaster (scenario at (v)) will be well beyond the coping capability of the local authorities and it calls for handling at the national level.

As regards the vulnerability of various nuclear fuel cycle facilities to terrorists attacks, these facilities have elaborate physical protection arrangements in place to ensure their security. The structural design of these facilities ensures that even in the event of a physical attack, the structural barriers prevent the release of any radioactivity outside the plant area itself and hence the public are not likely to be exposed to radiation.

While their radioactive strength is in itself a deterrent to pilferage, the radioactive sources can still be stolen and used in a Radiological Dispersal Device or Improvised Nuclear Device. Essentially, a Radiological Dispersal Device is a conventional explosive devise in which the radioactive material has been so added that, on its being exploded, there would be dispersal of radioactivity in the environment.

A Radiological Dispersal Device is not a Weapon of Mass Destruction. Normally, the use of a Radiological Dispersal Device by itself would not result in fatalities due to radiation. The fatalities, if any, would primarily be due to the explosion. However, it may contaminate a reasonably large area, besides its main potential of causing panic and disruption.

There are well-established international treaties for the control of fissile materials, because of which the possibility of fissile material falling into the hands of terrorists is extremely low. However, if these treaties are violated through state-sponsored activities, access to fissile materials by terrorist group cannot be ruled out.

Accidents during the transportation of radioactive materials are of low probability due to the special design features of the containers in which they are transported and

special safety and security measures (to take care of all possible threats/eventualities, including the threat from misguided elements) which are laid down to be followed during actual transportation.

A network of 18 Emergency Response Centres has presently been established by the Bhabha Atomic Research Centre to cope with radiological emergencies in the public domain, like transport accidents, handling of orphan sources, explosion of Radiological Dispersal Devices etc. The task of these Emergency Response Centres is to monitor and detect radiation sources, train the stakeholders, maintain adequate inventory of monitoring instruments and protective gear, and provide technical advice to first responders and local authorities.

CHAPTER - 17

DISASTER COMMUNICATION SYSTEM

17.1 Communication on Railways for Disaster Management

A comprehensive Communication System on the Railways to encompass all requirements of the Railways Disaster Management is required to be set up. This will be also inter-linked with the communication system with outside agencies of the concerned Central and State Governments, IMD etc. Preparatory work to be done for quick installation of communication system (satellite system) between Railway control set up for flood and affected locations locations/station. This can even be on make shift raft, boat etc. Similar arrangements can also be made in earthquake affected areas. There should be a provision for Telecommunication with Relief Camps as and when and where set up.

17.2 Communication between stake holders

Under the Head of the item of Infrastructural Development (Item 3.3.2) under the Sub-Head "Networking and Communication" it is mentioned NDMA's Guidelines in item (iii) and in (iii) (c) page 30 that "Effective Communication and Networking (Human and Functional) between various stake-holders and sensitive organizations is currently inadequate and needs to be established with the Security Agencies (CISF, Police etc.) manning sensitive locations like Railway stations."

In item iii (e) page 30, it is laid down that dedicated communication system is to be established for Rail Transportation to monitor movement of Toxic Chemical Agents. A mechanism is to be developed like a Geographic Information system (GIS) for continuous monitoring of such Transport Vehicles along their route. This may require to be dove-tailed with the FOIS network of the Railways, once the TMS/FOIS is extended for booking (preparation of RRs) and movement of chemical items in wagons to be included in FOIS.

17.3 Back up Communication on Railways :

To handle any disaster by the Railways and to utilize its resources efficiently Communication is an essential requirement. Where required, back up (alternatives) should be adequately available.

In chapter 2 of the DM Plan of the Railways (in item 2.2) one of the strengths of the Railways to handle a disaster is its own communication network. In handling a crises or a disaster, reliability of communication has to be cent per cent.

At the Divisional level, the control rooms have to continue with communication with the stations, the telephone exchange have to function and the OFC and Quad cable network has to work.

Where there is no back up of the Railways owned OFC network, an arrangement of sharing with Government/Non Government organization and other service providers has to be planned in advance. Or else, the alternative of satellite communication be resorted to. However, the speed of reconnecting a failed communication by which ever means is of essence.

CHAPTER - 18

DISASTER INFORMATION FLOWS AND ALERTS OF DISASTER

18.1 Standard Operating Procedures (SOPs) :

Standard Operating Procedures (SOPs) hae been laid down for flow of Information and Alerts as per directives issued by the Government (MHA).

The Ministry of Home Affairs (MHA) is the nodal Ministry for disaster response management in case of natural and man-made disasters. MHA, as the nodal Ministry is responsible for coordinating response and relief efforts with various Ministries/Departments of the Government of India, State Governments and District Authorities.

Integrated Operation Centre (IOC) has been set up in the Ministry of Home Affairs to handle disaster situations on a 24X7 basis. IOC is responsible for initiating incident alert messages when a disaster is likely to occur or when it has actually taken place.

i) A Standard Operating Procedure has been prepared for alerts of events of different types and identifies the situations when alerts are to be sent by the IOC.

18.2 Categorization of Alerts :

Specific hazards have different categories of alerts. Accordingly, a uniform system has been devised by categorizing each type of alert in stages – **Yellow, Orange and Red.**

18.3 Action Plan for Communication of Alert Messages :

Whenever a crisis is about to be faced the 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).

(a) AVALANCHES (Defence Research & Development Organisation)

Category	Description	Stage
Low	Generally favourable condition. Triggering is generally possible only with high additional loads and on very few extreme slopes. Onlysluffs possible and reach valley in small sizes. Valley movement is safe. Movement on slopes with care.	Yellow

Medium	Partly un-favourable 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 possible from all avalanche prone slopes even with low additional loads and reach the valley in large size. Suspend all movements. Airborne avalanches likely.	Orange
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**
yellow stage		No
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. * The warning may be withdrawn after a better assessment of the level of rise in water level.	Red

(c) LANDSLIDES(Geological Survey of India)

Category	**Description**	**Stage**
IV	Landslides of small dimensions that occur away from habitations and do not affect either humans or their possessions. These may occur near infrastructural installations, agricultural and forestlands and may not affect them in a significant manner. These slides may include small incidents that block communication routes for short periods or do not 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 hydroelectric and irrigation projects. The landslides that enter large water bodies like reservoirs of hydroelectric projects and could damage some of components of these projects.	Orange
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 blockade of courses of relatively smaller natural drainages. If the blockade is of relatively smaller dimensions its impact would be of a 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	Red

some times resulting in loss of human life. Landslides which result in blockade of courses of relatively large natural drainages. If the blockade is fairly large it could lead to formation of a 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 on large scale.

(d) CYCLONE (India Meteorological Department)

Category	**Description**	**Stage**
Cyclone Alert	Issued 48 hrs. before the commencement of bad weather when a system is located about 500 km 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 plans 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 & 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 km - 500 km away from the coast. Disaster Management Machinery is expected to be geared up fully during this phase.	Orange
Post handfall 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 impeding 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 are required to be forwarded to senior officials of the PMO.	Red

(e) EARTHQUAKE (India Meteorological Department)

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 (HFL)	Red

(g) RAILWAYS (Ministry of Railways)

Category	**Description**	**Stage**
Minor	50 or less casualties (inclusive of death and injuries)	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 & Forests)

Category	**Description**	**Stage**
Ordinary Fire	Localised fires which can be controlled by the concerned territorial Conservator of Forests.	Yellow
Medium Fire	Where large forest area is under fire, which can be controlled by the State Government and no Central intervention is sought by the State Government.	Orange
Major Fire	Large fire, which may result in substantial loss of human lives, massive environmental degradation or loss of wildlife.	Red

18.4 Action on Division/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 :-

- Mobilisation 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 disaster control room
- Coordination amongst various stake holders through advance warnings
- Communication system to be ensured and back ups 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 mobilized. It takes 2-3 days for the deployment of the TA unit after issue of their mobilization order; hence advance warning is of essence.

18.5 Monitoring/Reporting of Effects of Disaster :

The Safety Dte. 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 Administrator or even by the GM/AGM of the Zonal Railway, 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 on the zonal Railways.

18.6 Standard Operating Procedure (SOP) on Railways :

National Disasters :-

The Civil Engineering Department at the field level and on the Divisions 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/crises/calamity expected the information would be passed on to the Divisional officers through the Emergency Control which will act as the ICS. Where train operations have to be suspended or regulated the operating departments would be 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 Railway in the Print and Electronic Media.

The DRMs on the divisions shall ensure coordination amongst the departments for ensuring running of train services (including relief special trains) 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 the Headquarter of the Zonal Railways (i.e. by involving the General Manager). Coordination with the IOC of MHA and NDMA/NDRF would be through the Emergency Control of each zonal Headquarter.

Man-made Disasters :-
Different forms of terrorism fall under the ambit of these disasters. A major role has to played by the Security Department of the Railways who will coordinate with the State Governments and when required the Para-military 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 organizing regulation of train services by the operating department at the divisional, zonal level and also in the Railway Board.

CHAPTER - 19

CRISIS MANAGEMENT PLAN

19.1 Difference between a Crisis and Disaster :-

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 bigger occurrence of an event which would cause large scale devastation, damage to property and loss of human life etc.

While a Crisis may or may not form into a Disaster, the opposite is not normally true.

19.2 Crisis - Types :-

There can be broadly 4 types of crisis situation which the Ministry of Railways may be confronted with:-

(a) National level crisis developed in the Railways and is specific to railways, which is to be managed with the help and assistance of other Ministries. All India Railway Strike is only such crisis identified in the CMP 2007 for which Ministry of Railways is the nodal ministry.

(b) National level crisis affects the country including Railways and different ministries/departments have to help and assist each other based on their strengths. Cyclone, Earthquake etc. can be such crisis where railways have to assist by running special trains. Ministry of Home Affairs has to assist railways under security related crisis situations like sabotage, bomb blasts, etc.

(c) Crisis situation which is not a national level crisis affects railway system, which is to be managed with the help and assistance of other Ministries/departments. Chemical explosion in train, fire in train, train falling in river, etc may be such situations.

(d) Crisis situation which is not a national level crisis affects railway system, which can be managed with the help of internal resources from the railways only.

19.3 National Level Crisis :-

The Crisis Management Plan deals with National level crisis situations as under:

(i) **All India Railway Strike** – Ministry of Railways is the nodal ministry

(ii) Terrorism/Security related Crisis – Ministry of Home Affairs is the nodal ministry but Railways have to maintain liaison and flow of information.

(iii) Natural Factor(s) related Crisis 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.

(iv) Crisis where railways have to help other ministries by way of rail transport. Ministries concerned will make their own Crisis Management Plans bringing out the assistance that the Railways will be required to provide to them.

19.4 Drill for handling Crises :-

This Crisis Management Plan (CMP) is intended to deal with the afore-mentioned 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.

Chapter - 20

MANAGEMENT OF RAIL DISASTER IN TUNNELS/ DEEP CUTTINGS OR IN A WATER BODY

20.1 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 the Indian Railways which would be mobilized for this job.

20.2 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 rooms in case of a mishap.

In case a train stalls in long tunnel due to derailment/fire or any unusual condition automatically alarm will be sounded in the control room to alert the Ventilation Operator controller or if Guard/Driver 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.

20.3 handling Rail Disasters in a Lake, River, Sea etc. :

The Railways neither has the equipment (cranes operated from barges) nor trained manpower to extricate bodies from a train or coaches fallen down from a bridge on to a water body, viz lake, river or sea etc.

20.4 Assistance of NDRF and State Governments :

The Zonal Railway has to contact the respective NDRF Battalion for assistance; or it trained manpower alongwith equipment is available then even the resources of the State Government can be made use of.

CHAPTER-21

CROWD MANAGEMENT

20.1 Guidelines by NDMA

National Disaster Management Authority (NDMA) has issued a guide for administrators and organizers of events and venues for managing crowds in 2014. The scope of the guidelines involves study of past crowd disasters, framework for administrators to plan and manage events better, to provide practical guidelines to venue managers and event organizers etc.

21.2 Salient features of NDMA guidelines

Important aspects of planning for events/places of mass gathering includes understanding the visitors, various stake holders and their needs, crowd management strategies, risk analysis and preparedness, information management and dissemination, safety and security measures, facilities and emergency planning, transportation and traffic management. One of the important points to be kept in mind is the demand and supply gaps. Depending on the type of event, venue and type of crowd expected proper signage have to be planned. Specific focus should be on fire, electrical and structural safety. NDMA has suggested the following guidelines on Incidence Response System.

(i) Systematic and complete planning process.

(ii) Clear cut chain of command.

(iii) System of accountability for the incident response team members.

(iv) Well thought out pre-designed roles for each member of the response team.

(v) Effective resource management.

(vi) System for effectively integrating agencies into the planning and command structure without infringing on the independence of the concerned agencies;

(vii) Integration of community resources in the response effect and

(viii) Proper and coordinated communications set up.

21.3 Crowd control and management.

For effectiveness in this, RPF, GRP and District Police have to act in a synchronized manner in consultation with magisterial authorities. Chapter 10 (Maintenance of Public Order and Tranquility) of the Criminal Procedure Code (Cr.P.C.) Part-A deals with 'Unlawful Assemblies". Legal procedures are outlined in Sections 129 to 132 of the Cr.P.C. 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.

Railway should prescribe preventive protocols, when laid down footfalls defined separately for important stations become extraordinarily high, as during Melas or other exceptional situations. It may not be out of place to ban all commercial vending and parcel handling on such occasions, supplement exists if possible, and bring more area under illumination.

It is important to press upon the District Magistrate (Dy. Commissioner) or the Civil Police (Senior Superintendent of Police) 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 a one to two hour time slots. Unless this information is given, it would not be possible for Railways to plan 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 their 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 hourly slots) the Railway would be unable to evacuate.

21.4 Role of responsibility of Zonal Railways/Divisions

Depending upon the past experience Zonal Railways/divisions should identify events of mass gathering over their system. The events can be of periodic in nature or one time events where mass gathering of passengers is expected in the station which is beyond the normal capacity that can be handled at that station.

Zonal Railway/Division should have a close coordination with the organizers and law enforcement agencies to understand crowd arrival and departure, their numbers for each such event. Railway administration should identify the threats, assess the risk and plan accordingly. Based on the past experience a coordinating officer should be nominated for better planning and execution crowd management at the station. He should be designated as incident commander and shall be overall in charge of that particular station. He shall be assisted by staff drawn from the respective departments to discharge his/her functioning.

21.5 Crowd control and Management of rush at Railway Stations:

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 security personnel Railway Protection Force, Civil Police and GRP with well defined areas of responsibilities.

The car and other vehicle parking facility at a station may be discontinued; sale of Platform Tickets can also be 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 liaise with the RPF/GRP 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 destination to the operating departments control room.

DISASTER MANAGEMENT PLAN

PART II

CHAPTER – 1

DISASTERS

1.1 WHAT IS A DISASTER :

1.1.1 Disaster is an unusual occurrence characterized by sudden calamitous event, having great material damage, loss and distress. It is an event, which threatens a society or a relatively self sufficient sub division of a society with major unwanted consequences.

1.1.2 Disaster is an unusual of a magnitude in terms of its severity or scale of casualties that may require active involvement of multiple agencies of the Central Government (Ministry of Railways & other Ministries) and State Government(s).

1.1.3 Disaster in the railway context " 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 traffi, necessitating large scale help from other Government/Non-government and Private Organisations."

1.1.4. In case of a serious accident the Administration would take a conscious decision whether the situation is to be classified as a Disaster or not.

1.1.5 *GM, AGM, or CSO is the authorized officer to declare an untoward incident as a Railway Disaster.* Such declaration will be issued to all concerned with the approval of General Manager. As soon as the accident is declared as a Disaster, the concerned officers will be apprised of the same by the different functionaries in Central Control as detailed in para B (iv) of Chapter 3 and all instructions as contained in this Disaster Management Plan would automatically come into force, and officers and staff of all departments would take action as laid down in this book, in addition to the provisions of accident Manual and other Rule Books/Manuals in use.

1.2. DISASTER INVOLVING TRAIN SERVICES :

The disaster may be due to the following factors:

Human/Equipment failures leading to:· Collisions, Derailments, Level crossing accidents at Manned/Unmanned Level Crossings, Fire on Train.

Natural Calamities suchas:·Landslide,Earth quakes,Floods,Storm/Cyclones/Tornadoes.

Sabotage: Setting fire to train/railway installations and railway property, Bomb blasts, Placing of obstructions on track to cause disruption to traffic, Tampering with railway fittings to cause accidents.

Chemical: Disaster due to Chemical reaction.

CHAPTER – 2

PREPAREDNESS AND RESOURCES

Railways are generally self-reliant in carrying out rescue and relief operations. However mobilizing non-railway resources in cases of major accidents, involving heavy casualties, occurring in remote areas, difficult terrain and/or under adverse weather conditions may be necessary.

Disaster Management mechanism in Railways is to be maintained at a high level of preparedness and efficiency. All resources (men and material including medical personnel, transport, volunteers, police and fire services) belonging to railway and non-railway both, should be ensured for availability and preparedness. Details of these resources, their location, contact numbers etc shall be available in Data Bank maintained in Divisional Disaster Management Plan of Lucknow, Izzatnagar and Varanasi.

Resources available in case of a major accident may be grouped into 4 different units, depending on the time frame within which these can be made available after an accident. These are as follows:

Resource Unit I - Railway and non-railway resources available on the train, and at nearby surroundings.

Resource Unit II - Railway resources available at ARMV/ART depots and elsewhere within the division.

Resource Unit III- Railway resources available at ARMV/ART depots and elsewhere on adjoining Zones and Divisions.

Resource Unit IV - Non-railway resources available within or outside the division.

2.1. Resource Unit – I:

2.1.1 On trains carrying Passengers following resources are available :

a. First Aid Box available with the Guard.
b. First Aid Box available with Train Superintendent and in the Pantry Car.
c. Portable Telephones, Fire Extinguishers in Brake Van.
d. Portable Telephones in Locomotives.
e. Walkie-Talkie with Guard and Driver.
f. Cell Phones/Mobile communications with Passengers.
g. Information collected by Train Superintendent/Travelling Ticket Examiner about
   (a) Medical Practitioners and
   (b) Railway Officers travelling on the train.
h. Railway Staff travelling on the train – either on duty or on leave.
i. Passengers who volunteer their help.

2.1.2 Non – railway resources available nearby :

a. Volunteers from nearby villages and towns.
b. Transport facilities available at site or passing nearby.
c. Tractors with trolleys from nearby villages for
   (i) transport and
   (ii) lighting up the accident site-Station staff and local railway administration should requisition help from non-railway sources for medical assistance, additional manpower, rescue equipment, lighting arrangements, transport and fire fighting tools etc. before railways own rescue team arrives.

2.1.3 Railway resources available nearby:

a. Engineering, S&T, OHE and other departmental gangs/staff.

b. Other resources such as medical facilities, communication facilities.
c. Families of gang men and other staff residing in vicinity.

2.1.4 At adjoining Stations:

a. Staff available at adjoining or nearby stations.
b. Railway and non – railway resources as given in respective Divisional DM Plans.

2.2 Resource Unit – II:

a. ARMVs, ARTs with 140T crane are stabled at nominated stations
The locations of these resources are given in Chapter –4.
b. Railway medical and departmental resources.

2.3. Resource Unit – III:

a. Location of AMRVs, ARTs with 140T crane based on adjoining Zones/Divisions are given in Chapter – 4.
b. Section wise chart of which ARMVs/ARTs to be requisitioned from adjoining Zones Divisions is given in Chapter – 4.
c. Resources of men and material available on adjoining Zones/Divisions are given in their data bank and included in the Zonal/Divisional DM Plans of respective Zones/Divisions.

Copies of DM Plans of adjoining divisions should be available with the divisional control offices.

2.4. Resource Unit – IV:

a. Non-railway resources available within the division - as and included in the Divisional DM Plan.
b. Non - railway resources available outside the division - as and included in the Divisional DM Plans of adjoining Zones/Divisions.
c. Air support

2.5 Authority to order movement of ARMV & ART to site:

(a) On receipt of information about serious accident involving casualties, ARMVs and ARTs shall be ordered immediately.
(b) This decision would be taken by the Dy. Chief Controller (Coaching) on duty and nobody's authorization would be required for ordering the same. In this regard provisions available in Para 6.04 (a) of Accident Manual shall be considered adequate.
(c) After sounding of siren the ARMV and ART should be run out within the stipulated target time.

CHAPTER – 3

DISASTER RESPONSE – OFFICERS AT DIVISION & HQ's

3.1. Immediate action by Divisional Control Office:

3.1.1. Intimation of Accident – Divisional Officers:

(i) In the Divisional Control Office, information regarding an disaster is generally received by the Section Controller.

(ii) In most cases, the First Information Report also intimates the approximate number of coaches involved and a rough estimate of the likely number of casualties (such as 'heavy casualties expected').

(iii) Accidents involving a passenger carrying train where the first information says that heavy casualties (around 75) are expected, should prima-facie be treated as a Disaster.

(iv) The moment information regarding an accident involving a passenger carrying train is received in the divisional control office; the accident bell in the control room should be sounded for alerting all on-duty functionaries.

(v) After all on-duty functionaries gather around the section control board they will be briefly informed about the accident.

(vi) Each functionary will thereafter resume his position and take steps to set in motion activities required of him.

(vii) Dy. Chief Controller (Coaching) will first inform Hospital Casualty. Thereafter he will inform officers and supervisors as given below.

(viii) Each departmental functionary will inform divisional officers and supervisors of his department about the accident as detailed below.

Functionary	Officers and Supervisors
Dy.Chief Controller(Coaching)	Operating & Safety, Hospital Casualty, DRM, ADRM, Medical
Electrical Control	Electrical
C&W Controller	Mechanical
Engineering Control	Engineering, Personnel, Account
Test Room/S&T Control	S&T, Stores
Commercial Control	Commercial, Public Relations
Security Control	RPF

(ix) For this purpose, all functionaries working in the divisional control office will have a ready list of telephone numbers (Railway, BSNL and Mobile) of all officers and supervisors of their departments.

(x) After Dy. Chief Controller (Coaching) has informed Hospital Casualty, DRM, ADRM and Medical Doctors, he will then inform Dy. Chief Controller (Coaching) in Hdqrts. Central Control regarding the accident.

3.1.2 Intimation of Accident – Railway Doctors:

Dy. Chief Controller (Coaching) will inform the Hospital Emergency of Railway Hospital regarding details of the accident. Railway doctor on emergency duty shall undertake the following:

(i) Note down time of receiving message.

(ii) Inform CSS, CMS, MD, MS other Doctors & para medical staff and instruct them to reach the ARMV immediately.

(iii) Collect necessary Medical team in the hospital.

(iv) Inform CMD about movement of AMRV.

(v) Alert blood donors, St.John's Ambulance Brigade.

(vi) Bare minimum medical team should remain in the hospital; rest of the doctors should be rushed to the accident site by ARME first and then by other fastest mode of transport.

(vii) Arrange to move Emergency boxes from ARME Scale – II locations to the accident site.

3.1.3 Informing Non – Railway Officials:

(i) DM, SP and CMS of the district within which the accident site falls should be informed regarding the accident by the Chief controller for immediate assistance.

(ii) DRM and CSO can seek assistant from NDRF as per situation demand.

(iii) ADRM will inform the following regarding the accident :

- IG/GRP,
- ADG/GRP,
- Divisional Commissioner,
- Home Secretary.

(iv) In case POL rake is involved, then IOC/BPC/HPC officials should also be informed.

(v) In case Mail bags of RMS are involved, then Postal officials should also be informed.

(vi) Telephone numbers of all DMs, SPs, CMSs an Divisional Commissioners are available in Divisional DM Plans.

(vii) Telephone numbers of IOC, BPC and HPC officials are also available in the Divisional DM Plans.

(viii) Telephone numbers of ADG/GRP, IG/GRP, Home Secretary etc. of UP, Uttaranchal and Bihar are given in Annexures.

3.1.4 Divisional Officers required to go to site:

(i) All divisional officers required to go to the accident site should proceed by the ARMV. They should not proceed by road.

(ii) Road vehicles should be sent to accident site separately. Maximum number of road vehicles should be sent to accident site from Divisional Hdqrts.

(iii) Target time for turning out of the medical van:-

In case of double exist sidding-15 minutes.
In case of single exist sidding - 20 minutes.
This time is reckoned from the time of odering of the time of despatch.

(iv) DRM will proceed to the accident site. ADRM shall stay back at divisional hdqrts for co-ordination work.

(v) All Branch Officers except Sr.DOM should proceed to the accident site. For this purpose, officers heading different branches within the same department are referred to as Branch Officers.

(vi) The second senior most officer of each branch should stay back at divisional hdqrts.

(vii) Of the remaining officers from each branch, a majority of both Senior and junior scale officers should also proceed to the accident site.

(viii) Once it has become clear that the accident is a Disaster, then the 80/20 rule should be followed :

(a) 80% of all officers should go to the accident site, and only 20% should stay back at hdqrts.

(b) Similarly, 80% of all supervisory staff should go to the accident site, and only 20% should stay back at hdqrts.

(ix) The complement of officers available in each department varies from division to division. Hence, Divisional DM Plans should specifically spell out, department wise, designations of officers who will be required to go to site, and those who will be required to stay back in hdqrts.

(x) Divisional DM plans should also spell out the same thing for Supervisors of each department.

(xi) Arrangements of Road Vehicles to proceed to accident site, indicating alternative vehicles as well, shall be indicated in Divisional DM Plans.

(xii) Arrangements of vehicle drivers including spare drivers shall also be notified.

3.1.5 Supervisors required to go to Accident Site:

(i) At the divisional level 80% of all supervisors available in divisional hdqrts. should proceed to the accident site.

(ii) All other supervisors available in the field at other stations should also proceed to the accident site.

(iii) Divisional Control Office should issue a recorded control message from DRM to all Supervisors for proceeding to the accident site immediately by fastest possible means.

3.1.6 Setting up Emergency Cells in Divisions:

(i) Divisional Emergency Cell shall be opened immediately after receipt of information of the accident at Divisional Control Office.

(ii) This unit will exercise control, co-ordinate and arrange supplementary assistance to the accident site.

(iii) It shall function in a separate cubicle at Divisional Control Office provided with centralized communication networks, hot line to the site and hdqrts.

(iv) Sr. DOM will be over all in charge of the Divisional Emergency Cell and will function as the Divisional Emergency Officer for the purpose of managing relief and restoration operations from divisional level.

(v) In case Sr. DOM is not available, DOM/AOM (Movement) will be the Divisional Emergency Officer.

(vi) In case both officers are not available, any other officer nominated by DRM will take over charge.

(vii) Requirements of all departments for movement of men and materials to the accident site shall be conveyed to the Divisional Emergency Officer, who shall arrange their movement.

(viii) Timings of 2nd and 3rd special trains to be moved from each end to the accident site, carrying backup logistic support will be conveyed to all concerned beforehand.

(ix) Divisional Emergency Cell will maintain:

- Telephone and FAX numbers of the accident site. These should be maintained functionary wise for each functionary available in the UCC.
- Similarly telephone and FAX nos. of functionaries available in CAC should also be available with the divisional emergency cell.
- Telephone and FAX numbers of Helpline Enquiry Booths that would have been set up at various stations on the division.
- E-Mail addresses of UCC, CAC, Helpline Enquiry Booths and Hqdrts. Emergency Cell.
- Names and phone numbers of hospitals where injured have been admitted/shifted, along with number of patients.

(x) Divisional Emergency Cell will collect updated information regarding all aspects of the accident and pass on the same either telephonically or by E-Mail to :

- All Helpline Enquiry Booths within the division.
- Hdqrts. Emergency Cell.

(xi) Divisional Emergency Officer on duty shall chronologically record all information and instructions received or given in a logbook.

(xii) In addition to the Division where accident has taken place similar Emergency Cells will be opened in other Divisional Control Offices of NER that are involved in restoration and relief operations. Chief Emergency Officer will decide divisions where Emergency Cells are to be opened.

(xiii) Helpline Enquiry Booths outside the accident affected division, but within NER jurisdiction should keep in touch with Divisional Emergency Cell of their respective division.

(xiv) If necessary, similar Emergency cells will be opened at other major terminals as decided by Chief Emergency Officer.

(xv) After relief, rescue and restoration work is completed, winding up of Divisional Emergency Cells shall be decided by DRM.

3.1.7 Duties of Additional Divisional Railway Manager:

(i) Undertake making of announcements over local TV channel and Cable network for all supervisory staff to rush to the accident site.

(ii) Ensure that functionaries of different departments in Divisional Emergency Cell carry out duties assigned to them as per Divisional DM Plan.

(iii) Monitor movement of assistance from other divisions/zones.

(iv) Co-ordinate with State Govt.

(v) Co-ordinate with Defence and Para Military authorities.

(vi) Monitor various important media channels to keep track of media reporting. Suitable corrections/clarifications may also be issued, if required.

3.2 Immediate Action by Hdqrts. Central Control Office:

(i) In Hdqrts. Central Control Office also, the accident bell in control room should be sounded for alerting all on-duty functionaries.

(ii) After they gather around the Dy. Chief Controller (Coaching) they will be briefly informed about the accident.

(iii) Each functionary will thereafter resume his position and take steps to set in motion activities required of him.

(iv) Each departmental functionary will inform Hdqrts. officers of departments about the accident as detailed below :

Dy.Chief Controller(Coaching)	Operating & Safety, GM, Medical, S&T
Power Controller	Electrical, Stores
C&W Control	Mechanical
Engineering Control	Engineering, Personnel, Accounts
Commercial Control	Commercial, Public Relations, RPF

(v) For this purpose, all functionaries working in the Central control office will have a ready list of telephone numbers (Railway, BSNL and Mobile) of all officers and supervisors of their departments.

(vi) After Dy. Chief Controller (Coaching) has informed GM and Medical Doctors, he will thereafter inform Safety Directorate's Emergency Cell in Railway Board, if nominated officer of safety department is not their till then.

(vii) GM will inform CRB regarding the above accident.

(viii) PHODs will inform their respective Board Members. In case PHOD is not available in Hdqrts, then the next senior most officer of that department will inform his Board Member.

(ix) PCSO/ ATM/Safety or nominated officer of safety department will inform GM and CRS.

(x) Dy. Chief Controller (Chg.) will thereafter inform Lucknow Division control office regarding running out of 1st Special train to the accident site carrying GM and the Hdqrts. officers.

(xi) Functionaries of different departments will also inform their respective departmental officers regarding timing of 1st Special train carrying GM and other hdqrts. officers to the accident site.

(xii) In case the accident site is far off and going by air would be faster, then either helicopters or special Air Force planes may be organized from the IAF Base at Gorakhpur, by Secy. to GM.

3.2.1 Hdqrts. Officers required to go to site:

(i) All hdqrts officers required to go to the accident site should proceed by the 1st special train which will be carrying GM and other officers from Hdqrts.

(ii) This special train shall be arranged by Lucknow Divisional Control Office, in consultation with Hdqrts Central Control. Scheduled departure time will be informed to Hdqrts. officers by their departmental functionaries in Hdqrts. Central Control.

(iii) GM will proceed to the accident site. COM shall stay back at zonal hdqrts for co-ordination work.

(iv) Department wise, designations of officers who are required to go to site, and those who will be required to stay back in hdqrts is given below :

Department	Site	Head Quarter
Medical	PCMD	Dy.CMD/MS*
Commercial	PCCM	CCM(PSM)*
Mechanical	PCME, CRSE	CWE*, 1 JA Grade Officer
Civil	PCE, CTE, CBE, 2 JA Grade Officer	CPDE*, 2 JA Grade Officer
Electrical	PCEE, CEE/Hq.	CESE*, 1 JA Grade Officer
S&T	PCSTE, CCE, Dy.CSTE(Tele)	CSE*, 1 JA Grade Officer
Operating	Officers to be nominated by COM	COM, CFTM,STM(Chg.)*
Safety	PCSO, Dy.CSO/Mech., Dy. CSO/Engg.	STM/Safety or ASO/Signal nominated officers for co-ordination with Safety Directorate of Rly.Board
Security	CSC, Dy.CSC	Staff Officer to CSC*
Personnel	PCPO	CPO(Admn.)*
Accounts	FA&CAO, Dy.CAO(Trf.)	FA&CAO(F&B)*
Stores	PCOS, Dy.CMM(G)	CMM/G*

* These Officers will immediately report to Chief Emergency Officer in the Headquarters for departmental coordination.

(v) PHODs should issue local instructions based on the above regarding supervisors who will be required to go to the accident site.

(vi) Only 3 supervisors of each department should stay back in hdqrts. All others should go to the accident site.

3.2.2 Setting up Emergency Cell in Hdqrts:

(i) Hdqrts. Emergency Cell shall be opened immediately after receipt of information of the accident at Hdqrts. Office.

(ii) This unit will exercise control, co-ordinate and arrange supplementary assistance to the accident site.

(iii) It shall function from a separate room in NER Hdqrts. office provided with centralized communication network, hot line to UCC and divisional emergency cell.

(iv) PCOM's room in NER hdqrts. office should be converted into Hdqrts. Emergency Cell for the duration of the disaster.

(v) CPTM will be over all in charge of the Hdqrts. Emergency Cell and will function as Chief Emergency Officer for the purpose of managing relief and restoration operations from Hdqrts. level.

(vi) In case CPTM is not available, CFTM will be Chief Emergency Officer.

(vii) In case both officers are not available, any other officer nominated by COM will take over charge.

(viii) Requirements of all departments for movement of men and materials to the accident site from adjoining zones and divisions shall be conveyed to the Chief Emergency Officer, who shall arrange their movement.

(ix) Hdqrts. Emergency Cell will maintain :

- Telephone and FAX numbers of the accident site. These should be maintained functionary wise for each functionary available in the UCC.

- Similarly telephone and FAX numbers of functionaries available in CAC should also be available with the divisional emergency cell.
- Telephone and FAX numbers of Helpline Enquiry Booths that would have been set up at various stations on adjoining zones.
- E-Mail addresses of UCC, CAC, help line booths and divisional emergency cell set up on other divisions of NER.
- E-Mail addresses of emergency cells opened on train originating/terminating divisions and zones and safety directorate emergency cell in railway board.
- Names and phone numbers of hospitals where injured have been admitted/shifted along with number of patients.

(x) Hdqrts. Emergency Cell will collect updated information regarding all aspects of the accident and pass on the same telephonically:

- Emergency Cells opened on other divisions of NER,
- Emergency Cells opened on originating and terminating Zonal railways.
- Safety Directorate's Emergency Cell in Railway Board.

(xi) Hdqrts. Emergency Cell will monitor movement of ARMVs/ARTs etc. coming from adjoining Zones/divisions.

(xii) Assistance from Defence, Para military establishments, State Govts. should be coordinated by Hdqrts. Emergency Cell as and when required. Officials to be contacted and their telephone numbers are indicated in Annexures 4 - 8.

(xiii) Chief Emergency Officer on duty shall chronologically record all information and instructions received or given in a logbook.

(xiv) SDGM shall monitor various important media channels to keep track of media reporting. Suitable corrections/clarifications may also be issued, if required.

(xv) After relief, rescue and restoration work is completed, winding up of all Emergency Cells on NER shall be decided by COM.

3.2.3 <u>Manning of Divisional/Hdqrts. Emergency Cell in shift duty</u>:

(i) Divisional/Hdqrts. Emergency Cell shall be manned round the clock by officers.

(ii) In addition to officers of the Operating Department, there will be officers of Engineering, Mechanical, S&T, Electrical, Commercial, Medical, Security and Personnel departments in the Divisional/Hdqrts. Emergency Cell round the clock.

(iii) Divisional Emergency Cell will be manned by Senior Scale/Junior Scale officers of all departments in 12 hrs. shift duties round the clock. (8 hrs. to 20 hrs. day shift and 20 hrs. to 8 hrs. night shift.)

(iv) Similarly, Hdqrts. Emergency Cell will be manned by JA Grade/Senior Scale officers of all departments in 12 hrs. shift duties round the clock.

(v) Senior most officer of each department who is available in the division/hdqrts. shall be on duty in the Divisional/Hdqrts. Emergency Cell during the day shift (8 hrs. to 20 hrs.).

(vi) Senior most officer of each department shall issue a 12 hrs. roster for his own department for the night shift (20 hrs. to 8 hrs.)

(vii) Round the clock roster of 12 hr. shift duty should cover both officers and supervisors.

(viii) Same officers and supervisors should be repeated each day without any change or rotation, for the next 4 – 5 days. This will maintain continuity and will ensure that experience gained on the first day can be gainfully used on subsequent days.

3.2.4 Liaison with Railway Board:

Hdqrts. Emergency Cell will maintain constant liaison with Safety Directorate's Emergency Cell in Railway Board regarding following activities:

(i) Movement of additional ARMVs and ARTs from adjoining zones.

(ii) Movement of additional diesel powers from adjoining zones.

(iii) Diversion, Regulation, Short termination, Cancellation and Rescheduling of Mail/Express trains.

(iv) Arrangement of men and material as required from adjoining zones and their expeditious movement.

(v) Opening of Helpline Enquiry Booths on other Zonal Railways as follows:

- Originating and destination stations of the accident involved train.
- All junction stations falling on the route of the train.
- Divisional hd qrts. of originating and terminating divisions.
- Zonal hdqrts. of originating and terminating Zonal Railways.
- Any other station as may be decided.

(vi) Movement program for visit of MR/MOSR, CRB and other Board Members to the accident site.

(vii) Assistance required from Defence, Para Military organizations, State Govts. should be conveyed to Railway Board who shall coordinate the same.

(viii) 3 hourly progress report on the rescue and relief work shall be communicated to Safety Directorate's Emergency Cell in Railway Board.

3.2.5 ACTIVITIES OF DIFFERENT DEPARTMENTS:

3.2.5.1 OPERATING DEPARTMENT:

Duties of the Operating Department in Hdqrts. are given in Chapter 10, under the heading 'Site Management Plan – II'.

3.2.5.2 SAFETY DEPARTMENT:

CSO will proceed to accident site along with all other officers and supervisors of the Safety Organization. Duties of Safety Organization at accident site has been listed out in Chapter 10, under the heading 'Site Management Plan – II'.

3.2.5.3 PUBLIC RELATIONS:

Duties of the Public Relations Department are given in Chapter 12, under the heading 'Media Management Plan'.

3.2.5.4 MEDICAL DEPARTMENT:

1. **Formation of two teams:**

(i) On receipt of information regarding the accident where casualties are expected, the doctor on emergency duty in the hospital casualty would inform all other doctors and para medical staff concerned.

(ii) Two teams of Doctors and Para medical staff would be formed, Team 'A' and Team 'B'.

(iii) Team 'A' - headed by CSS/MD in-charge will rush to the accident site immediately by ARMV along with 12 –15 doctors and 15 - 20 paramedics.

(iv) Team 'B' – headed by the senior most doctor amongst them will stay back at the divisional hospital and perform duties as given below.

(v) In case the accident site is far away from divisional hdqrts., then injured passengers are unlikely to be brought back to the divisional hospital for treatment.

(vi) In that case, only bare minimum number of doctors should be left behind for manning Team 'B' and most of the available doctors should be rushed to accident site as part of Team 'A'.

2. <u>Duties of Team 'A'</u>:

These are listed in detail in Chapter 11, under the heading 'Site Management Plan – II'.

3. <u>Duties of Team 'B'</u>:

(i) Team 'B' will establish an Emergency Cell in the Casualty Unit of Railway Hospital.

(ii) Contact adjoining divisions and organize movement of 2 more ARMVs to accident site, one from each end, as detailed in Chapter 4, Section (A4).

(iii) Contact local hospitals (Railway/Govt./Private) near the accident site to and ask them to rush their road ambulances along with necessary medical teams to the accident site immediately.

(iv) Contact local hospitals (Railway/Govt./Private) near the accident site to keep themselves in readiness to receive and provide medical treatment to injured passengers.

(v) Arrange to send the following in the 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end:

- as many more medical teams as possible,
- adequate number of Safai walas other health workers,
- members of St. John Ambulance Brigade, Scouts and Civil Defence personnel.

(vi) Co-ordinate with MS/CMD of adjoining Divisions/Zones and ask them to send their medical teams to the accident site.

(vii) These medical teams should be sent to the accident site by train/road or combination of train-cum-road, as feasible. In case suitable Railway vehicles are not available, taxis should be hired for this purpose.

(viii) Adequate number of following items should be arranged and sent to accident site for the purpose of handling dead bodies.

- Shrouds.
- Polythene covers for dead bodies.
- Wooden Coffins.

- Dry ice.

(ix) One doctor will be available in Divisional Emergency Cell for maintaining liaison with UCC and the medical team at the accident site. Requirement of medicines required either at the accident site or in various hospitals where patients have been admitted should be noted, procured and sent as required.

(x) Prepare Railway Hospital to receive and provide treatment to injured passengers, as and when they are brought back from accident site.

(xi) Arrange to send anti snake venom 4 vials and other items in cold chain carrier.

3.2.5.5 <u>COMMERCIAL DEPARTMENT</u>:

(i) Sr. DCM should proceed to site of accident along with all other Commercial Officers except DCM. DCM will be available in Divisional Control Office for providing backup support.

(ii) A nominated supervisor should be authorized for withdrawing sufficient money from station earnings before proceeding to site.

(iii) Similarly, CCM along with other HODs and other Commercial officers from hdqrts. will proceed to accident site as detailed at Section (B1) above.

1. <u>Transportation of men and material to accident site</u>:

(i) As soon as the ARMV/ART siren sounds & it is declared as Disaster, 50 TTEs/TCs and 50 Coolies and licensed porters in uniform should be collected together and rushed to the accident site.

(ii) The on duty commercial supervisor at the station at that point of time should ensure that they proceed by the ART itself and do not get left behind. If 50 number of each is not available, then whatever numbers are available should be sent to the accident site by the ART and rest by other fastest means of transport.

(iii) More TTEs/TCs can be sent by the 2nd and 3rd Special trains carrying backup logistic support to accident site, from each end. TTEs from the Divisional squad should also be utilized for this purpose.

(iv) After the first batch of staff has proceeded to the accident site in the ART, the entire manpower of the commercial department should be mopped up in order to send them on the 2nd and 3rd special trains which would carry backup logistic support to the accident site, from each end. For this purpose 80% TCs/TTEs from the entire division should be sent.

(v) 2nd and 3rd Special trains should carry the following:

- 2 gas stoves, 4 gas cylinders, 1000 mineral water bottles, provisions for making poories, vegetables, tea, etc., would be rushed to the site. This will be augmented later if necessary. These will be arranged by the affected division and provided by catering personnel/IRCTC.

- Sufficient cooks and catering staff from departmental catering or catering contractor (including IRCTC) would be ensured at the site for arranging tea, biscuits, packed meals like poories and vegetables to the stranded passengers, railways working force and other officials at site.

(vi) Sr. DCMs should prepare section-wise nominations of catering agencies both departmental and private for rushing to site. This should be available in Divisional DM Plans.

2. <u>Helpline Enquiry Booths at stations</u>:

(a) General:

(i) Helpline Enquiry Booths within NER would be opened as below

- Originating and destination stations of the accident involved train.
- All junction stations within the jurisdiction of NER falling on the route of the train.
- Divisional hdqrts.
- Zonal hdqrts.
- Any other station as may be decided.

(ii) On NER, Helpline Enquiry Booths would normally be required to be opened at following stations, depending on the route of the accident involved train:

- Lucknow, Gonda , Gorakhpur, Kanpur Anwarganj, Chhapra, Kasganj, Mau, Manduadih, Izzatnagar

(iii) Helpline Enquiry Booths on other Zonal Railways would also be opened as follows:

- Originating and destination stations of the accident involved train.
- All junction stations falling on the route of the train.
- Divisional hdqrts. of originating and terminating divisions.
- Zonal hdqrts of originating and terminating Zonal Railways.
- Any other station as may be decided.

(iv) All Helpline Enquiry Booths shall have DOT telephones with STD, Railway telephones with STD, fax machine, photocopier and a PC with internet connection.

(v) Helpline Enquiry Booths would be manned by computer literate Sr. supervisors on round the clock basis.

(vi) Helpline Enquiry Booths within the accident affected division should keep in touch with the Divisional Emergency Cell.

(vii) Divisional Emergency Cell will collect updated information regarding all aspects of the accident from the UCC and pass on the same to:

- All Helpline Enquiry Booths within the division.
- Emergency Cells of other divisions of NER.
- Hdqrts Emergency Cell.

(viii) Such information should be received from UCC and transmitted to all concerned. For this purpose all Helpline Enquiry Booths should be provided with PCs with internet connection.

(ix) Similarly, Helpline Enquiry Booths outside the accident affected division, but within NER jurisdiction should keep in touch with Divisional Emergency Cell of their respective divisions.

(x) Hdqrts. Emergency Cell will collect updated information regarding all aspects of the accident from the UCC and pass on the same to:

- Emergency Cells opened on other divisions of NER,
- Emergency Cells opened on originating and terminating Zonal railways.
- Safety Directorate's Emergency Cell in Railway Board.

(xi) Helpline Enquiry Booths should not contact the accident site or the UCC directly.

(b) Accident details to be available:

(i) Accident details would include number of dead and injured.

(ii) Break up of type of injuries, such as grievous, simple etc.

(iii) Disposal of injured passengers in various hospitals.

(iv) Names of injured passengers.

(v) Officials incharge of Helpline Enquiry Booths would display the list of injured passengers on the notice board.

(vi) Normally, list of injured passengers is available quickly since most injured passengers are conscious and are in a position to give details of their names, addresses etc.

(vii) Identification of dead bodies takes much longer since either

- they were travelling alone, or
- their companions are injured and are not in a position to identify them, or
- their companions have also perished.

(viii) Under such circumstances it is possible to identify dead bodies only when relatives come from their home town.

(ix) This aspect of identification of dead bodies and reasons for delay should be explained to the public.

(x) Number of dead bodies identified, and their names should be available.

(xi) This information would continue to be updated once every 3 hrs. and would continue to be accessed for the next 4 to 5 days.

(c) Information regarding running of trains:

(i) Departure of unaffected front portion of the accident involved train, and its expected time of arrival at destination.

(ii) Departure of unaffected rear portion of the accident involved train, its diverted route, and expected time of arrival at destination.

(iii) Expected date and time of starting of relatives special from originating and destination stations of the accident involved train, its stoppages enroute and its expected time of arrival at intermediate stations.

(iv) Free passes to be given to relatives of dead and injured for going to the accident site. These passes will be issued by Welfare Inspector who should be drafted into Helpline Enquiry Booths.

(v) Details of other trains that were scheduled to run on the accident affected section, but have been:

- Delayed , Regulated , Diverted , Rescheduled , Short terminated , Cancelled

(vi) Above information regarding running of trains would be required for initial 24 hours only. Thereafter, number of enquiries regarding train running would be very few and far between.

(d) Refunds:

(i) Booking counters at stations should be augmented for granting of refund to large number of passengers who have been unable to either complete or commence their journey as a result of the accident.

(ii) Refund of money should be granted for trains:

- Delayed, Regulated, Diverted, Rescheduled, Short terminated, Cancelled

(iii) Staff manning Refund counters should be thoroughly familiar with rules for granting of refunds under such circumstances.

(iv) Sufficient amount of cash should be available at these Refund counters for this purpose.

3.2.5.6 MECHANICAL DEPARTMENT:

(i) Sr. DME as well as AME should proceed to site of accident. DME will be available in Divisional Control Office for providing backup support.

(ii) Similarly, CME, CRSE and other JA grade officers from hdqrts. will proceed to accident site as detailed at Section (B1) above.

1. Rushing of men and material to site:

(i) 2 ARTs with 140T crane should be moved to the accident site, one from each end as detailed in Chapter 4, Section (B5).

(ii) In addition to above, Brake Down Special should be sent from other base stations within NER, so that additional rescue equipment such as cutters, spreaders, hydraulic jacks etc. are available.

(iii) BD Special without Crane should be requisitioned from adjoining divisions also so that additional rescue equipment such as cutters, spreaders, hydraulic jacks, generators, lighting equipment etc. are available as detailed in Chapter 4, Section (B5).

(iv) The aim should be to ensure one ART with 140T crane along with one BD special at each end of the accident site.

(v) Provision should be made for availability of standby crane driver on each ART working at site, so that ARTs can work round the clock.

(vi) Road cranes of sufficient capacity should be arranged so that these cranes can start working from the center while the 140T cranes can continue working from either end.

(vii) Trucks should be arranged for carrying BD equipment near to accident involved coaches, so that the site of accident can be approached from the middle, and more work centers can be opened up simultaneously.

(viii) Prior to arrival of the CPRO along with photographers, the ART/ARME incharge will arrange for still/video photography of the affected rolling stock, track & other vital clues in consultation with OC site.

3.2.5.7 SECURITY DEPARTMENT:

(i) Sr. DSC/DSC will proceed to the site by ARMV along with maximum number of RPF personnel. Only one officer will stay back at divisional hdqrts.

(ii) Similarly, CSC/RPF will proceed to accident site along with Dy. CSC as detailed in Section (B1) above. CSC/RPF will assume control and take necessary steps for discharging duties allotted to Security department.

1. Rushing of men and material:

(i) On receipt of first information the nearest RPF Post should muster maximum available manpower within the shortest possible time and dispatch them to the scene of accident, by fastest available means.

(ii) Simultaneously, the Post/Outpost in charge would requisition additional manpower from adjoining RPF Posts.

(iii) He should also pass on the information to Local Police and Police Control Room, local Fire Brigade, Hospitals, local voluntary organizations and the like at the earliest.

(iv) Divisional Security Control shall get reinforcement from neighboring posts/outposts, reserve line, divisional hdqrts. or zonal reserve and send them by the ART. If they could not be sent by the ART then they should definitely be sent by the 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end.

(v) In case any RPSF battalion or Company is located in the vicinity, men can be requisitioned from there for dealing with such emergent situations till additional force is available from other sources.

(vi) Additional RPF personnel from Zonal hdqrts. should be shouldered and sent to accident site.

(vii) Additional RPF personnel available throughout the division should be alerted and sent to the accident site by the 2nd and 3rd special trains carrying backup logistic support of men and material, from each end.

(viii) While sending reinforcement, the Divisional Security Control shall ensure that the necessary equipment required for rescue, recovery and protection of the scene of incident are provided as follows :

- Torches (1 per person) and other lighting arrangements.
- Nylon ropes (1 kms) and poles for segregating the affected area.
- 4 loud speakers for making announcements.
- 10 stretchers and first aid equipment.
- 10 wireless sets for inter-communication.
- Digital Camera for photographing the scene (both on negative and slide films)
- Video recording of rescue and salvage operations and connected administrative arrangements.

2. Co-ordinate with Local Police:

Maintain constant liaison with IG/GRP and ADG/GRP for following:

(i) Rushing all available GRP personnel to the accident site.

(ii) Obtaining additional manpower from the local police for purpose of crowd control.

(iii) Issue of necessary instructions to local police for giving expeditious clearance for starting restoration work.

(iv) Issue of necessary instructions to SP of the district for waiving off formalities of Post Mortem on dead bodies.

3.2.5.8 ELECTRICAL DEPARTMENT:

(i) Sr. DEE should proceed to site of accident. AEE will be available in Divisional Control Office for providing backup support.

(ii) Similarly, CEE, CEE (Plg) from hdqrts. will proceed to accident site as detailed at Section (B1) above.

(iii) Main responsibility of Electrical Department will be regarding site illumination and OHE.

(iv) Maximum number of electrical staff should be sent by 2nd and 3rd Special trains for installation and operation of electrical equipment.

(v) Officers staying back in divisional hdqrts. shall maintain constant liaison with site and find out quantum of assistance required by way of men and material.

(vi) These should be rushed to accident site either from:

- Railway sources within the division, or
- Railway sources from adjoining divisions and zones, or
- Non – Railway sources within the division.

3.2.5.9 SIGNAL & TELECOMMUNICATION DEPARTMENT:

(i) Sr. DSTE as well as ASTEs should proceed to site of accident. DSTE will be available in Divisional Control Office for providing backup support.

(ii) Similarly, CSTE along with CSTE/Con and other JA grade officers from hdqrts. will proceed to accident site as detailed at Section (B1) above.

(iii) Main responsibility of S&T Department will be for providing effective and adequate means of communication.

1. Rushing of men and material to site:

(i) Sr. DSTE along with ASTE will carry the following to the accident site :

- satellite phone,
- FAX cum printer,
- two 25W VHF sets along with antenna and battery
- 10 numbers 5W walkie-talkie sets.

(ii) He will be accompanied with at least two TCI and two TCM.

(iii) 6 more TCI/TCM, SIs of the section and maximum number of telecom staff should be sent for installation and operation of telecom equipment. They should go to the site of accident either by ART or latest by 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end.

(iv) Satellite phones of HQ and one FAX machine will be carried in GM special by at least two TCI and two TCM.

(v) All mobile phones available with the Division should also be rushed to site for emergency use.

(vi) Sufficient number of spare batteries and battery chargers for these mobiles should also be taken to accident site.

2. Arranging communication at site:

(i) DSTE in the division will immediately come to divisional control office and ensure setting up of all communication arrangements as required.

(ii) DSTE will keep a record of the numbers of Railway telephones, BSNL telephones, IMMERSAT phones provided at site and telephones provided at Helpline Enquiry Booths. This information shall be passed on to the Divisional Emergency Cell.

(iii) He should liaison with BSNL officials in the area for immediate provision of additional BSNL telephone/hot lines at the accident spot, nearest station and at Helpline Enquiry Booths duly utilizing assets under his disposal where required.

(iv) Map of the division showing areas where cell phone connectivity is operative is available in Divisional DM Plans.

(v) Should hire sufficient number of cell phones and send them to accident site. If the accident happens at station, where cell phones are available on hire, the responsibility of hiring cell phone will be of SM.

3. Communication at Headquarter and Divisional Emergency Cells:

(i) Communication arrangements are required to be provided at NER Hdqrts. Emergency Cell immediately.

(ii) 2 BSNL Telephones having ISD/STD facility are already available in the Hdqrts. Central Control. Dynamic locking code of the telephone is available with Chief Controller (Coaching).

(iii) Apart from this telephone, 4 other BSNL telephone numbers (2 with STD facilities) should be made available in Hdqrts. Emergency Cell for use by Chief Emergency Officer. These should be temporarily transferred from officers' chambers.

(iv) One FAX machine shall be provided on one BSNL telephone.

(v) 2 Railway telephone numbers with STD facilities should also be made available.

(vi) 2 Mobile telephones should also be made available in Hdqrts. Emergency Cell.

(vii) Similar Communication arrangements should also be provided in the Divisional Emergency Cell.

4. Communication at Helpline Enquiry Booths:

(i) Helpline Enquiry Booths are to be opened at all important stations en-route of the affected train as mentioned at Section 2a(ii) above.

(ii) Location of these Helpline Enquiry Booths will be on Platform No. 1 of their respective stations.

(iii) 2 BSNL phones should be identified and kept pre-wired to the Helpline Enquiry Booths so that these can be energized at short notice.

(iv) Similarly, 2 Railway phones should be identified and kept pre-wired to the Helpline Enquiry Booths so that these can be energized at short notice.

(v) One FAX machine should also be provided at Helpline Enquiry Booths. These should also be kept pre-wired so that these can be energized at short notice.

(vi) Stations at which such arrangements are to be made and telephones which are to be utilized should be identified by Sr. DSTE with approval of DRM.

3.2.5.10 ENGINEERING DEPARTMENT:

1. Rushing men and material to accident site:

PCE along with HODs and other JA grade officers as required will proceed to accident site by the special train organized for this purpose as detailed at Section (B1) above. In cases, where the SSE/Pway and AEN are based at divisional hdqrts., they should move along with staff by ART. At least, 2 SSE/Works and 1 SSE/Bridge if posted should move along with their staff by the ART.

2. Mobilization of work force:

(i) Adequate number of workmen including gang men are required to reach the site of the accident. 500 nos. along with 10 PWIs and 10 Black Smiths shall be arranged by the Division and further about 500 should be arranged to other rly. . For this purpose, labour specials will be run from the specified destination as decided by the Divisional Engineering Control/HQ Emergency Control.

(ii) ½ km of rails, sleepers and fittings and one set of 1 in 12 and 1 in 8 ½ turnouts are available in the ART. The Mechanical and Operating Departments will ensure that part 'C' of ART (consisting of additional Engineering Material Wagons) shall follow the ART. The additional half km. of matching materials and one set of 1 in 8 ½ and 1 in 12 turnouts shall be kept in the Track Depot already nominated locations by CTE of the Division. For loading of this material, 2 BRN and 2 BCN wagons should be immediately placed in the Track Depot. These materials should be loaded within 3 hours and dispatched to the site of accident. This will be ensured by the SSE (P.Way) Track Depot and Divisional Engineering Control.

(iii) At least two nos. of JCBs available with the ballast depot earth work contractor of near by area shall be immediately moved.

(iv) The bulldozer available at Kanpur ART will be moved by special train arranged by Allahabad Division.

(v) DSTE/DEN in Divisional Emergency Control will request concerned authority (Army/State Govt. Deptt.) for bulldozer/earthmoving machinery in the area.

3.2.5.11 IT Department:

(i) COM's room which will be used as Hdqrts. Emergency Cell should be provided with a PC with internet connectivity.

(ii) Following information should be uploaded on to NER's Website by Telecom and commercial supervisors in Railnet chamber as quickly as possible:

(a) List of injured and deceased passengers:

- Names of stations where Helpline Enquiry Booths have been opened along with their telephone numbers.
- Accident details would include, number of injured passengers rescued.
- Break up of type of injuries, such as grievous, simple etc.

- Disposal of injured passengers in various hospitals.
- Names of injured passengers – coach wise.
- Number of dead bodies recovered.
- Number of dead bodies identified.
- Names of deceased passengers.

(b) Details of trains which have been diverted, regulated, short terminated, cancelled or rescheduled.

(c) Details of special trains which are to be run :

- Passenger special carrying passengers of front portion of accident involved train.

- Passenger special carrying passengers of rear portion of accident involved train.

- Relatives special from originating and terminating stations of the accident involved train.

CHAPTER – 4

LOCATIONS OF ARMVs/ARTs

4.1 ACCIDENT RELIEF MEDICAL VAN:

4.1.1 ARMV Scale I - Equipment stored in Special Medical Relief Vans stabled in separate sidings :

a. Locations of ARMV Scale-I are given below in Para A2.

b. One key of the van is available with the SSE/SE/JE/Mechanical. or the Station Master in aglass fronted case.

c. Other key is with the doctor in charge of the ARMV.

d. Medicines and equipment are provided as per Railway Board norms.

e. Keys of all locks inside the ARMV are also in duplicate. One set of keys are with the Medical Officer in charge of the ARMV and the other set of keys are kept in a glass fronted case inside the ARMV.

f. The target time for turning out of ARMV is 15 minutes from double entry siding and 20 minutes from single entry siding.

4.1.2 Location of ARMV Scale – I:

Scale – I ARMVs on North Eastern Railway are located as follows:

1. **Varanasi Division:**

   a. BG: Banaras(SPART), Mau Jn., Chhapra (SPART)

2. **Lucknow Division :**

   a. BG: Gorakhpur (SPART), Gonda, Lucknow(SPART)

   b. MG: Mailani

3. **Izzatnagar Division :**

   a. BG: -Kasganj

   b. BG- Lalkua(SPART)

4.1.3 Location of ARMV Scale – I on adjoining Zones/Divisions:

ARMVs Scale – I on adjoining Zones/Divisions are located as follows:

1. On BG system: Prayagraj, Kanpur Central, Pt DD Upadhyaya Jn., Lucknow, Moradabad, Sonpur, Agra, Ayodhya Cantt, Narkatiaganj

2. On MG system: None (No Zonal Railway has connectivity with NER)

4.1.4 Section wise chart for requisitioning of ARMVs:

Division	Section	ARMV
LUCKNOW BG	LUCKNOW- MAILANI	AISHBAGH/LJN
	LUCKNOW - SITAPUR	AISHBAGH/LJN
	LUCKNOW -MANKNAGAR.	AISHBAGH/LJN
	LUCKNOW-MALHAUR	AISHBAGH/LJN
	GONDA-GOVINDNAGAR	GONDA
	KATARA-MANKAPUR	GONDA
	GONDA-LUCKNOW	GONDA
	BURWHAL-SITAPUR	GONDA
	GONDA-BARHANI	GONDA
	GORAKHPUR-GONDA-SITAPUR	GORAKHPUR
	GORAKHPUR-NAUTANWA	GORAKHPUR
	ANANDNAGAR- BARANI	GORAKHPUR
	GONDA-ANANDNAGAR-BARANI	GONDA
	GORAKHPUR-BHATNI-AUNRIHAR	GORAKHPUR
MAILANI (MG)	MAILANI-NANPARA	MAILANI
VARANASI BG	GORAKHPUR-MAIRWA	GORAKHPUR
	GORAKHPUR-NARKATIAGANJ	GORAKHPUR
	CAPTANGANJ-THAWE	GORAKHPUR,CHHAPRA
	BHATNI-MAU	GORAKHPUR,MAU
	SALEMPUR-BARAHAJ MAU-PHEPHNA PHEPHNA-INDARA	MAU
	CHHAPRA-BHATNI	CHHAPRA
	CHHAPRA-PHEPHNA	CHHAPRA
	BANARAS -PRAYAGRAJ RAMBAG	BANARAS
	BANARAS-MAU	BANARAS
	AUNRIHAR-PHEPHNA	BANARAS
	MAU- AUNRIHAR	MAU
	MAU-SHAH GANJ	MAU
	CHHAPRA-MSARKH-THAWE	CHHAPRA
	CHHAPRA-THAWE-SIWAN	CHHAPRA
	DURAUNDHA-MAHRAJGANJ	CHHAPRA
	HATHUWA-BATHUWA BAZAR-MASRAKH	CHHAPRA
	BANARAS -AUNRIHAR-JAUNPUR	BANARAS
IZZATNAGAR/ BG	MORADABAD-RAMNAGAR	MORADABAD
	KASHIPUR-LALKUAN	LALKUAN
	RAMPUR-KATHGODAM	LALKUAN
	KASGANJ-RAVATPUR-MANDANA-BRAHMAVART	KASGANJ
	KASGANJ-MATHURA CANT	KASGANJ
	BAREILLY CITY-LALKUAN	LALKUAN
	KASGANJ - LALKUAN,PILIBHI-MAILANI	KASGANJ
	KASGANJ-PILIBHIT-SHAHJAHAPUR	KASGANJ, LALKUAN
	BHOJIPURA-PILIBHIT-TANKPUR	LALKUAN

4.1.5 ARME Scale II - Equipment stored in boxes in Special room on platform at station:

a. Locations of ARME Scale II on NE Railway are given below in (4.1.6).

b. The medical equipments are kept sealed without any lock.

c. The Scale II room has duplicate keys - One is with the Medical officer and the other is in Station Master's Office.

d. The ARME scale II equipment is to be taken out and rushed to the site of accident by first and/or the fastest means (train or available road vehicle).

4.1.6 Locations of ARME Scale – II on NE Railway:

	DIVISION		
BG	IZZATNAGAR	LUCKNOW	VARANASI
	FATEHGARH	BASTI,	PRAYAGARAJ RAMBAG, SIWAN,
	KASHIPUR		BHATNI.
	MATHURA	BURHWAL,BARHNI,SITAPUR,	BALLIA, AUNRIHAR

4.2 ACCIDENT RELIEF TRAIN:

4.2.1 Accident Relief Train :

a. ART Locations are given below in Para 4.2.2

b. BD Special keys are with the following officials :

i. Station Masters room in a sealed cage.

ii. Mechanical: SSE/SE/JE/Mechanical.

c. SPART is propelled by an inbuilt Diesel Engine and is capable of movement in both directions.

d. Crane Supervisor shall ensure availability of adequate fuel and water in the crane at all times.

e. On getting emergency call, the Crane Supervisor shall check and ensure:

- Correct marshalling of Crane according to site requirement.
- Alert the stand by Crane Operator of 140T Crane.

f. In case road approach is faster, re-railing equipment may be moved by road as required.

g. The target time for turning out of ART is 30" by day and 45" by night from the time of sounding of siren.

4.2.2 Location of ARTs:

1. On BG system:

Division	Location	Class	Crane	Single/exit Particulars	Whether SPART
IZZATNAGAR	KASGANJ	A	140 T	DOUBLE	NO
	LALKUA	SPART	NIL	DOUBLE	YES
	FARRUKHABAD	B	NIL	(ON TRUCK)	-
LUCKNOW	GORAKHPUR	A	140 T	DOUBLE	YES
	GONDA	B	NIL	DOUBLE	NO
	LUCKNOW	B	NIL	DOUBLE	NO
VARANASI	CHHAPRA JN.	SPART	NIL	DOUBLE	YES
	BANARAS	SPART	NIL	DOUBLE	YES
	MAU	A	140 T	DOUBLE	NO

4.2.3 On MG System:

Division	Location	Class	Crane	Single/exit Particulars	Whether SPART
IZZATNAGAR	NIL				
LUCKNOW	MAILAN	B	NIL	SINGLE	NO
VARANASI	NIL				

3. Locations of ARTs on adjoining Zones/Divisions:

Location(Station, Railway, Division,)	Crane Particulars
KANPUR/N.C.RLY./PRAYAGRAJ	140 T
PRAYAGRAJ /N.C.RLY./ PRAYAGRAJ	B CLASS ART
Pt DD Upadhyaya /E.C.RLY	140 T
MORADABAD/N.RLY./MORADABAD	140T
LUCKNOW/N.RLY./LUCKNOW	140 T
SONPUR/E.C.RLY./SONPUR	140 T
AGRA/N.C.RLY.	B CLASS ART
ROZA/N.RLY./MORADABAD	B CLASS ART

4. Section wise chart for requisitioning of ARTs with 140T/without 140T Crane On BG System:

Division	Section	1st ART	2nd ART
LUCKNOW	GORAKHPUR-GONDA	GORAKHPUR	GONDA(LUCAS)
LUCKNOW/NR	GONDA- BURHWAL	GORAKHPUR	LUCKNOW/NR
	BURHWAL -LUCKNOW	LUCKNOW/NR	GORAKHPUR
	BURHWAL-SITAPUR	GORAKHPUR	GONDA
	KATRA-MANKAPUR-AYODHYA	GORAKHPUR	—
	GORAKHPUR-NAUTANWA	GORAKHPUR	GONDA
	ANANDNAGAR-BALRAMPUR	GORAKHPUR	GONDA
	GONDA-BARHANI	GONDA(LUCAS)	GORAKHPUR
	GONDA-BAHRAICH	GONDA(LUCAS)	GORAKHPUR
VARANASI	GORAKHPUR-BHATNI	GORAKHPUR	CHHAPRA
	GORAKHPUR-NARKATIAGANJ	GORAKHPUR	SONPUR/E.C.R
	BHATNI-PRAYAGRAJ RAMBAGH	GORAKHPUR	MAU
	MAU-AUNRIHAR -CHHAPRA GRAMIN	MAU	CHHAPRA
	CHHAPRA GRAMIN -SIWAN	CHHAPRA (LUCAS),	GORAKHPUR
	PHEPHNA-INDARA	MAU	CHHAPRA
	BANARAS-PHEPHNA	BANARAS	CHHAPRA
	MAU-SHAHGANJ	MAU	GORAKHPUR
	MAU-BHATNI	MAU(LUCAS)	GORAKHPUR
	MAU-AUNRIHAR	MAU(LUCAS)	GORAKHPUR, BANARAS
	BANARAS-PRAYAGRAJRAMBAG	BANARAS	GORAKHPUR
	CAPTANGANJ-THAWE	GOARKHPUR	CHHAPRA
	CHHAPRA-MSARKH-THAWE	CHHAPRA	MAU
	CHHAPRA-THAWE	CHHAPRA	GORAKHPUR
	CHHAPRA-DURAUNDHA-MASRAKH	CHHAPRA	MAU
	HATHUWA Jn.-PANCHDEVRI	CHHAPRA	MAU
	BANARAS -AUNRIHAR-JAUNPUR	BANARAS	MAU
IZZATNAGAR	MORADABAD-RAMNAGAR	MORADABAD/NR	LALKUAN
	KASHIPUR-LALKUAN	LALKUAN	-
	RAMPUR-KATHGODAM	LALKUAN	-
	KASGANJ-MANDHANA	KASGANJ	-
	KASGANJ-MATHURA	KASGANJ	-
	MANDANA-BRAHMAVART	KASGANJ	-
	BAREILLY CITY- LALKUAN	LALKUAN	-
	KASGANJ-BAREILLY CITY-MAILANI	KASGANJ	-
	BARELLY CITY-PILIBHIT	LALKUAN	-
	PILIBHIT-SHAHJAHAPUR	LALKUAN	-
	PILIBHIT-TANKPUR	LALKUAN	-

5. Section wise chart for requisitioning of ARTs with 140T/without 140T Crane from adjoining Zones/Divisions from the other end:

Division	Section	1st ART	2nd ART	Additional ARTs without crane
LUCKNOW	GORAKHPUR-GONDA	LUCKNOW/NR		
LUCKNOW/NR	GONDA- BURHWAL	LUCKNOW/NR		
	BURHWAL -LUCKNOW	LUCKNOW/NR		
	BURHWAL-SITAPUR	LUCKNOW/NR		
	KATRA-MANKAPUR-AYODHYA	LUCKNOW/NR	MAU	
	GORAKHPUR-NAUTANWA	MAU		
	ANANDNAGAR-BALRAMPUR	MAU		—
	GONDA-BARHANI	MAU		-
	GONDA-BAHRAICH	GONDA(LUCAS)		-
VARANASI	GORAKHPUR-BHATNI	MAU	CHHAPRA	
	GORAKHPUR-NARKATIAGANJ	MAU	SONPUR/E.C.R	-
	BHATNI-PRAYAGRAJ RAMBAGH	GORAKHPUR	Pt DD Upadhyaya /E.C.RLY	-
	MAU-AUNRIHAR -CHHAPRA GRAMIN	GORAKHPUR	SONPUR	
	CHHAPRA-SIWAN	GORAKHPUR	SONPUR	-
	PHEPHNA-INDARA	GORAKHPUR	SONPUR	-
	BANARAS-PHEPHNA	GORAKHPUR	SONPUR	-
	MAU-SHAHGANJ	GORAKHPUR	-	AYODHYA
	MAU-BHATNI	MAU(LUCAS)	GORAKHPUR	-
	MAU-AUNRIHAR	GORAKHPUR	-	-
	BANARAS-PRAYAGRAJRAMBAG	GORAKHPUR	-	PRAYAGRAJ
	CAPTANGANJ-THAWE	SONPUR	-	CHHAPRA
	CHHAPRA-MSARKH-THAWE	GORAKHPUR	-	-
	CHHAPRA-THAWE	GORAKHPUR	-	-
	CHHAPRA-DURAUNDHA-MASRAKH	GORAKHPUR	-	-
	HATHUWA Jn.-PANCHDEVRI	GORAKHPUR	-	-
	BANARAS -AUNRIHAR-JAUNPUR	GORAKHPUR	-	-
IZZATNAGAR	MORADABAD-RAMNAGAR	MORADABAD/NR		
	KASHIPUR-LALKUAN	MORADABAD/NR	-	-
	RAMPUR-KATHGODAM	MORADABAD/NR	-	-
	KASGANJ- MANDANA	KANPUR	-	-
	KASGANJ-MATHURA	KANPUR	-	AGRA
	MANDANA-BRAHMAVART	KANPUR		-
	BAREILLY CITY- LALKUAN	MORADABAD/NR	-	-
	KASGANJ-BAREILLY CITY	MORADABAD/NR	-	-
	BARELLY CITY-PILIBHIT	MORADABAD/NR	-	ROZA/NR
	PILIBHIT-SHAHJAHAPUR	LUCKNOW/NR	-	ROZA/NR
	PILIBHIT-TANKPUR	MORADABAD/NR	-	-

2.0 On MG System:

LUCKNOW	MAILANI-KAKRAHA-BAHRAICH-NEPALGANJ ROAD	MAILANI	-	-

CHAPTER – 5

DISASTER PREPAREDNESS – USE OF ON BOARD RESOURCES

5.1 PORTABLE TELEPHONE:

5.1.1 Types of Portable Telephones:

1. Portable Telephones are available in Brake van of Passenger carrying Trains.
2. Telephones presently in use are of the 4-wir e/2-wire type of portable phones which can be used in RE area as well as in overhead communication territory.
3. There are two types of Portable Telephones
   a. Land line type (Overhead Telephone line transmission)
   b. Socket Type (Underground cable transmission)
4. In overhead territory additional poles are to be carried by Guards for connecting phones to the overhead lines.

5.1.2 How to use Portable Telephones:

(a) Overhead type :

a. Fix "Y" bracket on the poles.
b. Use required number of poles available.
c. Connect the two wires to phone terminals.
d. Circuit on Red colour bracket side connects the section controller telephone line.
e. Link "Y" bracket on the circuit and rub it for clear communication.

(b) Underground cable type:

a. Look at Receiver Arrow sign for socket location on Over Head Equipment mast/location post and move towards the Arrow pointing direction.
b. On reaching EMC Socket location, open the socket by using the key kept in the phone box where required.
c. Plug in the phone terminal properly for communication.
d. In electrified section this phone connects the Traction power controller and then link to section controller.

5.2 WALKIE – TALKIE SETS:

a. Ensure that the set is charged.
b. Check that the proper channel is selected for communication.
c. Do not intervene when the channel is engaged.
d. Never press "SOS" button provided in walkie-talkie unless it is a real emergency. In case of emergency if "SOS" button is provided on the mobile, it should be used to override an on going conversation.

5.3 USE OF BSNL/CELL PHONE/MOBILE PHONES:

a. BSNL phone numbers with STD code for Railway Station in a Division are given in Working Time Table (WTT).

b. WTT is available with Guard, Driver and Assistant Guard.

c. Refer WTT for nearest Station contact number.

d. BSNL phone numbers of important Stations are also available in Public Time Table.

5.4 EMERGENCY TRAIN LIGHTING BOX/EMERGENCY LIGHT FITTING (ELF):

1. How to use ELF BOX:

a. This box is available in the Brake Van of Passenger carrying trains.

b. Open the box by removing the seal.

c. Fix the crocodile clip of hand Torch to the coach power supply terminal and use it for searching/surveying.Fix the flood light to the Tripod Stand and connect its crocodile clip to the power supply terminal.

CHAPTER – 6

DISASTER RESPONSE – OVERVIEW

6.1 Golden Hour:

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

During this Golden Hour period every effort should be made to:

a. Render definite medical care to the extent possible preferably by qualified medical practitioners.

b. Stop bleeding and restore Blood Pressure.

c. Persons under shock should be relieved of shock immediately.

d. Transport casualties to the nearest hospital so as to reach within this Golden Hour period.

For being effective, any Disaster Management system should aim at recovering as many critical patients as possible and rushing them to hospital within this period.

6.2 Disaster Syndrome:

A victim's initial response following a Disaster is in three stages, viz. Shock stage, Suggestible stage and Recovery stage. These initial responses are called Disaster Syndrome.

(i) Shock stage: In which victims are stunned, dazed and apathetic.

(ii) Suggestible stage: In which victims tend to be passive but open to suggestions and willing to take directions from rescue workers and others.

(iii)Recovery stage: In which individuals may be tense and apprehensive and may show generalized anxiety.

6.3 Different phases of Disaster Response:

Disaster Response in case of a railway accident, constitutes of 3 phases. These 3 phases are determined both by the time factor, as also by the extent of specialized assistance available. Firstly, it begins with the spontaneous reaction of men available on the train at the time of the accident. Thereafter the second phase continues with contributions made in rescue and relief work by men and material available locally in nearby areas of the accident site. The third and longest phase consists of meticulously planned action by trained DM teams who arrive at the accident site to carry out rescue and relief operations.

The first phase which is of shortest duration last for about half an hour. It is an amateurish, poorly equipped effort; but is nevertheless the most important phase. In most cases, this is the only help available for a major part of the 'Golden Hour'.

The second phase which is of 2-3 hours duration is comparatively less amateurish and much better equipped. Their contribution is vital since the 'Golden Hour' period comes to an end during the working of this group. How many critically injured passengers can finally be saved depends solely on the efficiency of this group.

The last and final phase of Disaster Response by railway's DM team continues for a few days. It comes to an end not only with the restoration of traffic but with the departure of most relatives and next of kin from the accident site and disposal of all bodies. Few of

the grievously injured who continue to be hospitalized for comparatively longer spells are then the sole responsibility of railway's medical department.

With the above scenario in mind, it is necessary to take firm and quick decisions to save lives and property. To achieve these objectives Railways have a well-defined action plan that is successfully executed by the coordinated efforts of different disciplines, all of whom function as a team. The three groups which are active during the above mentioned 3 phases of Disaster Response, may be classified as follows:

(i) Instant Action Team (IAT)

(ii) First Responders (FR)

(iii) Disaster Management Team (DMT)

6.4 First Aid in Emergency :

6.4.1 Order of priority for dealing with and helping injured passengers should be as follows :

- unconscious,
- bleeding excessively,
- having breathing problems,
- grievously injured,
- in a state of shock,
- having fractures,
- simple injured.

6.4.2 For assessing and handling injuries, acronym DR ABC is to be followed.

(i) D – DANGER :

Look for danger. Make sure that no further danger exists either for the patient or for the First Aider.

(ii) R – RESPONSE :

Check for consciousness. Call by his/her name, slap, pinch and shake gently. If there is no response, then it means that the patient is unconscious.

(iii) A – AIR WAY :

Clear the airway (Trachea). If patient is unconscious, then the airway may be narrowed or blocked making breathing impossible. This occurs due to several reasons. Mass food particles or foreign body in the air passage; or the tongue may have sagged back and blocked the air passage.

To open the airway lift the chin forward with the fingers of one hand while pressing the forehead backwards with the other hand, now the tongue comes forward and the airway is cleared. To clear the other objects in the mouth press the Jaw, open the mouth put your fingers or a clean cloth in the mouth and clear the things. Now the air passage is clear.

(iv) B – BREATHING :Check for Breathing. Keep the back of your fingers near the nose of the patient. You can feel the warm air (or) keep your ear near the nose and look for the movement of chest, listen to the sound from the throat and feel the warm air from the nose.

(v) C – CIRCULATION :Check the pulse. Normally we check the pulse at the wrist; however,

sometimes it is not felt because of severe bleeding. So, it is better to check the pulse at neck. (Carotid Pulse).

After checking DR ABC, there may be two possibilities.

(a) If patient is breathing, has circulation but is unconsciousness, immediately turn him to Recovery position and transport to hospital.

(b) If the patient has failure of breathing and circulation, then immediately start CPR (CARDIO PULMONARY RESUSCITATION) the important life saving technique in First Aid.

To revive the lungs you have to give artificial respiration by mouth to mouth (Kiss of Life) method. Lift the chin forward and press the jaw open the mouth with one hand and close the nose with other hand keep your mouth on the casualty's mouth and blow.

To revive the heart you have to give external chest compression. The casualty should be made to lie down on a hard surface. Keep heel of the palm on the chest (Pit of stomach) of the casualty and keep the other palm over that hand and compress.

Mouth to mouth ventilation and external chest compression should be given in the ratio of 2:15. This should be continued up to the revival of life or till reaching the hospital. Once life starts, immediately turn the casualty into recovery position and transport to hospital. (Recovery position or three quarter prone position means turn to one side, better to right side)

Recovery position :

Recovery position is the safest position for unconscious patients. Normally we keep the patient in a supine position. However, in case of unconscious patients, it is a very dangerous position because the tongue can fall back and close the airway or saliva and other secretions may get into windpipe. To avoid that, turn the casualty into recovery position and transport to hospital.

Sometimes, you may not be in a position to do First Aid due to tense situation. In such circumstances at least turn the casualty to Recovery Position, which would help to save many precious lives.

CHAPTER – 7

DISASTER RESPONSE – INSTANT ACTION TEAM

ACTION BY FRONT LINE STAFF & STAFF/PEOPLE IN AND ARROUND SITE OF ACCIDENT

INSTANT ACTION TEAM (IAT):

7.1 Instant Action Team comprises

(i) The Guard, Crew, TS, TTEs, AC coach attendant, RPF and other railway staff on duty on the accident involved train.

(ii) GRP staff travelling on the train on duty.

(iii) Railway staff travelling by the accident involved train either on duty or on leave as passengers.

(iv) Doctors travelling by the train.

(v) Passengers travelling on the train who volunteer for rescue and relief work.

(vi) Railway staff working at site or available near the site of the accident.

(vii) Non-Railway personnel available at or near the accident site.

7.2 Pre – accident checklist of preparation for Members of Instant Action Team

(i) Generally, about 15" time elapses before information regarding occurrence of an accident reaches the Divisional Control Office. In case information can be conveyed immediately this time can be saved. This 15" time is of vital importance since it constitutes 25% of the 'Golden Hour'.

(ii) In case they have a Mobile, ensure that telephone numbers of all relevant officials such as those of divisional control offices etc. have been permanently fed into the Mobile for immediate use in an emergency.

(iii) These important telephone numbers should cover all those sections where they are required to work their train either within their own division or even those of adjoining divisions.

(iv) Divisions will get printed and circulate a DM Telephone Directory containing all such telephone numbers that are likely to be required in an emergency.

(v) Whenever they are travelling at night they should keep a torch handy and secure it by some means. The torch will be of no use in an emergency if it cannot be taken out from inside the suitcase at that point of time; or if the torch cannot be located since it has fallen off due to severe jerk.

7.3 Duties of Guard, Driver and other Commercial Staff

Detail duty list of Guard and Driver are laid down in the Accident Manual as also in the guide book for front line staff published by this Railway. Some of the more important ones are enumerated below:

7.3.1 Guard

(i) Note the time of the accident and the location.

(ii) Switch on the Amber Light, if provided, in Flashing Tail Lamp, in the rear of brake van.

(iii) Inform Driver through walkie – talkie set.

(iv) Inform Station Master on walkie – talkie set, if possible.

(v) Protect adjacent line/lines if required and the line on which the accident has taken place as per G&SR 6.03.

(vi) Secure the train and prevent escaping of vehicles.

(vii) Make a quick survey of magnitude of accident and roughly assess casualty, damage and assistance required.

(viii) Send information through quickest means to Control Office and SMs on either side of the block section. For this purpose,

(a) Walkie – talkie communication provided with stations should immediately be used.

(b) Otherwise field telephone should be used.

(c) If a train comes on the other line which is not blocked the same should be stopped and information sent through the driver.

(d) Assistant driver or Assistant guard may be sent to the next station to convey information of the accident.

(e) If all of the above fail, one of the railway staff on duty on the train should be sent on foot to the nearest station.

(ix) Utilize Emergency Train Lighting box to facilitate medical aid.

(x) Save lives and render First Aid.

(xi) Call for Doctors and seek their assistance.

(xii) Seek assistance of railway staff and other volunteers from train to rescue injured or entrapped passengers.

(xiii) Direct railway staff and other volunteers from train for attending to injured.

(xiv) Ensure that field telephone is constantly manned by a railway staff.

(xv) Arrange protection of passengers' belongings and railway property with the help of railway staff, volunteers on train, RPF and GRP.

(xvi) Stop running trains on adjacent line and utilize resources on that train.

(xvii) In electrified section if OHE is affected, take steps to switch off OHE supply.

(xviii) Arrange for transportation of injured to hospital.

(xix) Record evidence or statements, if any, given by passengers.

(xx) Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.

(xxi) Log your activities. Do not leave the spot unless you are relieved by a competent authority.

7.3.2 **Driver**

(i) Note the time of the accident and location.
(ii) Switch ON the 'Flasher light' of the locomotive and give 4 short whistles.
(iii) Inform Guard on walkie – talkie set.
(iv) Light the fusee, if required.
(v) Inform Station Master on walkie – talkie set, if possible.
(vi) Protect the adjacent line, if required, and the train in front as per G&SR 6.03.
(vii) Take necessary action to keep the loco safe.
(viii) Take necessary action to prevent Loco/Vehicles/ Wagons from rolling down.
(ix) Make a quick survey of magnitude of accident and roughly assess casualty, damage and assistance required.
(x) Send information through quickest means to Control Office and SMs on either side of the block section. For this purpose,

(a) Walkie – talkie communication provided with stations should immediately be used.
(b) Otherwise field telephone should be used.
(c) If a train comes on the other line which is not blocked the same should be stopped and information sent through the driver.
(d) Assistant driver or Assistant guard may be sent to the next station to convey information of the accident.
(e) If all of the above fail, one of the railway staff on duty on the train should be sent on foot to the nearest station.

(xi) Render all possible assistance to the guard.
(xii) Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.
(xiii) Log your activities. Do not leave the spot unless you are relieved by a competent authority.
(xiv) If necessary detach Loco and take it to inform SM.

7.3.3 **Train Superintendent/Travelling Ticket Examiners**

(i) Preserve reservation charts of each coach containing names of passengers who actually travelled and in which berth no.
(ii) Avail services of Doctors travelling by the train and render Medical Aid.

(iii) Render First Aid to injured.

(iv) Collect particulars of injured passengers and prepare a list showing exact position of injured in coaches, from Train Engine to Brake Van. This should be handed over to railway doctors when ARMV arrives.

(v) Prepare a separate list of dead passengers with address and ticket particulars, if available.

(vi) Take assistance of local people and other volunteers at site.

(vii) Transport injured passengers by road vehicles, if available, to the nearest hospital.

(viii) Inform stranded passengers about alternative transport arrangement.

(ix) Record Evidences or statement given by passengers/others at site.

7.3.4 <u>AC Mechanic/Attendant</u>

(i) Switch off the power supply to avoid short-circuiting in case of suspected fire in coaches or any other damage.

(ii) Assist the TS/TTEs in their duties at the accident site.

7.3.5 <u>RPF and GRP staff</u>

(i) Try and rescue as many passengers as possible from the accident involved coaches.

(ii) Render First Aid to injured.

(iii) Arrange to shift injured persons to the nearest hospital.

(iv) Protect passengers luggage and railway property.

(v) Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.

7.3.6 <u>Gang Staff</u>:

(i) On double line section stop any other train approaching the accident area by showing hand danger signal.

(ii) Ensure that track alignments or lines are not disturbed.

(iii) Report to OC Site and assist in rescue and relief work.

(iv) Assist in extricating injured passengers from coaches.

(v) Assist in transporting them to nearest hospitals.

7.3.7 <u>Gate men</u>:

(i) Keep gate closed if the train has not cleared the gate.

(ii) On double/multiple line section stop any other train approaching the accident area by showing hand danger signal.

(iii) Arrange to inform SM immediately.

(iv) Don’t meddle with Interlocking.

(v) Avail services of road vehicles waiting or passing through LC Gate.

(vi) Send message to nearby village, informing them regarding the accident.

(vii) Collect men and material available nearby and direct them to site.

7.3.8 <u>Station Master at adjoining station</u>:

(i) Conveying of information.

(ii) Arrange protection of traffic by keeping all signals at ON position.

(iii) Report the accident to Station Master at the other end. He should be asked to call all off duty staff at his station and send them to the accident site.

(iv) Report the accident to Section Controller.

(v) Control to be advised regarding –

- Time and nature of accident.
- Brief description of accident.
- Adjacent lines clear or not.
- Damage to rolling stock.
- Damage to track in terms of telegraph posts.
- OHE masts damaged or not, and extent of damage.
- Approximate number of dead and injured (grievous, simple) to be obtained from the TS/TTEs.

(vi) Following functionaries should be advised regarding the accident:

- All off duty railway staff posted at that station.
- SS of Junction stations at either end.
- TI, DCI.
- P Way Supervisors – SSE/JE etc.
- TRD Supervisors – SSE/JE etc.
- C&W Supervisors – SSE/JE etc.
- S&T Supervisors – SSE/JE etc.
- SI/RPF, SHO/GRP.- Nearest Fire Station.

(vii) Inform civil authorities, village/town/city representatives and volunteers for possible relief assistance.

7.3.9 <u>Supervisory Station Manager of the nearest Jn. station shall proceed</u> <u>to accident site</u>.

7.3.10 <u>Medical assistance</u>:

(i) Call for assistance from local Doctors, St.John's Ambulance Brigade, Civil and Army Hospitals.

(ii) Arrange adequate number of First Aid boxes and stretchers.

(iii) Mobilize local medical team and send it to site to render First Aid to the injured.

(iv) Quickly transport ARME Scale – II equipment to the site of the accident.

7.3.11 Passenger assistance:

(i) Arrange drinking water, beverages and refreshments, either from Refreshment Room or local sources.
(ii) Supply beverages and refreshments free of cost to stranded passengers.
(iii) Open an emergency counter and display necessary information.
(iv) Obtain reservation charts and display it.
(v) Collect information on dead/injured and convey it whenever asked for.
(vi) Make frequent announcements about diversion, cancellation, regulation of train services.
(vii) Arrange for refund of fares as per extant rules.

7.3.12 Transport assistance:

(i) Arrange for transport from local resources, if available, for transporting injured passengers to nearest hospitals by fastest possible means.

(ii) For this purpose, apart from tractor trolleys, even trucks passing on the highway can be utilized.

(iii) Stranded passengers to be transported from the accident spot by arranging transshipment either by train or by hiring road vehicles.

7.3.13 Security assistance:

(i) Advise RPF/GRP/State Police to provide security to passengers, their belongings and railway property.

(ii) They should also be asked to assist in rescue and relief work.

7.3.14 Communication Assistance:

(i) Direct passengers to PCO booths available nearby, Hire cellular phones to meet the need of stranded passenger.

(ii) Issue free telegrams and make available STD phone to relatives of dead/injured.

7.3.15 Sending manpower for site:

(i) Proceed to site of the accident by quickest means with trolleys, coolies, lamps, vendors and any other equipment that is considered necessary.

(ii) Till relieved by a Traffic Inspector or Divisional Officers be in charge of site and carryout rescue/relief operations.

7.3.16 Preservation of clues and evidences:

(i) TI/SM first reaching the site shall take action to preserve clues and evidences.

(ii) Secure records related to accident in the Station/Cabin.

(iii) Seal slides, levers, knobs and Relay room, if accident takes place within the Station limit.

7.4. Duties of TI/PWI/SI/CWI/LI:

7.4.1 Rushing to accident site with men and material:

(i) Before leaving for the site of accident organize maximum number of men to go to the accident site along with their equipment.

(ii) Reach the site of accident by quickest available means.

7.4.2 Rescue and relief:

(i) Ensure that the obstructed line is protected.

(ii) Direct all staff working under them to assist in rescue and relief work.

(iii) All of them should work as per directions of OC Site.

(iv) Assess casualties and arrange to render First Aid.

(v) Shift injured to nearest hospital.

7.4.3 Joint measurements and preservation of clues and evidences:

(i) Collect and record all evidences relating to the accident such as :

- Condition of track, with special reference to alignment, gauge, cross levels, super elevation, points of mount and drop and any sign of sabotage etc.
- Condition of Rolling stock with reference to Brake Power and braking gear.
- All marks on sleepers, rails, locomotives and vehicles etc. especially for preservation of clues.
- Position of derailed vehicles.
- Prima facie cause of accident.

(ii) Seize and seal the Train Signal Register, Log book, Private Number Book, Line Admission

Book, Speed Recorder Chart and other relevant records.

(iii) Note down the position of panel switches, indication, block instrument, condition of relay room, status of data logger, etc.

(iv) Condition of switches, ground connections, point locking, occupancy of track circuit, details of damage to out door signal/point gears should be noted down.

(v) Seize and seal the Speed Recording Graph and all other registers and repair log book of the locomotive.

(vi) Record details of Brake Power and other aspects of Rolling stock as per Proforma.

(vii) Joint measurements of rolling stock should be taken.

(i) Note down observations, measurements of Loco etc. at site. If it is not possible arrange for taking the reading at shed.

(viii) These can also be recorded on a video or digital camera subject to availability.

(ix) Details of all readings taken and position of all equipment noted should be jointly signed by supervisors of all 5 departments at accident site.

(x) Obtain statement of staff involved in the accident.

(xi) CWI shall prepare a sketch showing position of Rolling stock.

(xii) PWI shall prepare a final sketch indicating the position of track, with respect to alignment, point of mount, point of drop, OHE mast, point number etc.

(xiii) Survey the situation, assess assistance required and issue message to Divisional Control Office.

(xiv) Take charge of the situation pertaining to your own department and remain till Divisional officers arrive at the site.

7.5. <u>Railway Staff Travelling on the accident affected train</u>

(i) Whenever a train is involved in a serious accident with casualties/injuries to passengers, all railway staff travelling on the train either on duty or on leave are deemed to be duty with immediate effect.

(ii) Under no circumstance should any of them leave the accident site unless and until divisional officers arrive, take over charge of rescue and relief operations, and permit them to leave.

(iii) Railway staff on train/at site shall volunteer themselves to render assistance and report to TS/TTE/Guard of the Train.

(iv) The senior most officer travelling on the train will assume charge as Officer-in-Charge Site (OC Site).

(v) Normally the senior most officer will be travelling in either the 1AC or in 2AC coach; and most probably in the HOR quota section of the coach. In any case the TS/TTE would know who are the railway officers travelling in 1AC or 2AC.

(vi) Similarly, other railway staff will be travelling in 3AC coach; and most probably in the HOR quota section of the coach.

(vii) Similarly, some Group 'D' railway staff may be travelling in Sleeper coach; and probably in the HOR quota section of the coach.

(viii) In the absence of any officer, the Guard will discharge duties listed out for OC Site.

7.6 <u>Duties of OC Site – Immediately after the accident</u>

(i) Note down the time of accident.

(ii) Ensure protection of traffic by Guard and Driver.

(iii) Ensure reporting of accident to nearest Station/Control.

(iv) Roughly assess the extent of damage and likely number of casualties.

(v) Collect railway staff and volunteers from amongst the passengers and form different groups. Each of these groups should be assigned work as detailed at item 7 below.

(vi) Maintain a log of events.

(vii) Till Divisional Officers arrive and take over charge of the situation, continue to discharge duties of OC Site.

(viii) After Divisional Officers arrive, fully brief the DRM hand over charge to him.

(ix) The on-board OC Site should ensure issue of a detailed message with following information before leaving the site of the accident.

- Time/Date of accident.
- Location Km./between stations.
- Train number and description.

- Nature of accident.
- Approximate number of killed/injured.
- Extent of damage.
- Assistance required.
- Condition of the adjacent line, if any.
- Whether OHE is involved.

(x) From here onwards, the DRM of the accident involved division takes over charge as OC Site.

7.7 <u>Formation of Groups comprising members of Instant Action Team</u>

(i) OC Site shall immediately collect all Railway staff on train/at site and form separate groups.

(ii) Passenger traveling by the same train who volenteer for rescue and relief work should be drafted into these groups.

(iii) Passengers from accident involved coaches should be directed towards their own coach.

(iv) Passengers from coaches which are not effected can be distributed amongst other accident involved coaches.

(v) In the absence of OC site, TS/TTE shall take steps to form such groups.

(vi) In the absence of TS/TTE the Guard/Assistant Guard shall take steps to form such groups.

(vii) 5 or 6 groups should be formed depending on number of coaches involved.

(viii) Ideally, one group should be formed for handling each coach.

(ix) In case sufficient number of officers are present, then one officer should be made in-charge of each group.

(x) Otherwise, Sr. Supervisors travelling by the accident involved train should be nominated as in-charge of each group to co-ordinate its working.

(xi) In case sufficient number of Sr. Supervisors are also not present, one TTE should be nominated as in-charge of each group to co-ordinate its working.

(xii) Each group should rescue injured, entrapped passengers.

7.8 <u>Duties of on board railway staff immediately after the accident</u>

(i) Don’t panic. Once the accident has already occurred and the train has come to a standstill nothing worse can happen.

(ii) In case you have a Mobile and it is working, inform the divisional control office immediately about the accident.

(iii) Observe the position in which your coach has stopped; whether it is standing upright or turned upside down or lying on its side.

(iv) Try and see whether your coach has stopped on a bridge or whether there is level ground on both sides.

(v) In case the coach is on a bridge or very high embankment or in case it is raining heavily, then it is better to wait for some time and not be in a hurry to leave the coach. You may be jumping from the frying pan into the fire.

(vi) Search your coach with your torch and try to determine the general position.

(vii) See that passengers don't panic either. Passengers sometimes make things worse for themselves by panicking at this critical moment. Try to calm them and build up their confidence.

(viii) Ascertain whether passengers are injured or not; and whether any of them are trapped or pinned down inside the debris.

(ix) Call out aloud and find out whether there are any doctors present.

(x) Doctors who are travelling in the coach should be asked to announce their presence so that they can attend to and help injured passengers.

(xi) Call out aloud and find out whether there are any railway staff present.

(xii) Railway staff who are travelling in the coach should be asked to announce their presence so that they can attend to and help other passengers.

(xiii) For each coach, form a core team comprising of railway staff available, doctors and 3 or 4 uninjured passengers from the same coach. This core team should take the lead in helping remaining passengers both injured and uninjured.

7.9 <u>Duties of members of Instant Action Team – Till arrival of Divisional Officers</u>

(i) If a person is bleeding and loosing blood, or if he is unconscious, then in that case you have to act quickly. 'Golden Hour' should be kept in mind. You may have at the most only one hour's time on hand.

(ii) In such cases, immediately administer First Aid to the injured passenger and try and stop further loss of blood.

(iii) Persons trained in first aid may do 'Cardio Pulmonary Resucitation'. This may save several lives.

(iv) If the door is open and is accessible, then uninjured passengers should be helped to come out from the door.

(v) In AC coaches the windows panes should be broken open in order to let in fresh air for the occupants, and thereafter to evacuate them.

(vi) Non – AC coaches have one emergency exit window on each side. The position of this emergency window is 5th from the left when facing the line of windows from inside the coach. They are opposite berth nos. 23 and 57. In case the door is locked and jammed, try and open these windows so that some of the uninjured passengers can come out through the emergency exit.

(vii) Special care should be taken while evacuating the old, infirm and children in order to ensure that they are not separated from their family members.

(viii) Extrication of critically injured should be done under medical supervision as far as possible.

(ix) In case medical supervision is not available, then critically injured passengers should be made to lie down on a bed sheet and thereafter taken out by 4 persons

holding the four corners. This will ensure that no further damage takes place. (Bed sheets will be available in AC coaches).

(x) Passengers who are bleeding from open cuts should be tied up with strips of cloth so as to reduce if not stop the bleeding altogether.

(xi) It is better not to take out the luggage from inside the coaches at the first instance, for two reasons. Firstly, passengers both injured and uninjured should get preference in this evacuation process. Secondly, it may be safer for the luggage to be left inside where there are less chances of their being stolen or pilfered.

(xii) After passengers have been evacuated from your coach, cross check with the reservation chart and against the name of each passenger note down as to whether he/she is injured or not.

(xiii) After all passengers have been evacuated, water and eatables can be taken out gradually.

(xiv) Building up confidence of injured passengers by suitable advice is of great importance.

(xv) After helping evacuate all passengers from your coach go over to the unreserved coaches and provide similar help to those passengers also.

(xvi) Railway officials from divisional hdqrts. generally arrive at the site of the accident within 2 to 3 hours, depending on the distance of the accident site from the divisional hdqrts. Wait for them to come and make further arrangements.

(xvii) Grievously injured passengers who are bleeding or those who are unconscious require immediate hospitalization. In case some local people have arrived by that time, their help should be taken in shifting the grievously injured to the nearest hospital.

(xviii) In case your train has been involved in an accident but neither has your coach derailed nor are any passengers of your coach injured, then you should go to the unreserved coaches and carry out the duties as listed above.

7.10 <u>Duties of the Instant Action Team – In case of a fire</u>

(i) In case of fire pull the Alarm Chain and stop the train immediately.

(ii) Try and put out the fire before it becomes a big blaze by using either water or blankets etc.

(iii) More people expire due to suffocation from smoke rather than due to actual burning.

(iv) Advise passengers to take a cloth, wet it in their drinking water and cover their nostrils.

(v) Instruct passengers to go to the other end of the coach which is away from the fire and if possible cross over to the next coach through the vestibule.

(vi) Insist that passengers should save themselves first and not to bother about their luggage which can be retrieved later on.

(vii) Make sure that no passenger lies down on the floor.

(viii) After train has stopped, passengers should come down from the coach immediately.

(ix) Building up confidence of injured passengers by suitable advice is of great importance.

7.11 Duties of OC Site - till arrival of divisional officers

Having formed different groups consisting of available railway staff on the train and volunteers from amongst passengers, the rescue and relief work should be got started in right earnest. This entire exercise would take about 30" time. Once the rescue and relief work by the Instant Action Team has got underway, the OC site should then devote his attention to contacting First Responders.

7.11.1 Locating nearby villages:

(i) There would be some villages nearby, either visible or out of sight.
(ii) In most cases, villagers turn up on their own having heard the sound of the disaster.
(iii) Otherwise, try and see if any light or any other signs from the village are visible.
(iv) In case none of the above is possible, then speak to either the control office or the nearest station and find out the location of nearby villages as also their general direction.
(v) Location of nearby villages as also their general direction will be available in the Divisional DM Plans.
(vi) Having ascertained the general location of nearby villages, send messengers (preferably railway staff) to inform villagers and seek their assistance.

7.11.2 Locating the nearest manned level crossing gate

(i) The train driver is the best and fastest source of information regarding location of the nearest manned level crossing gate in either direction.
(ii) Send a messenger (preferably a railway staff) to the gate for contacting the gateman.
(iii) In most cases, the gateman will be able to give location of nearby villages.
(iv) The messenger should then try and stop a passing vehicle and go to the nearby village, inform villagers and seek their assistance.

7.11.3 Organizing assistance from local people available in near by villages

(v) Villagers should be asked to make an announcement from their loud speaker (generally available in the local temple, mosque, gurudwara, church etc.) informing others regarding the accident.
(vi) Everybody should be asked to rush to the accident site with following :

- Tractor trolleys (both for transportation as also for general lighting),
- As many cutting implements, hammers, chistles etc. as are available,
- Ropes,- ladders,

(vii) If doctors or para-medical staffs are available in the village they should also be sent to the accident site.

(viii) The messenger should stay back and try and organize opening of a big building (preferably a school) for sheltering of injured passengers and/or preservation of dead bodies.

7.12 Duties of First Responders – Local people:

7.12.1 At Accident site :

(i) Tractors which arrive should be lined up in a row facing the track with their headlights switched ON for illuminating the accident site.

(ii) Tractors should be so spaced out that they illuminate the entire length of the accident site. Such spacing would also depend on number of tractors that have arrived.

(iii) Rescue and relief work should now be mounted under the available light.

(iv) Villagers arriving for rescue and relief work should be formed into separate groups for handling individual coaches.

(v) Group leaders of IAT who were earlier conducting rescue and relief work should co-ordinate with the local people and guide them.

(vi) Grievously injured passengers extricated from coaches should be sent to the nearest hospitals in tractor trolleys.

(vii) Passengers who have suffered Trivial injuries and uninjured passengers should stay back at accident site and wait for arrival of railways DM team who would take charge of them.

(viii) As a thumb rule, any injury requiring hospitalization of more than 48 hrs. is grievous, hospitalization of less than 48 hrs. is simple, and any injury not requiring hospitalization at all is trivial.

(ix) The following priority should be adhered to while sending such grievously injured passengers:

- Unconscious,
- Bleeding excessively,
- Having breathing problems,
- Grievously injured,
- In a state of shock,
- Having fractures,
- Simple injured.

(x) Dead bodies, if extricated should be kept alongside the coach but away from the track for proper tagging etc. before being dispatched for preservation.

(xi) Bodies should be kept in separate lots, coach-wise, so that they do not get mixed up.

(xii) Tagging of dead bodies should indicate the coach number and also the cabin number, if possible. (For example NER 98127, cabin number containing berths 9-16)

7.12.2 <u>In villages/towns</u>:

(i) A big building, preferably a school building should be got vacated and made ready for keeping of dead bodies and unclaimed luggage of passengers.

(ii) They should be asked to bring the following to the accident site for train passengers :

- Tea and refreshments,
- Warm clothing, if required.

(iii) Look after injured passengers who have been taken to the village.

(iv) Take injured passengers to the nearest hospital by means of any transport available. For this purpose, apart from tractor trolleys, even trucks passing on the highway can be utilized.

CHAPTER – 8

DISASTER RESPONSE – ASSISTANCE FROM ADJOINING DIVISIONS/ZONES

8.1 Necessity of assistance from adjoining Divisions/Zones :

(i) No division can be equipped to handle a disaster of such a large magnitude like Ferozabad or Gaisal.

(ii) Assistance has to be sought from adjoining Divisions/Zones.

(iii) A division is normally expected to handle an accident of the magnitude involving up to 100 injuries (Grievous + Simple). Threshold levels have been given in terms of injuries, because initially it is difficult to estimate number of casualties.

(iv) Whenever number of injuries is estimated to go beyond 100, assistance should be sought for from adjoining Divisions/Zones.

(v) This is to be co – ordinated by the Chief Emergency Officer in Hdqrts. Emergency Cell.

8.2 Assessment of assistance from adjoining Division/Zones :

(i) DRM after reaching the accident site should make an immediate assessment of likely injuries.

(ii) Quick assessment is an absolute must in order to ensure that assistance from adjoining divisions can be rushed at the shortest possible time.

(iii) Assessment made by DRM should be based on number of coaches involved.

(iv) As a thumb rule, for each coach that has capsized, 30 injuries should be estimated.

(v) Total injuries estimated would be (no. of coaches) x 30.

(vi) This should be conveyed to Sr. DOM in Divisional Emergency Cell and Chief Emergency Officer in Hdqrts. Emergency Cell.

(vii) Based on the above figures, decision should be taken and assistance rushed from adjoining divisions and zones.

8.3 Scale of assistance from adjoining Division/Zones :

(i) As a thumb rule, assistance of 1 team should be sought from adjoining division for every 50 additional injuries, beyond 100 injuries.

(ii) In case of all disasters, following should be used as an approximate guideline for deciding level of assistance required :

Threshold level	150 (Injuries > 100)	250 (Injuries > 200)
No. of teams	1 team	3 teams
ARMVs	2	2 + 2
140T crane	2	2 + 2 BDs

(iii) Complement of staff in each team sent by adjoining divisions/zones will be as per norms given below :

- Officer in charge Senior Scale
- Doctors 5
- Para – medical staff 10
- Commercial officers 2
- Commercial supervisors 10
- Commercial staff 20
- Personnel supervisors 5
- Group 'D' staff 20
- RPF 1 platoon

(iv) In case of Izzatnagar Division, assistance should be sought from following divisions in the given order of priority :

Name of division No. of teams

- Agra (NCR) 2
- Lucknow (NR) 1
- Moradabad (NR) 1

  Total 4

(v) In case of Lucknow Division, assistance should be sought from following divisions in the given order of priority:

Name of division No. of teams

s
- Lucknow (NR) 3
- Moradabad (NR) 1

  Total 4

(vi) In case of Varanasi Division, assistance should be sought from following divisions in the given order of priority :

Name of division No. of teams

- Sonpur (ECR) 2
- PRAYAGRAJ (NCR) 2
- Lucknow (NR) 2
- Pt DD Upadhayaya Jn.(ECR) 1

  Total 7

8.4 Assistance from Defence & Para Military forces:

(i) Assistance should be sought from nearest army & para – military establishments.

(ii) Railway staff no matter how dedicated and loyal, are not experts in extricating dead bodies, handling injured passengers, their evacuation etc.

(iii) Army has the necessary expertise and are trained and equipped to handle such a war like situation.

(iv) Therefore, divisional/zonal hdqrts. should get in touch with the nearest army command and request for necessary assistance.

(v) Select telephone numbers of Army and Para – military establishments are given in Annexure.

(vi) Additional telephone numbers of Army are given in Divisional DM Plans.

8.5 <u>Departmental assistance from adjoining divisions/zones</u>:

(i) <u>S&T Department</u> :

(i) Satellite telephones from ARTs of adjoining divisions.

(ii) 4 Mobile Telephones from each ART of adjoining divisions (20 mobiles in all).

(ii) <u>Electrical Department</u> :

(i) Generators from ARTs of adjoining divisions.

(ii) Lighting equipments from ARTs of adjoining divisions.

(iii) Portals and OHE masts.

(iii) <u>Civil Engineering</u> :

(i) 500 additional workmen are required who are to be moved from adjoining divisions/zones.

(ii) Each such division sending assistance should move 250 men along with 5 artisans and 5 PWIs.One DEN and one AEN each should also move to the site of accident from each such division.

CHAPTER – 9

9.1 SITE MANAGEMENT PLAN - I

There are 2 aspects of Disaster Management work at an accident site. Firstly, rescue, relief and restoration operation which is carried out by one set of functionaries. Second aspect pertains to rehabilitation of accident involved passengers, taking care of dead bodies, dealing with their relatives etc. for which a different set of functionaries are required. For managing these 2 distinct aspects of DM work that are required to be discharged by railways, two separate establishments should be set up at an accident site. The outline schematic plan of accident site is given at Annexure - 1.

9.1.1. Unified Command Center (UCC) :

(i) Unified Command Centre (UCC) should be set up at the accident site.

(ii) This will be some kind of a control office to be located near the centre of the accident site.

(iii) This is basically meant for catering to operational needs of railway in rescue, relief and restoration work.

(iv) Detail schematic plan of UCC is given at Annexure - 2.

(v) UCC is to be manned by staff of relevant departments such as :- Medical, Commercial, Operating, Safety, Security, Public Relations, Mechanical, Electrical,-S&T, Civil,

(vi) UCC will be provided with all facilities similar to a control office.

(vii) Adequate lighting with generator backup should be provided in the UCC.

(viii) Adequate number of telephonic links to Divisional Emergency Cell and Hdqrts. Emergency Cell should be provided. Preferably each department in the UCC should be given an independent telephone.

(ix) Satellite telephone should be installed in the UCC.

(x) UCC should be provided with FAX, Photocopier, PCs, loudspeakers.

(xi) PC/Laptop should be connected to internet for E-Mailing of detail update to all concerned, including Divisional Emergency Cell, Hdqrts. Emergency Cell and Helpline Enquiry Booths.

(xii) A big banner displaying 'UNIFIED COMMAND CENTER' should be put up at a prominent place at the entry to the shamiana.

(xiii) Similarly there should be sufficient number of signages indicating the way to UCC on approach roads etc.

(xiv) UCC at the site will be manned by Sr. Supervisors on round the clock basis in 12 hrs. shift duty.

(xv) Officers will not be permanently stationed in UCC. They will move about the entire accident site supervising and monitoring working of their department at different activity centers. However, they will keep coming to the UCC off and on and will kept in tough with their departmental functionaries in UCC.

(xvi) Various functionaries in the UCC will monitor and co-ordinate the working of their departments, and assistance required by them, if any.

(xvii) Each functionary at the UCC will maintain a log book. Flow of information both incoming and outgoing would be recorded along with the time and names of officers/staff who were given the message.

(xviii) UCC will basically supervise the working of 2 LCCs and co-ordinate with Divisional and Hdqrts. Emergency Cells.

(xix) Functionaries of different departments in LCCs should provide updated information regarding progress of work to their counterparts in UCC.

(xx) This updated information should be provided once every 3 hrs. as per the following timings :- 1/- hrs., 4/- hrs., 7/- hrs., 10/- hrs., 13/- hrs., 16/- hrs., 19/- hrs., 22/- hrs.

9.1.2 Local Command Centers (LCC)

(i) Depending on the spread of the accident site, Local Command Centers (LCC) on the same pattern as the UCC should be set up.

(ii) If the site is spread out over 300 – 400 mts. 2 LCCs should be set up.

(iii) Detail schematic plan of LCCs would be similar to that of UCCs as given at Annexur−2.

(iv) Representatives of same departments as in UCC should be present in LCCs also. However, they should be either one or at most 2 men per department.

(v) LCCs will serve as co – ordination centres for various teams that are working spread out over different geographical locations.

(vi) Each LCC will oversee the working of DM teams at one end of the accident site.

(vii) Jurisdiction of each LCC will extend to all men and materials belonging to 2 ARMVs, 1 BD special and 1 ART at that end of the accident site.

(viii) One SAG officer of Mechanical department will be overall in charge of each LCC.

(ix) LCCs should be provided with loudspeakers for making announcements.

(x) LCCs should be provided with direct telephonic links to UCC.

(xi) However, LCCs should not be provided with telephonic links to either Divisional Emergency Cell or Hdqrts. Emergency Cell. This will ensure that there is minimum telephonic disturbance from outside to teams which are actually working at the accident site. It will also ensure that outflow of information from accident site goes out from UCC only.

(xii) Members of different teams of each department working at the accident site in rescue, relief and restoration work should provide updated information regarding progress of work to their respective functionaries at the LCC.

(xiii) This updated information should be provided once every 3 hrs. as detailed at 1 (xx) above.

9.1.3 Need for setting up of Central Assistance Center :

(i) Relatives of passengers who arrive at an accident site are already traumatised by the tragedy.

(ii) They arrive at an unknown location with no place to stay, no friend or acquaintances and not knowing whom to turn to.

(iii) The problem is made even more challenging since many relatives and next of kin come from far flung areas in some other state.

(iv) Being semi – literate and from different parts of the country some of them are not even familiar with the local language. For them even communicating becomes a problem.

(v) In addition to above, complex legal formalities & multiplicity of paper work is required to be completed before dead bodies are handed over to their next of kin.

(vi) For taking care of relatives of passengers, providing them with succor in their hour of agony and for guiding them sympathetically, some kind of an assistance centre is required.

9.1.4 Formalities required to be completed by relatives of passengers :

(a) Sequence of formalities that are required to be completed by relatives of injured passengers include:

(i) Locating the name of the passenger on reservation charts, in case passenger was travelling in reserved accommodation.

(ii) Going through the list of injured and dead passengers to find out whether the name appears.

(iii) In case the name is not available in the list, then taking a round of different hospitals to find out whether their relative has been admitted in one of them in an unconscious state.

(iv) Hospitals are generally at separate locations, sometimes even in different towns; and commuting becomes a problem.

(v) In case the passenger can be located in one of the hospitals, they have to find out the severity of injuries, likely period of hospitalisation etc.

(vi) Collect the ex – gratia paid by railways.

(vii) Try and locate missing luggage of the injured passenger. For this they have to take a round of the building where all unclaimed luggage have been kept.

(viii) Next they have to arrange for a place for themselves to stay.

(ix) Arrange for medicines/diet etc. and payment of hospital bills, if required.

(x) Thereafter, they have to keep in touch with the hospital and get their relative released.

(b) Additional formalities that are required to be completed by next of kin of dead passengers include:

(i) In case the passenger could not be located in any of the hospitals, then they have to go to the building where unidentified dead bodied have been kept.

(ii) Take a round of various rooms where bodies have been kept, examine each body and try and locate their near and dear one.

(iii) Identify the dead body, if the same has been extracted by then.

(iv) Otherwise wait for all bodies to be extracted and try and identify their relative.

(v) In case they fail to identify the same then they have to go through photographs of unidentified bodies taken at site.

(vi) After the body is finally identified, they have to produce proof of relationship for railways to entertain their claim.

(vii) Obtain medical death certificate from the railway doctor.

(viii) Obtain post mortem report, from the Govt. doctor who has performed post mortem on the body.

(ix) Obtain official death certificate from the local municipality.

(x) Accept of ex – gratia payment from railways.

(xi) Collect forms for lodging claim for compensation in RCTs.

(xii) Take over custody of dead body from the local police.

(xiii) Perform last rites at the same place or take back the body to their native place, depending on circumstances.

(xiv) Make arrangements for their return journey back to their native place.

9.1.5 <u>Problems encountered by relatives</u> :

(i) Each of these formalities are under the jurisdiction of a different agency, either railway, or police, or civil administration, or local administration.

(ii) In such a situation the level of co – ordination between these various agencies leaves much to be desired.

(iii) Sometimes it even takes up to 48 hours before all these documentary formalities can be completed.

(iv) In most cases, relatives have to run from pillar to post for completing all these formalities and the bitter experience leaves them permanently antagonized towards railways.

(v) For this purpose a single window clearance system should be available for relatives and next of kin.

9.1.6 <u>Combined Assistance Center (CAC)</u> :

(i) The UCC should have a Combined Assistance Centre (CAC) located towards the rear side, away from the track, for rendering help to passengers and their relatives. Outline schematic plan of UCC/CAC is given at Annexure – 1.

(ii) This is basically meant for catering to requirements of passengers and their relatives/next of kin, and for providing a single window clearance for all types of formalities.

(iii) CAC should be separate from the UCC so that it does not interfere with normal rescue and relief work.

(iv) Detail schematic plan of CAC is given at Annexure - 3.

(v) CAC will be manned by staff of relevant departments such as :

- Operating, Medical,
- Commercial, Security,
- Personnel,

(vi) There should be only one such CAC, and all railway resources should be pooled into it.

(vii) LCCs should <u>not</u> have any small CAC located in the rear. It is likely to create logistic problems.

(viii) A big banner displaying 'COMBINED ASSISTANCE CENTER' should be put up at a prominent place at the entry to the shamiana.

(ix) Similarly there should be sufficient number of signages indicating the way to CAC on approach roads etc.

(x) Railway staff fluent in the language of relatives should be posted for doing work of interpreters.

(xi) Post mortem formalities should be waived off so that number of formalities gets reduced by one.

(xii) Different counters should be provided in sequence for each of these formalities, so that the entire exercise can be completed in about an hour.

(xiii) Functionary concerned from the local Municipality who issues Official Death Certificates should be made to come and sit in the CAC so that these certificates can be issued immediately without any delay.

(xiv) CAC should have different counters for various purposes in following sequence :

(a) Reservation chart, for locating the name.

(b) List of dead and injured along with name of hospital. The name of passenger involved should be checked up from the list of dead or injured, if available, and their current status informed.

(c) Counter for providing commercial supervisor or WLI as escort along with a vehicle, for accompanying the relative and going to hospitals or mortuary.

(d) Railway doctor for issue of Medical Death Certificate.

(e) Govt. doctor for issue of Post Mortem Certificate, in case the same is necessary.

(f) Municipality official for issue of Official Death Certificate.

(g) Local police for issue of authority for handing over of dead body.

(h) Claims counter - Payment of ex-gratia and issue of Claims Compensation form.

(i) Counter for helping performance of last rites in case relatives decide to cremate the body there itself.

(j) Pass counter for issue of return journey pass.

(k) Return journey facilitation counter for making arrangements for return journey.

9.1.7 First Aid Posts :

(i) Medical Posts should be provided in both UCC and CAC.

(ii) Medical Post in UCC will provide first aid to injured passengers after extrication, assess their injuries and make arrangements for sending them to nearby hospitals.

(iii) Medical Post in CAC will keep all records of injured and dead passengers, names of hospitals where they have been admitted etc.

(iv) FA posts should be provided in LCCs.

(v) This will be meant for treating passengers and classifying their injuries before they are sent for admission to various hospitals.

9.1.8 Setting up of UCC, LCC and CAC :

(i) One SSE/Works shall be exclusively responsible for setting up of these facilities. He shall undertake the following :

- move along with sufficient staff for setting up of these facilities.
- immediately start setting up of the tentage accommodation after taking out tents and shamianas provided in ARTs.
- In addition, he should also requisition agencies which provide tentage accommodation on contract. Details of such agencies have been given in Divisional DM Plans.

(ii) Bridge Line staff will assist in setting up tentage and above mentioned facilities. Dy. CE/Bridge will also move to the site and in case, bridge is not involved, he will take full charge of tentage arrangements.

(iii) Bridge Unit will take with them sufficient Manila ropes, wire ropes, survey instruments, binoculars, helmets, life jackets, ladders and other equipment. Nylon ropes should be sufficient in length to ensure barricading at sites and camping areas.

(iv) Sufficient facilities for erecting temporary stage/scaffolding etc. should also be organized, if required at site.

(v) Few temporary toilets should be provided at one location in addition to number of urinals at 3 or 4 places.

(vi) Water tankers will be ordered for supplying water at site and arrangements shall also be made for drinking water.

(vii) Temporary kitchen in tents/shamianas is to be set up so that catering unit or IRCTC can provide cooked food to staff working at accident site.

(viii) About 100 folding chairs should also be arranged.

(ix) Bridge Line staff will have list of divers who in case of emergency can be hired for rescue or restoration operations wherever site is surrounded by deep water.

(x) Signages for both UCC and CAC should be provided at prominent locations.

9.1.9 Collection and Dissemination of Information – Channel of Communication :

The following would be the responsibility and channel both for collection as also dissemination of information. Before each shift goes off duty, details of work done should be updated in the LCC.

The LCC should in turn update the UCC regarding the latest progress. This updated information would be conveyed to Divisional Emergency Cell every 3 hrs.

9.1.9.1 Number of dead and injured – Medical department :

(i) Medical department at site should confirm the number of dead.

(ii) Doctors in charge of various teams working on different coaches should give 3 hrs report to Medical counter in LCC who in turn will inform UCC.

(iii) Number of injured passengers.

(iv) Type of injuries, whether grievous, minor or trivial.

(v) Names of injured, and names of various hospitals where injured have been sent.

9.1.9.2 Identification of dead bodies – Commercial department :

(i) Ex – gratia paid to injured.

(ii) Number of dead bodies identified.

(iii) Ex – gratia paid to dead.

(iv) No. of bodies handed over to relatives.

9.1.9.3 Number of coaches dealt with – Mechanical department :

(i) No. of coaches thoroughly searched.

(ii) No. of coaches made off track.

(iii) No. of coaches yet to be dealt with.

CHAPTER – 10

SITE MANAGEMENT PLAN -II

Nominated officials from various departments arriving at site by ARMVs and ARTs form part of the Disaster Management 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 will also ensure that their work is synchronized with that of functionaries of other departments for quick rescue, relief and restoration operation.

(10.1) Members of the Disaster management Team:

10.1.1 Disaster Management Team normally comprises members of following departments:

(i) Trained railway men from Medical, Commercial, Safety, Electrical, S&T, Mechanical, Engineering, Security, Personnel and other departments.
(ii) In case of fire accidents, trained fire service personnel shall form part of this unit.
(iii) In case of an accident on water body, divers and naval cadets will also be part of the team.
(iv) In case of sabotage or bomb explosion, bomb disposal squads and GRP/Local Police will also be involved.
(v) Various rescue units shall accompany ARMVs, ARTs or move by road as quickly as possible.

10.1.2 Officer-in-Charge of Site (OC Site):

On arrival of ARMV at accident site DRM shall take over as OC Site from the senior-most officer of the accident involved train. On arrival of 1st Special train carrying GM and other hdqrts. officers, GM shall be OC Site. In the absence GM, the senior most officer shall be OC Site. He will be responsible for forming Core Groups as required and direct them to carryout efficient rescue, relief and restoration operations.

10.1.3 Rescue, Relief and Restoration Operation:

DM Team on arrival by ARMVs and ARTs shall undertake following actions:

(i) Crowd Control and Law and Order.
(ii) Rescue operation.
(iii) Relief operation.
(iv) Video coverage of accident site.
(v) Installation of Communication Network.
(vi) Clearance from State Police for restoration.
(vii) Preservation of Clues and Evidence.
(viii) Media Management at site.
(ix) Salvage operation.
(x) Restoration operation.

10.1.4 Photography:

Prior to starting restoration work at an accident site, divisions should undertake suitable video film coverage to the extent feasible. Still photography by digital camera

should also be undertaken extensively for its obvious advantages. The photograph should be taken from a vantage point and from as many angles as possible so as to give a bird's eye view as also close up photographs.

(i) Such photographs should clearly indicate:
- **Severity of the accident.**
- illustrate the damage to P-Way, Rolling Stock, Signal, OHE and other structures and equipment.

(ii) Separate set of photographs to be taken to preserve clues and evidence of sabotage if suspected.

(iii) Victims and unidentified bodies should also be extensively photographed as detailed in (D4) (xv).

(10.2) <u>General</u>:

For efficient Disaster Management, responsibilities of various departments are to be executed by deputing responsible officers and supervisors. Important duties of such officers/supervisors are enlisted as follows:

10.2.1 OC Site:

(i) Ensure setting up of UCC, CAC and LCC at the earliest.

(ii) Collect information from OC Site of IAT.

(iii) Take stock of the situation and plan for efficient rescue operation.

(iv) Estimate quantum of assistance required for each department from :
- within the division,
- adjoining divisions of NER,
- adjoining zones,
- non – railway agencies.

(v) Channelise local resources to supplement available railway resources.

(vi) Ensure that duties of various functionaries of different departments as laid down in NER's Zonal DM Plan are carried out.

(vii) Ensure co-ordination among all departments for efficient rescue, relief and restoration operation.

(viii) Ensure information to SP Police and District Magistrate.

(ix) In case of sabotage, direct RPF to obtain quick clearance from State Police.

(x) In case of serious explosions or fire, clearance from Controller of Explosives is to be obtained.

(xi) Give prima facie cause of the accident along with forecast of expected date and time of restoration.

(xii) Ensure timely information on the progress of rescue, relief, and restoration work every 3 hrs. with following details :
- Number of coaches searched.
- Number of injured passengers recovered.
- Nature of injuries to passengers.
- Number of bodies recovered.
- Number of bodies identified.
- Number of coaches dealt with.
- Supplementary assistance required, if any.

(xiii) Forecast for completion of each activity mentioned below should also be firmed up. These target dates and times should be communicated to all officers and supervisors at accident site :

- Re – railment.
- Track fitness.
- OHE fitness.
- Points and inter – locking.
- Clearance of section.
- Movement of first train.

10.2.2 Duties of Divisional Railway Manager:

(i) Ensure that functionaries of different branches at the accident site carry out duties assigned to them as per Zonal and Divisional DM Plan.

(ii) Co-ordinate with Divisional Emergency Cell regarding assistance requird.

(iii) Co-ordinate with Civil Authorities especially with regard to :

- Requisitioning of buses from State transport authorities, with drivers for round the clock duty.
- Waiving off of Post Mortem formalities.
- Positioning of Municipal Official in the CAC for issuing of Official Death Certificate.

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

(i) At the accident site, departmental officers available from both hdqrts. and division shall be formed into two teams for round the clock working in 2 shifts, preferably 8 hrs. to 20 hrs. and from 20 hrs. to 8 hrs.

(ii) PHODs/CHODs shall be available on duty during the day time.

(iii) PHODs/CHODs shall take on the spot decision regarding composition of the team for night shift for their respective department. This composition should <u>not</u> normally be changed during the 3-4 day stay at the accident site.

(iv) Branch Officers shall be available on duty during the day time.

(v) Branch Officers shall take on the spot decision regarding composition of the team for night shift for their respective department. This composition should not normally be changed during the 3-4 day stay at the accident site.

(vi) Similarly, supervisors available from both hdqrts. and divisions shall also be put in two teams.

(10.3) <u>Duties of Operating Department</u>:

Immediately after getting the information:

(i) All sectional TIs and Supervisory SSs should be directed to reach the accident site by first available means.

(ii) Similarly additional RG/LR staff from the section should be sent to 3 stations on either side so that SMs can be free for going to accident site.

(iii) Since considerable amount of shunting is required to be performed at adjoining stations, 2 traffic supervisors in 2 shifts should be posted at adjoining stations on each side.

(iv) Ensure that special trains are sent into the accident affected block section according to the sequence detailed in Chapter 9, Section 4.

(v) Ensure proper marshalling of crane while proceeding to the accident spot in the block section.

(vi) Ensure that Engineering vans of the ART are placed nearest to the accident site. For this purpose, Engineering van/wagon should be placed closest to site of accident by sending it in pushing condition.

(vii) Ensure prompt clearance of stranded passengers at the site in coordination with the Divisional Emergency Cell.

(viii) Regarding running of special trains, keep in touch with Divisional Emergency Cell and give requirement from site.

(10.4) Duties of Safety Department:

(i) Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed till police clearance is received.

(ii) Ensure that video/still photographs by digital cameras are taken as required.

(iii) Ensure that joint measurements, observations are recorded in the prescribed Performa before restoration work begins.

(iv) Ensure that unaffected rolling stock is moved away from the site and thereafter stabled at convenient location for further examination during accident inquiry.

(v) Ensure that evidence of train staff, station staff and public are recorded on the spot.

(vi) Addresses of passengers willing to give statements later should also be obtained.

(vii) Ensure that special trains are sent into the accident affected block section according to the sequence detailed in Chapter 9, Section 4.

(10.5) Duties Of Medical Department:

10.5.1 Main functions :

Main functions of the Medical department can be broadly classified as:

(a) Taking an initial round of hospitals and assessment of situation.

(b) Taking out injured passengers from accident involved coaches.

(c) Attending to injured passengers and giving them First Aid.

(d) Preparing list of injured passengers.

(e) Classification of their injuries.

(f) Transporting them to hospitals and getting them admitted.

(g) Post admittance hospital care of the injured.

(h) Dealing with dead bodies with care and respect.

(i) Preservation of dead bodies.

10.5.2 General:

(i) Ensure collecting blood and urine samples of train crew in case the same is necessary.

(ii) Organize as many road ambulances as possible at the accident site.

(iii) Data Bank of Divisional DM Plans have names, telephone numbers and other details of hospitals near the accident site. They should be contacted on phone for sending road ambulances along with team of doctors.

(iv) Set up Medical Counter in UCC and CAC for passenger assistance.

(v) Set up First Aid Posts in L C Cs.

(vi) Collect all relevant detail of local blood banks.

10.5.3 Site management:

(i) Leader of Team 'A' (Normally CMS/MS In-charge of the Division) would take control of the site, co-ordinate relief measures and distribute duties amongst doctors available as detailed below :

(ii) Different teams and groups will be formed for discharging various duties of the Medical department as detailed in Section (E1) above. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.

(iii) One group of doctors will take a round of various hospitals where injured passengers have already been admitted. (Para 4 below)

(iv) One group consisting of 4 – 5 teams of doctors and para-medics will take out injured passengers and dead bodies from accident involved coaches. (Para 5 below)

(v) One team will attend to injured passengers and give them First Aid and other medical treatment. (Para 6 below)

(vi) One team will prepare list of injured passengers, note down details of their injuries and classify them. (Para 7 & 8 below)

(vii) One team would be in-charge of transporting injured passengers to hospitals and getting them admitted. (Para 9 below)

(viii) One team would be in-charge of post admittance hospital care of the injured. (Para 10 below)

(ix) One team will deal with dead bodies after these have been extracted from coaches. They will prepare a list and arrange for their preservation. (Paras 11 & 12 below).

(x) In case sufficient doctors are available then more groups should be formed for rescue operations. (Para 5 below)

10.5.4 Taking an initial round of hospitals:

(i) Separate doctors will be deputed to visit each hospital where injured passengers have already been shifted.

(ii) One commercial officer will also accompany doctors and make a general assessment.

(iii) At the hospital, they should collect information about dead/injured persons, their name, age, sex, address, telephone no., name and telephone no. of relatives/friends, nature of the injury, etc.

(iv) These information should be immediately communicated to CMS/MS at accident site by using local PCO/cell phone etc.

(v) Prepare a list of persons dead/injured already in hospitals in three copies by using carbon paper.

(vi) The list thus prepared is to be signed by railway doctor on duty in the hospital. One copy is to be handed over to the Commercial Department.

(vii) 2nd copy to be kept with the doctor in charge as office copy and the 3rd copy to be given to paramedical staff to get multiple photocopies for further distribution.

(viii) One copy should also be sent to CAC for being fed into the PC provided in the CAC.

(ix) The initial list prepared should be updated at regular intervals, as and when any change occurs.

10.5.5 Taking out injured passengers:

(i) Maximum number of doctors should be deputed for this activity.

(ii) This group should consist of at least 4-5 teams. If numbers permit, more such teams should be formed.

(iii) Teams involved in rescue operation should ensure rapid access to all injured passengers.

(iv) They should take assistance of Mechanical/Engineering/RPF staff to extricate injured passengers.

(v) Each team will join up with teams of Mechanical staff who would also be involved in extracting dead and injured from coaches.

(vi) Maximum number of coaches should be tackled simultaneously, except those that have climbed on top or have telescoped into one another.

(vii) Coaches should be thoroughly searched including lavatory and vestibule portions before abandoning further search and moving on to the next coach.

10.5.6 Attending to injured passengers:

(i) One team will be asked to provide medical treatment to injured passengers immediately after their evacuation from coaches.

(ii) Ensure stabilization of condition of injured passengers already taken out from coaches, before they are dispatched to hospitals by road.

(iii) In case of patients in critical condition where stabilization of condition at site is not possible, they should be moved immediately by road ambulance or shifted to ARMV.

10.5.7 Preparing list of passengers:

(i) Collect list of injured passengers prepared by TS/TTEs and assess the situation.

(ii) Separate lists to be prepared coach wise.

(iii) The list should contain following details :

- If found Conscious: Name, sex, age, identification marks, address, ticket number, originating and destination station, any previous deformity.
- If found Unconscious: Approximate age, sex, identification marks, ticket number and other particulars if relatives and friends are available.

(iv) Once the preliminary list of injured passengers has been prepared, the list should be signed by the CMS/MS Incharge and a copy handed over to commercial department.

(v) The list of injured passengers will thereafter be updated periodically, as rescue and relief work continues.

10.5.8 Classification of Injuries:

(i) Injuries are classified as under :

(a) 'Grievous' injuries as defined below.

(b) 'Simple', but excluding 'trivial' injuries such as abrasions or bruises.

(ii) Following are considered to be grievous injuries (as per section 320 of the Indian Penal Code):

(a) Emasculation

(b) Permanent privation of sight of either eye.

(c) Permanent privation of hearing of either ear.

(d) Privation of any member or joint.

(e) Destruction or permanent impairment of powers of any member or joint.

(f) Permanent disfigurement of head or face.

(g) Fracture or dislocation of a bone or tooth.

(h) Any hurt which endangers life, or which cause the sufferer to be, during the space of twenty days, in severe bodily pain or unable to follow his ordinary pursuits.

(iii) Injuries other than those defined above are considered to be simple injuries.

(iv) Apart from injuries defined above, there may be cases where a passenger or trespasser receives only petty abrasions or bruises. These are of trivial nature and technically speaking should not be taken as injuries.

(v) As a thumb rule, any injury requiring hospitalization of more than 48 hrs. is grievous, hospitalization of less than 48 hrs. is simple, and any injury not requiring hospitalization at all is trivial.

(vi) Classify injured passengers into separate categories as grievous or simple.

(vii) Inform Commercial department for arranging ex-gratia payment.

10.5.9 <u>Transporting injured passengers to hospitals</u>:

(i) One team will be asked to arrange transport of injured passengers to nearby hospitals.

(ii) Ensure expeditious transportation of injured either to AMRVs or to nearby hospitals.

(iii) Critically injured passengers should be transported by means of road ambulances and other by means of ordinary road vehicles.

(iv) Commercial staff should also be associated with transfer of injured passengers to hospitals.

(v) Before doctors and supervisors leave the accident site for hospital duty, they should note down the DOT and Mobile Telephone No. of the accident site, CMS, MS and other doctors at the site for quick communication.

(vi) Doctors going to different hospitals should have separate vehicles.

(vii) In case sufficient numbers of railway vehicles are not available, they should hire taxis for their movement by withdrawing from station earnings.

10.5.10. <u>Post admittance hospital care</u>:

(i) One railway doctor, one commercial supervisor and one welfare inspector should be deputed round the clock at each hospital.

(ii) Normally one doctor should look after one hospital, along with a commercial supervisor and WLI.

(iii) If large no. of hospitals are involved 2/3 hospitals may be given to one doctor. In that case, the doctor, in consultation with CMS/MS, should station himself at the hospital where maximum no. of patients are admitted.

(iv) Make an assessment about capabilities of the hospital to handle injured persons especially with reference to types of injuries they have suffered. Decide whether the patient needs to be shifted to other hospital with better facilities and then arrange to shift the patient.

(v) In case any injured passenger succumbs to his injuries in the hospital, then the doctor in-charge of that hospital should update this fact to the medical counter at CAC.

10.5.11 Dealing with dead bodies:

(i) Problem faced by rescue teams is regarding dealing of dead bodies.

(ii) On IR it is not clearly spelt out as to who will deal with them.

(iii) Accident Manual is silent as to who will extricate dead bodies from coaches, and then take them to either hospital or the mortuary.

(iv) It can only be inferred that Medical Department will do this work.

(v) In case of a major disaster, the usual complement of medical staff in any ARMV is grossly inadequate for undertaking work of this magnitude.

(vi) Adequate number of Safaiwalas and other health workers who have come to the accident site should be mobilised for this purpose.

(vii) Often rescue and relief operations continues for more than 48 hours.

(viii) Dismembered bodies begin emitting foul odour after two days. Carrying out this task under such circumstances became a real problem.

(ix) Target should be to extricate all dead bodies within 24 hrs.

(x) Dead bodies should be dealt with coach wise, otherwise bodies taken out from different coaches get mixed up.

(xi) Bodies taken out from coaches should be stacked at quite some distance from the track in front of respective coaches, in separate lots, coach-wise. While this may slow down the work initially, in the long run it is more systematic since bodies don't get mixed up.

(xii) Shift dead bodies from coaches to a nominated place at the accident site with the help of paramedical staff, SJAB, Scouts, Civil Defence personnel, other railway staff and non-railway volunteers available at site.

(xiii) Ensure covering of dead bodies with shrouds.

(xiv) Put cloth label (white cloth of 12" x 9" written by Marker pen) on each dead body on the chest just below the neck as below :

- Date _____
- Dead body Serial No. _____
- Name _____
- Age _____ Sex _____
- Coach No. _____

(xv) In case of unidentified dead bodies, against the item 'name', it should be written as unidentified-1/unidentified-2, etc. Approximate age should be estimated from the appearance, such as between 35 – 45 years.

(xvi) 5 photographs preferably by digital camera should be taken of each dead body. Two should be close up of face from in front and sideways, third should be with the label visible as per item (xiii) above and fourth and fifth should be of full length of the body.

(xvii) If possible each body should also be video photographed.

(xviii) After photographs have been taken, each body should be placed inside a plastic bag with zip having proper labeling system where same information is also to be provided.

(xix) After this, bodies will be handed over to GRP or Local Police for safe custody.

(xx) Take necessary steps to handle unhygienic condition that may arise due to decomposed/mutilated bodies.

10.5.12 <u>Preservation of dead bodies</u>:

(i) Numbering and photography of bodies should be done even when relatives are on hand to claim the body.

(ii) Arrangements have to be made for a more permanent location for them till such time as the next of kin arrive to claim these bodies.

(iii) In all such accidents passengers are invariably separated from their belongings. As such in many cases there are no tickets or other identification papers on their persons.

(iv) This problem is further compounded in unreserved coaches where no reservation charts are available.

(v) Identification problems come up in case of mutilated bodies also. In such cases, photographs are better means of identification.

(vi) Arrange for hiring of a couple of big halls, for keeping bodies.

(vii) Rooms should preferably be at a single location so that relatives do not have to go around from mortuary to mortuary.

(viii) A large building having number of rooms would be ideal for storing them. Best option would be to take over a school building temporarily.

(ix) Arrange to move dead bodies to nominated buildings being used as temporary mortuaries.

(x) Bodies should be neatly lined up with their numbers prominently displayed, and kept in different rooms, coach-wise.

(xi) Notice Board outside the building should display the room nos. where bodies extracted from a particular coach have been kept.

(xii) These details should also be posted on a notice board outside each room.

(xiii) This will prevent unnecessary handling of bodies which in any case would be in an advanced state of decomposition.

(xiv) For dead bodies whose relatives are not readily available and delay is expected, arrange for their preservation by dry ice etc.

(xv) Procure following items from local market for dealing with dead bodies.

- Shrouds,
- Polythene bags,
- Coffins,
- Dry ice.

(xvi) 4 Commercial supervisors should be put on round the clock duty in the building housing the temporary mortuary for guiding relatives as and when they come.

(xvii) Take necessary step to handle unhygaienic condition that may erise due to decomposed/mutiloted bodies.

(10.6) <u>Duties of Commercial Department</u>:

10.6.1 <u>Main functions</u>:

Main functions of the Commercial department can be broadly classified as:

(a) Withdrawl of cash from station earnings.
(b) Hiring of road vehicles.
(c) Providing beverages and catering to injured and uninjured passengers.
(d) Initial round of hospitals and assessment of situation.
(e) Preparing list of injured passengers.
(f) Transporting them to hospitals and getting them admitted.
(g) Payment of ex-gratia to injured and next of kin of dead.
(h) Dealing with refund and claims compensation formalities.
(i) Taking charge of luggage and consignments.
(j) Post admittance hospital care of the injured.
(k) Taking care of relatives.

10.6.2 <u>General</u>:

(i) Before Sr. DCM proceeds to accident site he should withdraw sufficiently large amount of cash from station earnings. (Para 3 below)
(ii) At the accident site, handpicked commercial supervisors should be deputed for manning commercial counters in UCC and CAC.
(iii) Each commercial counter in CAC is to be manned by one group as detailed in Chapter 11, Section 6(xiv).
(iv) Different teams and groups will be formed for discharging various duties of the Commercial department as detailed in Section (F1) above. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.
(v) Separate teams and groups should be formed as detailed below, headed by a commercial officer.
(vi) One team will hire road vehicles for use and other related activities.
(vii) One group will arrange beverages and food both for injured as also for uninjured passengers.
(viii) One team will take an initial round of hospitals along with doctors and assess the situation.
(ix) One group should take care of uninjured passengers who have to be cleared from the accident site.
(x) One group will assist Medical department in preparing a list of injured passengers input the same into the PC in CAC.
(xi) One group will assist Medical department in shifting injured passengers to hospitals.
(xii) One group will assist the Medical department in preparing a list of dead bodies and looking after them.
(xiii) One team will make ex-gratia payment to injured passengers and next of kin of dead.
(xiv) One team will deal with refund cases and claims compensation formalities.
(xv) One group will be in-charge of unclaimed luggage and other consignments.
(xvi) One group will be in-charge of post admittance hospital care of injured and taking care of relatives as detailed in Chapter 10 under ‘Passenger Care’.

10.6.3 <u>Withdrawl of cash from station earnings</u>:

(i) In order to meet accident related expenditure, officers can withdraw money from station earnings duly following the procedure incorporated in Commercial Manual Vol. II Rule No. 2425.

- Departmental expenditure necessitated by floods, accidents or earthquakes, etc. (8)
- Ex-gratia payments to persons involved in train accidents. (22)

(ii) Before Sr. DCM leaves for accident site, he should withdraw sufficiently large amount of cash from station earnings to meet with immediate requirements at the site.

(iii) More should be withdrawn subsequently as and when required.

(iv) Procedure and accountal as detailed below should be followed.

(v) A commercial supervisor should be nominated for this purpose and he should withdraw Rs. 5 lakhs and carry it with him, duly escorted by RPF personnel.

10.6.4 <u>Hiring of Vehicles</u>:

(i) A large number of road vehicles are required at an accident site for following purposes :

- Taking injured passengers to hospitals.
- Taking doctors and other railway officials to hospitals.
- Clearance of uninjured passengers.
- Taking dead bodies to mortuaries.
- Bringing men and materials, etc. to accident site.
- Taking unclaimed luggage for being kept in safe custody.
- Taking relatives to hospitals and mortuary.
- Other miscellaneous work.

(ii) For this purpose apart from whatever number of railway vehicles may be available, extra road vehicles should be hired.

(iii) All road vehicles should be hired along with standby drivers for round the clock duty.

(iv) At least 10 road vehicles should be attached to CAC for taking relatives to hospitals, mortuaries etc.

(v) Nominated railway staff to be attached to each hired vehicle round the clock (even group ‘D’ would suffice), so that optimum use can be made of the vehicle.

(vi) Buses from State transport authorities should also be requisitioned along with extra drivers for round the clock duty.

(vii) One railway staff should be put in charge of each bus on round the clock duty, who will accompany the bus wherever it goes and bring it back in time (even group ‘D’ would suffice).

(viii) In case hospitals are in different towns, then road transport buses should be put on fixed time round trip schedule for shuttling relatives from CAC to various locations and back to CAC.

(ix) All hired vehicles and requisitioned buses should have stickers pasted on their front and rear windscreens indicating 'RAILWAY ACCIDENT DUTY'.

10.6.5 <u>Catering arrangements</u>:

(i) Arrangements for supply of food and beverages to not only injured but also to other passengers of the accident involved train should be swiftly organized.

(ii) Food and beverages should be supplied free of charge.

(iii) These may be arranged from railway sources or outside sources as necessary, including IRCTC or their contractors.

(iv) To supplement Railway catering arrangements nearby Dhabas and Hotels should be contacted and arrangements made for opening up stalls at the site.

10.6.6 <u>Clearance of uninjured passengers</u>:

(i) First of all, arrangements for water and food for stranded passengers should be made.

(ii) Announcement should be made for registering names of safe passengers.

(iii) Clearance of accident affected passengers from accident site should be planned along with Operating branch who will provide the empty coaching rake.

(iv) Make announcement through PA System informing passengers regarding their clearance from site either by :

- front portion of the accident involved train,
- rear portion of the accident involved train,
- empty coaching rakes that have been brought to the accident site,
- road bridging that has been arranged.

(v) Arrange adequate coolies for carrying passenger's luggage while they transfer to the new train.

(vi) In case of road bridging, arrange road transport to clear stranded passengers, record details of passengers dispatched and relay particulars to Divisional Emergency Cell.

(vii) Senior-most official at site shall have powers to arrange conveyance for affected passengers free of charge by any available mode of transport and also incur expenditure for carriage of passengers' luggage, etc.

10.6.7 Preparing list of injured passengers:

(i) Collect list of injured passengers prepared by TS/TTEs and assess the situation along with Medical department.

(ii) Separate lists to be prepared coach wise by Medical department.

(iii) The list should contain 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 other particulars if relatives and friends are available.

(iv) Once the preliminary list of injured passengers has been prepared, the list should be signed by the CMS/MS Incharge and a copy handed over to commercial department.

(v) This list should be input into the PC available in the CAC.

(vi) The list should also be E-Mailed to the Divisional Emergency Cell and Hdqrts. Emergency Cell.

(vii) The list of dead and injured that is initially fed into the PC will thereafter be updated periodically, as rescue and relief work continues.

10.6.8 Amount of Ex – Gratia payable:

(i) The amount of ex-gratia relief payable to injured passengers or to dependants of dead are as under :

(a) In case of death - Rs. 50,000/-

(b) Grievous injury - Rs. 25,000/-

(c) Simple injury - Rs. 5000/-

(ii) The amount of ex-gratia relief admissible to road-users who meet with an accident due to Railway's prima facie liability at manned level crossing gate accidents will be as under :

(a) In case of death - Rs. 50,000/-

(b) Grievous injury - Rs. 25,000/-

(c) Simple injury - 5000/-

(iii) Payment of ex-gratia will be made on the basis of categorization of their injuries made out by doctors at site.

(iv) No ex-gratia payment would be admissible to trespassers, persons electrocuted by OHE and road users at unmanned level crossings.

(v) Ex-gratia payment should also be made to railway staff killed or injured by a moving train while performing their duty, for example, gangman working on track run-over accidentally by a moving train.

(vi) Ex – gratia amount is to be paid in cash.

(vii) In case of injured passengers, ex-gratia should be paid to the injured passenger himself or in case he is too ill, to his relative in his presence.

(viii) In case of death cases where relatives identify and claim the body, following precautions are to be taken :

(a) Photograph the face of the body from in front and from the side.

(b) Photograph the person taking the ex – gratia payment,

(c) Record the relationship of the person claiming the body along with details of proof, if any.

(d) In case enhanced ex–gratia is announced by the Hon'ble MR, then the enhanced amount should be paid by cheque by Accounts department.

(e) Ex – gratia paid is not to be adjusted against claims compensation payable as decreed by RCT subsequently.

(ix) Payment should be arranged preferably on the spot by a senior scale officer nominated by GM after making such enquiries as can be reasonably made on the spot after immediate needs by way of medical attendance etc. to injured persons have been attended.

(x) For payment of ex-gratia, and to meet other expenses at site, one commercial inspector, authorized by Sr. DCM shall withdraw Rs. 5 lakh from station earnings of a nearby station, and shall be available at site duly escorted by RPF personnel.

(xi) Sr. DCM/DCM will ensure availability of sufficient cash for payment of ex-gratia/refund.

10.6.9 Refund and Claims Compensation:

(i) Refund of fares must be granted in the CAC for unfinished journey as per rules.

(ii) Injured passengers and next of kin of deceased passengers must be supplied with blank claims compensation forms along with Claims Booklet explaining complete procedure.

(iii) Photocopy of a filled up Claims Compensation form may also be given along with the blank form so as to help them in filling it up.

10.6.10 Luggage and consignments: As and when unclaimed luggage and personal belongings are taken out from coaches, a list should be made coach- wise, and each item should be tagged with coach no.

(i) A list of each item with distinguishing marks should be made.

(ii) If possible, the cabin number inside the coach should also be indicated.

(iii) Luggage claimed should be handed over on satisfactory proof of ownership.

(iv) Unclaimed luggage and personal belongings of injured/dead passengers should be taken possession of for safe custody.

(v) Unclaimed luggage should be stored in a safe place, preferably, part of the same school building which is being used for preserving dead bodies.

(vi) These should be stored in separate rooms coach wise so that it is easy for relatives to identify.

(vii) A list should be displayed outside each room indicating the coach no. whose luggage is stored there.

(viii) It is the responsibility of Commercial department to take charge of all unclaimed luggage etc. These should be taken over from the charge of RPF.

(ix) Booked luggage, parcels and consignments available in SLRs, VPUs etc. should be taken out and sent by road to nearest Jn. station for safe custody.

(x) Booked perishables available in SLRs, VPUs should be taken out and either auctioned at site or sent by road to nearest Jn. station for being auctioned.

(xi) RMS consignments on the train should be shifted to school building for safe custody till Postal Authorities come and take over custody.

10.6.11 Withdrawal from station earnings - procedure:

(i) In order to meet accident related expenditure, officers can withdraw money from station earnings duly following the procedure incorporated in Commercial Manual Vol. II Rule No. 2425.
- Departmental expenditure necessitated by floods, accidents or earthquakes, etc. (8)
- Ex-gratia payments to persons involved in train accidents. (22)

(ii) The nominated supervisor incharge of the department concerned may alone withdraw from station earnings through a requisition in respect of the above items specified in rule 2425 of the IRCM.

(iii) This requisition should be made in the form appended below indicating the official making such withdrawal, the departmental officer concerned and also the purpose of withdrawal.

From .....To .....

Name of Supervisory Official..... StationMaster .....

Designation/Station ..... Station .....

Please arrange to pay from Station Earnings an amount of Rs..... (Rupees .....) towards ..... (Purpose to be indicated). This is one of the authorized items of withdrawal from Station Earnings. The expenditure is chargeable to the head .....

Accounting Authority ……...

Controlling Officer ……...

Designation …….....

Station …….....

Payment made from station earnings amount:	Received an amount of Rs. ..... from station earnings
Signature of SM/SS	Signature: Designation:

(iv) Requisition is required to be prepared in triplicate. 1st to be kept as record, 2nd to be presented to SM for arranging payment against proper acknowledgement and 3rd should be sent to Sr. DAO concerned duly countersigned personally by the Divisional Officer of the department.

(v) Any failure by the supervisory official withdrawing cash to follow above instructions or any other irregularity will render him personally responsible and liable for action under Discipline & Appeal Rules.

10.6.12 Withdrawal from station earnings - accountal:

(i) Branch Officer concerned shall forward requisitions received from stations to the Divisional Accounts Office indicating circumstances under which the withdrawal was necessitated.
(ii) The countersigned requisition shall be accompanied by relevant supporting paid vouchers. Timely submission shall be monitored by the Branch Officer so that they reach Accounts Office within 15 days from the date of withdrawal.
(iii) Executive Officer concerned shall furnish full particulars of the amount withdrawn, details of payments made, reasons for the payment, the rate and period for which payment is made and the total amount paid with the acquittance of the payee with necessary revenue stamp wherever due to Sr. DAO.
(iv) Sr. DCM will compile a monthly statement of all withdrawals pertaining to his division obtaining a statement from various executives in his division and send it to CCM.
(v) A monthly return of requisitions issued during the period should be submitted to the Accounts Office by Executive Officers.

(10.7) Duties of Mechanical Department:

For discharging the dual responsibility of extricating injured passengers & dead bodies from coaches and toppling those coaches whose search has been completed, 2 separate groups will be formed at each end for purposes of 'search and rescue' and 'off tracking of coaches'.

Once 4 ARMVs, 2 ARTs and 2 BD specials have arrived at the accident site from both ends, normally no more mechanical equipment will be required from anywhere else. The main work will then consist of using of these resources effectively and efficiently.

Different teams and groups will be formed for discharging the dual responsibilities of the Mechanical department. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.

One Sr. Supervisor should be in-charge of each team conducting 'search and rescue' at the site. All such 'search and rescue' groups at each end of the accident site would function under directions of an AME.

Similarly, one Sr. Supervisor should be in-charge of each team working on 'off tracking of coaches' at the site. All such 'off tracking of coaches' groups at each end of the accident site, would function under directions of another AME. The second AME concerned would also be in-charge of the crane at that end.

(i) Take precautions in electrified section that power supply is switched off before commencing rescue/relief work.
(ii) Use necessary safety equipment like hand gloves, helmet etc.
(iii) If spillage of inflammable substances is suspected, then only cold cutting equipment should be used.
(iv) In case of suspected sabotage, ensure minimum interference to clues. Save lives and extricate passengers after video and digital photographs have been taken.
(v) Be cautious in using rescue tools like gas cutters, cold cutters, spreaders, hydraulic jacks etc. so that passengers trapped inside or buried under the debris do not get hurt.
(vi) Ensure marshalling of ART according to site requirement before it is sent into the accident involved block section.
(vii) For efficient extrication of entrapped passengers take assistance of Medical/ Engineering departments.

(viii) Each team will join up with Medical teams who would also be involved in extracting dead and injured from coaches.

(ix) Maximum number of coaches should be tackled simultaneously, except those that have climbed on top or have telescoped into one another.

(x) Road cranes of sufficient capacity should be arranged so that these cranes can start working from the center while the 140T cranes can continue working from either end.

(xi) Trucks should be arranged for carrying BD equipment near to accident involved coaches, so that number of coaches can be simultaneously approached and more work centers can be opened up.

(xii) Examine unaffected or re-railed rolling stock and certify their fitness for further movement.

(10.8) Duties of Security Department:

Main functions of the Security Department can be broadly classified as:

(a) Co-ordination with GRP and Local Police.

(b) Crowd management.

(c) Protection of luggage.

(d) Protection of railway property.

10.8.1 Liaison with Civil Police:

(i) In case of sabotage, liaison with Local Police & officials of district administration and get early clearance.

(ii) Clearance should be obtained as expeditiously as possible, for starting restoration work.

(iii) Additional manpower should be requisitioned from local police officials and district administration for purpose of crowd control.

(iv) Exemption should be obtained from SP of the district for waiving off formalities of Post Mortem of dead bodies.

(v) Obtain assistance from GRP and Local Police as and when required.

10.8.2 Crowd Management:

The first problem at an accident site is that of surging crowds. Carrying out any kind of rescue and relief operation becomes next to impossible. Railwaymen who try to undertake any kind of rescue and relief work become victims of mob fury.

(i) Cordon off the site and prevent unauthorized entry of outsiders.

(ii) Segregate the area of accident by putting up temporary barriers using nylon ropes or any other make-shift device available at the scene so that outsiders do not disturb the site or hamper rescue operations.

(iii) These barriers should be at quite some distance away from the track, so that UCC, CAC and LCCs are inside the cordoned off area.

(iv) Provide barricade and ask for additional force to control crowd during VIP visit.

10.8.3 Protection of luggage:

(i) Protect unclaimed luggage of passengers till these are duly taken over by commercial department for safe custody.
(ii) Unclaimed luggage of passengers should be isolated and stacked coach-wise, with proper labeling indicating coach no. from which recovered.
(iii) If possible, the cabin number inside the coach should also be indicated.
(iv) All such unclaimed luggage should be protected till they are handed over to claimants or taken over by commercial department.
(v) Unclaimed luggage should be stored in a safe place, preferably, part of the same school building which is being used for preserving dead bodies.
(vi) These should be stored in separate rooms coach wise so that it is easy for relatives to identify.

10.8.4 Protection of railway property:

(i) Protect Railway consignments/goods/parcels till these are duly taken over by commercial department and dispatched to nearest station for proper disposal.
(ii) Guard perishables till they are auctioned off at site or till they are dispatched to nearest station for being auctioned.
(iii) RMS consignments on the train should be shifted to school building for safe custody till Postal Authorities come and take over custody.
(iv) Provide security for the cash withdrawn for payment of ex-gratia by the commercial department.
(v) Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.
(vi) Ensure that no railway staff tampers with any track fittings, or rolling stock parts.
(vii) Anybody found moving under suspicious circumstances should be questioned.
(viii) No railway staff should be allowed to move about near the accident site with loose or piece meal equipment.

10.8.5 General:

(i) RPF personnel should respond to any call for assistance to rescue victims and transport them to the nearest hospital.
(ii) 3 - hourly Sitreps will be updated by field personnel at the scene of incident to the RPF functionary in the UCC, giving the latest situation.
(iii) RPF Assistance Post will also be established within the CAC so that people needing help can approach RPF.

(10.9) Duties of Electrical Department:

For discharging the responsibility of providing illumination at site 2 separate units will be formed at each end of the accident site.

Once 4 ARMVs, 2 ARTs and 2 BD specials have arrived at the accident site from both ends, normally no more electrical equipment will be required from anywhere else. The main work will then consist of using of these resources effectively and efficiently.

Different teams and groups will be formed for discharging various duties of the Electrical department. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.

10.9.1 Site illumination:

One Sr. Supervisor should be in-charge of each group working at the site. All teams at each end of the accident site would function under directions of an Sr.DEE/AEE.

(i) Senior most electrical officer at site would make a quick assessment of the electrical requirement of the site.
(ii) This would be done keeping in mind the geographical spread of the site, the size of UCC, LCCs, CAC and any other requirement as necessary.
(iii) Thereafter, he would assess the quantity of electrical fittings and generating sets available in ARMVs and ARTs.
(iv) In order to set up adequate illumination facilities, all generating sets and lighting fixtures available in ARMVs and ARTs would be used.
(v) First priority for lighting would be the accident site along the track where rescue, relief and restoration work is going on.
(vi) Next priority would be given to lighting up of UCC, CAC and LCCs.
(vii) Additional requirements of generators and lighting fixtures, if any, should be called for immediately from other railway sources within the division, well in time.
(viii) In case divisional sources are inadequate, then sources from other divisions should be tapped.
(ix) Officer at site should hire additional generating sets, lighting fixtures etc. as required, from non-railway sources available nearby. List of such sources are given in Divisional DM Plans.
(x) Once generators and lighting fixtures have been set up, efforts should be made to tap direct power supply from some nearby sources, if available.
(xi) In case power supply is not available nearby and illumination has to continue on generator supply, then sufficient quantity of petrol and diesel should be procured and kept in stock.

(10.9.2) OHE at site:

One Sr. Supervisor should be in-charge of each group working at the site. All TRD teams at each end of the accident site, would function under directions of an AEE/TRD.

(i) In case OHE is to be brought down, then the same should be done immediately so that working of crane does not get held up on account of OHE.
(ii) In case slewing of OHE suffices for some sections, then the same should be done quickly so that working of crane does not get held up on account of OHE.
(iii) AEN/TRD shall arrange movement of Tower Wagons along with men and material from adjacent depots from both sides of accident site.
(iv) Ensure that the section is earthed before staff starts working near OHE.
(v) OHE should not be charged until all staff, tower wagons, cranes etc. have cleared the block section.

(10.10) Duties of Signal & Telecommunication Department:

Duties of S&T department consist of providing sufficient and reliable means of communication at the accident site and other work centers.

10.10.1 Types of communication facilities:

For this purpose following types of communication facilities should be provided:

(i) Satellite telephones.
(ii) BSNL telephones.
(iii) Mobiles, in case the area is under mobile coverage.
(iv) Walkie – Talkie sets.
(v) Railway telephones.
(vi) PA system.

10.10.2 Locations:

These should be provided at following locations:

(i) UCC
(ii) CAC
(iii) LCCs
(iv) Any other location as decided

10.10.3 Numbers to be provided:

(i) Satellite telephones – 5 to be provided. 2 in UCC, 1 in CAC, 2 for passengers from adjoining ARTs of divisions/zones.
(ii) BSNL telephones – 2 in UCC, 3 in CAC and 1 in each hospital.
(iii) Mobiles – as many as can be arranged for each hospital.
(iv) Walkie – Talkie sets – each functionary should be covered.
(v) One 25W VHF sets shall also be provided in UCC.
(vi) One 25W VHF set shall be installed in a road vehicle so that mobile communication can be set up, upto a range of about 15-20 Kms.
(vii) Railway telephones – each functionary in UCC, CAC and LCCs should be covered.
(viii) In RE area emergency sockets will be utilized for extending communication to the accident site and in non-RE area where 6 Quad cable is available the same will be utilised for providing communication.
(ix) PA system at UCC, CAC and LCCs.

10.10.4 Public Address System:

(i) Provide adequate number of PA system, Hand sets to be used for communicating with passengers and for giving directions to railway staff.
(ii) PA system should be provided in UCC, CAC and LCCs. These are to be used for communicating with passengers and for giving directions to railway staff.

(iii) For this purpose, additional PA systems may become necessary depending upon the requirements at accident site.

(iv) Mega mikes available in ART will also be utilized.

(v) Volume of PA system in UCC, CAC and LCCs should be so adjusted that announcements made over one of them reaches only those areas which are under its jurisdiction. It should not interfere with announcements being made by other PA systems.

10.10.5 General:

(i) Ensure availability of adequate copies of Disaster Management telephone directory containing important telephone numbers.

(ii) Adequate number of Mobile Battery Chargers should be provided in UCC, CAC and LCCs along with number of spare batteries.

(10.11) Duties of Engineering Department:

Some duties have been detailed in Chapter 8. Additional duties are as follows:

(i) AEN/SSE (PWay/Works) shall collect men, rescue tools and arrive at site by fastest means possible.

(ii) Setup UCC, CAC and LCCs at the accident site.

(iii) Assist Medical/Mechanical Department in rescue work.

(iv) If necessary contact Army/Navy/Air Base and collect required personnel like Divers for rescue operation

(v) If necessary hire Private Road Cranes, Bulldozers, Earth movers etc.

(vi) 2 Engineering specials, one from each end, carrying engineering material and gangmen from the section.

(vii) Additional requirements of track materials, if any, should be called for immediately from other railway sources within the division, well in time.

(viii) In case divisional sources are inadequate, then sources from other divisions should be tapped.

(ix) 500 additional workmen are required who are to be moved from adjoining divisions/zones.

(x) Each such division sending assistance should move 250 men along with 5 artisans and 5 PWIs.

(xi) One DEN and one AEN each should also move to the site of accident from each such division.

(xii) Plan for coordinated working and movement of track machine for quick restoration in consultation with TRD and operating officials.

(10.12) Duties of Personal Department:

(i) Sr. DPO shall proceed to accident site along with all Welfare Inspectors.

(ii) Assist Doctors in collecting details of injured/dead and shifting them to hospitals.

(iii) Welfare Inspectors shall be available round the clock in shift duty to look after the welfare of injured persons in each hospital.

(iv) Issue complimentary return journey passes to relatives for escorting injured and taking them back home.

(v) Man personnel branch counters in CAC and discharge duties listed out for those counters.

(10.13) Duties of Accounts Department:

(i) Making available sufficient amount of cash for meeting emergent expenses.

(ii) Opening of current account in a local bank and getting permission for over draft facilities so that large amount of cash is not required to be carried from far off stations.

(iii) Issue of cheques for making of enhanced ex-gratia payments, if so announced at accident site by Hon'ble MR.

(10.14) Staff matters:

(i) First problem is of identifying railway personnel.

(ii) They should be supplied with orange coloured armbands to be kept in ARMVs/ARTs.

(iii) Adequate number of armbands, gloves and face masks should also be provided in the ARMVs/ARTs.

(iv) Second problem is of communicating with railway personnel in the crowd.

(v) Microphones/loud speakers provided in ARMVs/ARTs should be used both for crowd control as also for giving instructions to railway personnel working at accident site.

(vi) Once initial rescue operations have got underway, arrangements have to be made for water and food for railway staff working at site. Contract arrangement should be made for supply of food.

Spare coaches should be stabled at nearby stations where watering and charging facilities are available for stay of staff.

CHAPTER – 11

PASSENGER CARE

11.1 General:

(i) Assistance to passengers and their relatives is of utmost importance in relieving them of some of their misery.

(ii) Injured passengers and their relatives are to be treated with utmost courtesy, concern and sympathy to alleviate their trauma and discomfort.

(iii) For dealing with relatives arriving from far flung corners of the country, staff fluent in the local language of the place from where the train originated should be used as interpreters.

(iv) Commercial supervisors & Welfare Inspectors should be assigned to talk to injured passengers to ascertain from them whether they wish to call relatives.

(v) Injured passengers should thereafter be provided with either mobile or BSNL STD phones in order to enable them to speak to their relatives.

11.2 Hospitalization of the injured:

(i) The injured persons other than Railway beneficiaries should be shifted, as far as possible, to the nearest non railway hospital except in the following circumstances:

(a) Non availability of non railway hospital.

(b) Want of accommodation in the non railway hospital.

(c) Unsuitability of non railway hospital to render first aid.

(d) Difficulty of transport.

(e) Serious condition of the patient.

(f) In other circumstances considered justifiable by the attending medical officer.

The injured persons other than Railway beneficiaries, when admitted in a railway hospital should be transferred to non railway hospital as an when there condition permits.

(ii) In case there are no railway hospitals nearby, then they are to be admitted in the nearest Govt. hospitals.

(iii) In following cases, injured may be taken to a Private Hospital.

- When there is no railway or Govt. hospital available within a radius of say 8 kms. of the site of accident or,
- When the attending doctor certifies in writing that the treatment in private hospital is necessary in the interest of the patient.

- Except where railway doctor certifies, such injured passenger should normally be eligible to the lowest class of accommodation in private hospitals where different scales are available.

- Where the family of the injured person desires to be provided with a higher class

accommodation, the family should give in writing to pay the extra cost involved directly to hospital authorities.

(iv) For this purpose, each division should make out a working arrangement with such private hospitals as may be necessary in areas served by them so that in an emergency injury cases can be referred to hospitals concerned without loss of time.

(v) To facilitate matters and to avoid misunderstandings, CMD should draw up a list of such private hospitals bearing in mind Railway and non-Railway hospitals in the vicinity.

(vi) CMD should also settle charges to be paid for such cases for each class of accommodation.

(vii) Bills by such private hospitals should be submitted through CMD who will certify the correctness of charges payable, before passing for payment by FA&CAO.

(viii) Payments to private hospitals under this para can be arranged locally by the Railways and Ministry of Railways approval is not necessary.

(Extract of Para 701(1) & Para 712 of Chapter VII of IRMM and Para 1421 of Indian Railway Establishment Manual and M.O.R's letter No. MH 59/MES/96/Medical dated 18/12/1959)

(ix) When injured are admitted in non-railway hospitals, railway doctors should be deputed to these hospitals to render necessary assistance, including supply of medicines as required which may not be available in these hospitals.

(x) They should also carefully monitor the condition of injured and maintain an updated list with all details.

(xi) If more than one hospital is involved, apart from deputing doctors to individual hospitals, a railway doctor should also be deputed to coordinate and maintain centralized updated position.

11.3 Facilities to be made available in hospital:

(i) There should be a separate reception counter manned by commercial supervisor or Welfare Inspector at the entry to the hospital for dealing with relatives of patients who arrive.

(ii) A chart should be displayed at this reception counter indicating ward nos. where accident patients are admitted along with their names, coach no. wise.

(iii) At the entry to each such ward, a second list should display the name of the patient, coach no. and the bed no. inside the ward.

(iv) Commercial staff and Welfare Inspector on duty at that hospital should carry a list indicating the name, address and telephone no. of relatives as given by the patient, and whether they have been informed or not.

(v) Arrangements should be made to inform the next of kin or a relative or friend of the deceased, in case identity of the person involved in accident becomes known.

(vi) As each relative arrives his name should be marked in the list against the passenger's name.

(vii) Reception counter should be provided with BSNL telephone with STD facility.

(viii) There should be 2 mobile telephones for being taking to patients inside wards for making outgoing calls.

(ix) Complete medical care of all passengers including payment of medical bills till their final discharge should be provided.

11.4 Communication:

(i) STD equipped telephone should be made available to passengers to communicate with their relatives.

(ii) BSNL/Railway Telephones available at adjoining Stations/Cabins/Gates shall be extended to the accident site.

(iii) PCO telephones and other BSNL phones in nearby localities/villages/towns shall also be extended to the accident site by persuading owners of these phones.

(iv) Payments for such telephone connections will be made from station earnings.

(v) Sr. DSTE should hire few mobile phones to meet the need of stranded passengers, wherever cellular phone connectivity is available if the accident happens in mid section. Stranded passengers should be permitted to use these phones free of charge.

(vi) These cell phones should be used to convey information regarding the safety of passengers to their friends and relatives.

11.5 Arrival of relatives:

(i) After a few hours, next of kin of deceased and relatives of injured passengers start arriving at the accident site.

(ii) Adequate number of display boards should be available on ARMVs/ARTs for being put up at accident site.

(iii) By the large these display boards should indicate the direction towards the CAC.

(iv) These indication boards should be displayed near those areas where incoming relatives arrive and congregate.

(v) Periodic announcements on loud speakers should also be made for guiding them to the CAC.

(vi) CAC should have different counters for various purposes as detailed below in Section 8.

11.6 Taking care of relatives:

(i) At CAC, number of commercial supervisors & Welfare Inspector should be available for the purpose of taking arriving relatives to different hospitals etc.

(ii) After relatives arrive they should first of all go through the reservation charts and locate the name of the passenger.

(iii) Thereafter if details are available as to which hospital passenger has been admitted then commercial supervisor or Welfare Inspector should accompany him to that hospital.

(iv) A hired vehicle should be provided for carrying them to various hospitals and mortuary.

(v) The commercial supervisor or Welfare Inspector should stay with the relative until he has been able to either find the injured passenger or identify the dead body.

(vi) Thereafter, they should help him in completing all formalities in the CAC.

11.7 Single window clearance:

(i) CAC should have provision of single window clearance for all legal formalities & multiplicity of paper work.

(ii) Counters provided in CAC should have facilities for following items in the given sequence as indicated in Annexure – 3:

(a) Reservation chart, for locating the name.
(b) List of dead and injured along with name of hospital. The name of passengers involved should be checked up from the list of dead or injured, if available, and their current status informed

(c) Counter for providing commercial supervisor or Welfare Inspector as escort along with a vehicle, for accompanying the relative and going around to various hospitals or mortuary.

(d) Railway doctor for issue of Medical Death Certificate.

(e) Govt. doctor for issue of Post Mortem Clearance, in case the same is necessary.

(f) Municipality official for issue of Official Death Certificate.

(g) Local police for issue of authority for handing over of dead body.

(h) Claims counter - Payment of ex-gratia and issue of Claims Compensation Form.
(i) Counter for helping performance of last rites in case relatives decide to cremate the body there itself.

(j) Pass counter for issue of return journey pass.

(k) Return journey facilitation counter will make arrangements for return journey.

11.8 Stay of relatives of dead and injured:

(i) Commercial supervisor or WLI deputed with relatives should also arrange for their stay and accommodation.

(ii) Depending upon the need, accommodation in hotels/dharamshalas would be hired for accommodating passengers.

(iii) Arrangements should be made for their meals etc. Contract should be given for providing cooked food to relatives.

11.9 Performance of last rites:

(i) In many cases relatives decide to perform last rites at the place of accident itself instead of taking the body back to their native place.

(ii) This is mostly on account of :
- bodies being mutilated,
- bodies being in a state of decomposition,
- native place being far off,
- for overcoming logistic problems of taking the body back.

(iii) In such cases railways should render appropriate assistance to relatives for performing last rites.

(iv) Railways should locate :
- the nearest cremation or burial ground as the case may be.
- shopkeepers who supply necessary material for funeral rites.
- priest for performing the ceremony.

(v) The above information would be conveyed to relatives and transport provided for carrying the body.

(vi) Above duties are to be performed by Personnel department.

(vii) Commercial supervisor or Welfare Inspector who has been deputed for relatives of a particular passenger should help them out in this endeavour.

11.10 Departure of relatives of dead and injured:

(i) CAC should have counters for helping relatives regarding their return journey.

(ii) Personnel branch staff at the CAC should be available for issuing complimentary passes for their return journey.

(iii) Reservation of berths should be provided on trains. Such reservation should be provided only from the accident site onwards.

(iv) Extra coaches should be attached to trains going to these destinations for the next 2 or 3 days. These extra coaches should be brought in locked condition from the originating station.

(v) Reserved space in luggage portion of SLRs for some of them to carry back bodies in coffins etc, in case they so desire.

CHAPTER – 12

MEDIA MANAGEMENT PLAN

12.1 Objective:

(i) To post the public with factual information pertaining to the accident.
(ii) To convey certain information which is of use to passengers.
(iii) To convey specific information which is of use to relatives of dead and injured passengers.
(iv) To create a positive public opinion.
(v) To create a healthy relationship with the press and electronic media.

12.2 Duties of PR Organization:

(i) CPRO and his team will collect whatsoever information is available from Divisional Control Office and first information would be released to the media within 60 minutes of intimation of the accident.
(ii) The information shall include telephone numbers of Helpline Enquiry Booths.
(iii) CPRO, PRO and the entire PR organization should proceed to the accident site in the 1st Special train carrying GM and other hdqrts. officers.
(iv) Number of photographers with digital cameras and video photographers should also be taken along to the accident site for taking still/video photographs of affected rolling stock, & other vital clues including condition of track in consultation with OC site.
(v) Both CPRO and PRO will be available in the UCC during the day.
(vi) Responsible PR supervisors should be deputed during night shift for interacting with the media, if necessary.
(vii) CPRO will organize Press Briefings at fixed timings as detailed in Section 6 below.
(viii) PR organization shall monitor various important media channels to keep track of media reporting. Suitable corrections/clarifications may also be issued, if required.

12.3 Spokes person:

(i) Only GM, DRM, CPRO, Chief Emergency Officer in Hdqrts. Emergency Cell and Divisional Emergency Officer in Divisional Emergency Cell are competent to interact or give interview to press and electronic media.
(ii) Apart from the above, any other officer authorized by GM is competent to interact or give interview to press and electronic media.
(iii) Railway's endeavour shall be to ensure that only factually correct and confirmed information is relayed to the media.
(iv) No inflated or exaggerated version of any fact should be relayed to the media.
(v) Unconfirmed news having no authentic source shall not be relayed to media.
(vi) No railwaymen shall express or voice any criticism, or express his personal opinion or views about the accident, at any point of time.

12.4 Information to be relayed to Press and Electronic Media:

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

12.4.1 Accident:

(i) Nature of the accident – date, time, place, exact location, train no., number of coaches involved etc.
(ii) Details of how the accident most probably occurred.
(iii) Prima-facie cause of the accident will be relayed to Media only with the approval of GM.
(iv) Sabotage, even if suspected, will not be relayed to Media, without approval of Railway Board.
(v) Periodic reports regarding progress of rescue and relief work.
(vi) Expected date and time of restoration.

12.4.2 Uninjured Passengers:

(i) Steps being taken to provide beverages, refreshments and first aid treatment for unaffected passengers.
(ii) Steps being taken by railways for clearance of unaffected passengers.
(iii) Expected time of departure of front portion of accident involved train.
(iv) Its likely time of arrival at the destination.
(v) Expected time of departure of rear portion of accident involved train.
(vi) Its diverted route and likely time of arrival at the destination.
(vii) In case empty coaching rakes have been arranged, then details of the same.
(viii) Road bridging being done, labourers provided for transhipment of luggage.

12.4.3 Dead and Injured passengers:

(i) Steps taken by Railways to render immediate medical attention.
(ii) No. of injured passengers rescued.
(iii) Breakup of their injuries :
- Grievous,
- Simple,
- Trivial.

(iv) Names of hospitals where injured are being treated.
(v) Approximately how many patients have been admitted in each of these hospitals.
(vi) Names of injured passengers.
(vii) Communication facilities like cell phones, STD phones provided at these hospitals.
(viii) Payment of ex-gratia.
(ix) Facilities offered to relatives of victims, including free pass for journeys.
(x) Special trains being run for bringing relatives of dead and injured.
(xi) Number of dead bodies recovered and number of bodies identified.
(xii) Identification of dead bodies takes much longer since either

- they were travelling alone, or
- their companions are injured and are not in a position to identify them, or
- their companions have also perished.

(i) Under such circumstances it is possible to identify dead bodies only when relatives come from their home town.

(ii) This aspect of identification of dead bodies and reasons for delay should be explained to the media.

12.4.4 Helpline Enquiry Booths:

(i) Setting up of Helpline Enquiry Booths.

(ii) Details of Helpline Enquiry Booths as follows :

- Stations where these have been opened.
- Telephone Nos.
- FAX Nos.
- Internet address of NER on the railnet website, (www.ner.railnet.gov.in).

12.4.5 Train Services:

(i) Details of train operation with regard to :

- Diversion,
- Regulation,
- Rescheduling,
- Short termination,
- Cancellation.

(ii) Running of 2 passenger specials for carrying relatives to the site of accident.

(iii) These trains will be started from the originating and destination stations of the accident involved train and will be given same stoppages as the accident involved train for picking up relatives enroute.

(iv) Expected departure time of relatives special from their originating stations.

(v) Refunds being granted in Helpline Enquiry Booths for passengers whose journey have been interrupted.

12.5 Casualty figures:

(i) In all accidents, as long as rescue and relief work continues, there is always a difference between casualty figures given by railways and casualty figures quoted by the Media.

(ii) The reason for this difference is that railways give casualty figures based on actual number of dead bodies recovered; whereas Media estimates casualty figures based on the damage visible and likely final tally.

(iii) During Press Briefings, this point should be clarified that at that point of time so many bodies have been recovered.

(iv) However, it should also be made clear that casualty figures are likely to go up since rescue work is still continuing.

(v) Assessment regarding likely number of deaths and injuries may also be made if considered necessary. Such an assessment should be based on :

- Total number of coaches involved.
- Number of coaches searched.
- Number of coaches yet to be dealt with.

(vi) Particular reference should also be made to coaches that are crushed or that have climbed on top, and have not yet been searched.

(vii) For example, the media can be informed that as of 13/- hrs., 2 coaches have been dealt with and no. of bodies have been recovered. 8 more coaches are still to be searched and casualties are likely to go up.

12.6 Press Briefings at accident site:

(i) CPRO on arrival at accident site shall collect factual information from the OC Site and relay the same to Media personnel at site and also to Divisional Emergency Officer in the Divisional Emergency Cell. Thus, an on line communication channel will be established to keep media informed of all important details.

(ii) The first Press Briefing will be held within one hour of CPRO's arrival at site. Subsequent briefings will be held according to the schedule given below.

(iii) CPRO or PRO should be available in the UCC during Press Briefings.

(iv) There should be fixed time Press Briefings so that there is no confusion regarding different versions given to separate channels at various points of time.

(v) Simultaneous Press Briefings should be held at accident site as also at Hdqrts. Emergency Cell and Divisional Emergency Cell as per fixed timings given below, so that the same version is given by all concerned.

(vi) Information to be given to the media will be of -/30 hrs. earlier. For example the media briefing held at 7/30 hrs. will convey all information as at 7/- on that date.

(vii) On the first two days, there should be 6 media briefings per day. These should be scheduled at the following timings :

- 7/30 hrs.
- 10/30 hrs.
- 13/30 hrs.
- 16/30 hrs.
- 19/30 hrs.
- 22/30 hrs.

(viii) Thereafter, for the remaining days, there should be 3 media briefings per day. These should be scheduled at the following timings :

- 7/30 hrs.
- 13/30 hrs.
- 19/30 hrs.

(ix) All media releases will be up loaded on the North Eastern Railway website, and new page opened to give specific information with regard to the accident. The priority of information release to various media will be as under :

- TV Channels.
- Agencies – UNI, PTI, Varta, Bhasha.
- Print Media.

(x) Convenience and conveyance of media shall be taken care of by PR personnel with assistance of Commercial representatives at site. Media persons should be conducted to hospitals where injured are being treated.

(xi) Commercial department should ensure that list of passengers who traveled by the accident involved train along with list of dead and injured in the accident reach PR officials at the earliest.

CHAPTER – 13

FIRE AND OTHER ACCIDENTS

Fire on a running train is more catastrophic than on a stationary one, since fanning by winds helps spread the fire to other coaches. Moreover, passengers sometime jump out of a running train on fire resulting in increased casualties.

In case of fire in running train, every railway staff available on the train or at the site shall immediately try and stop the train and plunge into action to save lives and property.

GENERAL

Following Officer are nominated for coordination with State/District/Other concerned authorities in case disaster enumerated hereinafter—

Nature of Disaster	Coordinating Authority
Fire in trainBomb Threat/Blast	CSC
Radiation Emergency	PCMD
Breaches due to land slides, Floods, Earthquakes, Cyclones	PCE
Communication failures	PCSTE

13.1 FOLLOWING SOURCES ARE MAIN CAUSES OF FIRE IN TRAINS:

(i) Carrying stoves, sigris, gas cylinders, kerosene oil, petrol, fire works etc. in passenger compartments.

(ii) Making fire/using fire near paper, wood, petrol or such other inflammable articles.

(iii) Lighted match sticks, cigarette ends carelessly thrown.

(iv) Short circuit in electrical wirings.

(v) Using naked light during authority token delivery to the driver, shunting of inflammable loads, sealing of inflammable wagons.

(vi) Use of open fire, smoking near gas/ petrol tank.

All railway staff and passengers should take all possible precautions to avoid any of the above mistakes so that possibility of fire breaking out can be minimized. In general fire originates in a small level. When it is surrounded by burning materials with adequate supply of air, fire spreads.

13.2 ACTION TO BE TAKEN IN CASE OF FIRE IN TRAIN:

(i) First and foremost immediately summon the fire brigade.

(ii) Contact Air Force, Oil Companies for there expert services if needed.

(iii) Secondly, if you smell gas or vapour, or even in case of excessive smoke, hold a wet cloth loosely over your nose & mouth and breathe through it in as normal a manner as possible.

13.2.1 In case of fire in a passenger train:

(i) In case of fire pull the Alarm Chain and stop the train immediately.

(ii) Try and put out the fire before it becomes a big blaze by using either water or blankets etc.

(iii) More people expire due to suffocation from smoke rather than due to actual burning.

(iv) Advise passengers to take a cloth, wet it in their drinking water and cover their nostrils.

(v) Instruct passengers to go to the other end of the coach which is away from the fire and if possible cross over to the next coach through the vestibule.

(vi) Insist that passengers should save themselves first and not to bother about their luggage which can be retrieved later on.

(vii) Make sure that no passenger lies down on the floor.

(viii) After train has stopped, passengers should come down from the coach immediately.

(ix) Building up confidence of injured passengers by suitable advice is of great importance.

13.2.2 In the event of a vehicle on a train being on fire:

(i) Stop the train immediately.

(ii) Don't panic.

(iii) Evacuate passengers from burning coaches.

(iv) Protect property, valuables & mails.

(v) Locate fire extinguishing substances viz, water bucket with water/sand, fire extinguishers etc;

(vi) Use fire extinguisher if any and put out the fire.

(vii) Use water from the coaches and extinguish the fire.

(viii) Throw Earth or sand, if available, on the fire.

(ix) Ascertain the type of fire viz, dry, oil gaseous, electric and use the right type of extinguishers;

(x) Isolate the burning vehicle from other vehicle by uncoupling.

(xi) Train to be protected by Driver and Guard at both ends according to the provision of G&SR 6.03.

(xii) Report it to the nearest station/control/fire station.

(xiii) Every effort shall be made to extinguish the fire and to save the wagon labels, seals and contents of the vehicle.

(xiv) In case fire is discovered when the train is near a tank or 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.

(xv) Inform all concerned to assist in extinguishing the fire.

(xvi) In case of fire from electrical short circuit switch off the source.

13.2.3 In the event of fire on an Electric engine/EMU:

(i) Driver shall immediately switch off the circuit and lower the pantograph. The train shall then be brought to a stop at once.

(ii) After disconnecting the electric supply to affected circuits, Driver shall take necessary action to put out the fire.

(iii) If fire cannot be extinguished by the above means Driver shall advice TPC through emergency telephone to arrange for OHE of the affected section to be switched off.

(iv) The Guard and any other staff available shall render all possible assistance to the Driver in putting out the fire.

(v) Ordinary fire extinguishers or water from a hose pipe shall on no account be used to extinguish fire on live wire or electrical equipment.

(vi) If services of fire brigade are required, fire brigade shall not be allowed to commence operation until all electrical equipment in the vicinity of the fire have been made dead.

13.2.4 In the event of a fire on a Diesel Engine/DMU stock:

(i) The Driver/Motorman shall immediately switch off the circuit breaker and shut down the engine. The train shall be brought to stop at once.

(ii) The Guard shall give all possible assistance to the Driver in putting out the fire.

(iii) Fire extinguishers of approved type shall be provided on each diesel locomotive and motor coach of DMU when these are turned out from the home shed. The Foreman/CWS in charge of the shed shall inspect the fire extinguishers and ensure that these are in good working condition.

13.2.5 When a person is on fire:

(i) Approach him holding the nearest available wrap in front of you.

(ii) Wrap it round him.

(iii) Lay him flat and smother the flames.

(iv) He may roll on the floor, smothering the flames.

(v) On no account should he rush out in the open air.

(vi) Call for assistance.

13.2.6 Fire caused by Petrol or other inflammable liquids, acids or gases:

(i) Segregate the affected wagon, coach or area involved.

(ii) On opening a wagon do not enter it immediately. You would thus, avoid fumes, which may be dangerous.

(iii) Use foam type fire extinguishers and sand and not water or soda acid type fire extinguishers.

(iv) Do not bring naked lights near the site of fire.

(v) Warn the people living in the surrounding areas within one Km. radius.

(vi) Stay away from ends of tanks, as tanks normally burst from the ends.

(vii) Cool tanks that are exposed to flames with water from the sides only after the fire is put out.

(viii) Withdraw immediately in case of rising sound from venting safety device or any discolouration of tank due to fire.

(ix) Inform the nearest Fire Stations intimating that the fire has been caused by Petrol or any other inflammable liquids, acids or gases.

13.2.7 In case of fire due to Explosives/Inflammables/Dangerous Goods:

(i) Extinguish by closing the valve or isolating LPG feed to fire by other suitable controls.

(ii) Following steps may be taken if no undue risk is involved:

(a) Move unheated cylinders to a safe place after ensuring closing 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.

(iii) If cylinder containing inflammable/toxic gas develops leak during transportation, remove it to an isolated open place away from any source of ignition and advise the filler or consigner as required.

(iv) Inform the Chief Controller of Explosives by fax/telephone.

(v) Inform officer in charge of nearest police station.

(vi) Inform departmental officers concerned.

(vii) Pending the visit of the Chief Controller of Explosives/his representative, the wreckage and debris shall be left undisturbed except to save lives.

(viii) After getting information from the Chief Controller of Explosives that he does not wish any further investigation, the restoration work may be commenced.

(13.3) FIRE FIGHTING:

13.3.1 Dry chemical powder type fire extinguisher (DCP):

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

13.3.2 How to Use:

(i) Carry to the place of fire and keep it up right.

(ii) Remove the safety clip.

(iii) Strike the knob located in the cap.

(iv) Sealing disk of the cartridge gets broken and allows carbon dioxide gas to escape to the main shell and powder is pushed out.

(v) Direct the steam of the powder at the base of the flame.

(vi) For effective result stand at about 1.5 to 2.5 m. near the seat of the fire.

(vii) Move forward with moving the nozzle rapidly from side to side in sweeping motion.

(viii) When using on outdoor fires operate from the up wind side for effective spray.

13.3.3 Building Evacuation:

When the building fire alarm sounds:

(i) Immediately evacuate using building emergency plan procedures.

(ii) Walk to nearest exit/stairwell (close doors behind you)

(iii) Do not use elevators.

(iv) Proceed to the designated gathering area outside the building

(v) Do not re-enter building until cleared by authorized personnel.

(vi) Assist with evacuation of individuals with special needs.

13.3.4 Suspicious substance in Railway premises:

(i) Clear and isolate the contaminated area. Do not touch or disturb anything.

(ii) Call police/fire service/bomb squad.

(iii) Wash your hands with soap and water.

(iv) Identify individuals who may have been exposed to the material

(v) Do not leave premises until disposed by authorities.

13.3.5 Bomb threat/Blast:

Person receiving call regarding bomb threat should:

(i) Attempt to gain as much information as possible from the caller like type of device, time set, location, reason/purpose of the act, dialect mannerism and identity of the caller.

(ii) Inform and alert the disaster management team (Bomb detection squad).

(iii) Alert police, fire brigade and explosive department.

(iv) Pass on the information to all departments concerned.

(v) Take initiative for evacuation of all persons from premises.

(vi) Person noticing a bomb like object, should bring it to the notice of the nearest available officer.

(vii) Inform GRP, RPF, Bomb detection squad.

(viii) Ensure all persons are away from the spot and avoid unnecessary crowding near the area.

(ix) Inform control to take further steps for regulating train services.

(x) Wait for clearance from the Police department to restore normal working.

(xi) Utilize "Caller ID" facility if provided to trace the caller.

13.3.6 Radiation Emergency:

(a) Personal injury involving Radioactive material contamination:

(i) Render first aid immediately for serious injuries, as trained.

(ii) Call bomb squad, fire station.

(iii)If possible, without causing harm to the victim, monitor the injured, remove contaminated clothing and gross personal contamination.

(b) Radioactive contamination of personnel:

(i) Remove and bag all contaminated clothing.

(ii) Call fire station, bomb squad, police

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

13.3.7 What to do upon receipt of suspicious letter/package:

(i) Handle with care.
(ii) Don't shake or bump.
(iii) Isolate and look for indicators.
(iv) Don't open, smell, or taste.
(v) Treat it as suspect.
(vi) Call Police/Fire service/Bomb squad.

13.3.8 If parcel is Open and/or Threat is identified:

(a) For a Bomb:
(i) Evacuate immediately
(ii) Call police/fire service/ Bomb squad.

(b) For Radiological:
(i) Limit exposure – don't handle
(ii) Evacuate area
(iii) Shield yourself from the object.
(iv) Call police/fire service/bomb squad.

(c) For Biological or Chemical:
(i) Isolate – don't handle
(ii) Call police/fire service/bomb squad.
(iii) Wash your hands with soap and water.

(13.4) OTHER ACCIDENTS :

13.4.1 Tampering of Railway fittings causing accidents & Placing of foreign particles on track to cause distruption to traffic :

(i) A staunch vigil should be kept by introduction of special patrolling over the area as and when warranted.
(ii) Some persons to be trained specially and to be drafted for duty over the area if required.

13.4.2 Earthquake :

(i) 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.
(ii) Emergency shutdown should be declared.
(iii) Emergency response plan to be activated.
(iv) After status is restored, personnel should inspect all facilities for damage assessment, cleanup, restoration and recovery.

13.4.3 Landslide:

(i) Whenever landslide is expected/experienced due to heavy down pour all train services should be regulated.
(ii) Rescue team to be rushed for restoration work.

13.4.4 Floods:

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

(i) Bridge watchman to be provided at vulnerable points to inform flow of water.
(ii) Shifting all personnel and movable equipment around the bank.
(iii) If time permits sandbag dykes can be constructed to ensure safe passage of trains.
(iv) Regulate train service till flood recedes
(v) Evacuate people on train/at station and move them to a safer place.
(vi) Contact Fire brigade, Naval, Army, Air force, Local boat man and arrange divers and boats.
(vii) With the co-ordination of local authorities the Engineering officer/supervisor or other supervisors at that station shall arrange temporary shelter in nearby schools, marriage hall, community center etc.
(viii) If necessary, arrange coaches to accommodate the affected temporarily.
(ix) Seek assistance from voluntary organization and arrange drinking water, food, medicines etc.
(x) RPF and GRP in co-ordination with local police shall arrange protection.
(xi) Keep communication with Divisional Control Office.
(xii) When people are marooned by flood, arrange air dropping of food packets, cloths etc., with the assistance of civil administration.
(xiii) Contact SJAB, local doctors and provide medical care to the affected.
(xiv) Take all necessary action to provide shelter and other assistance to those affected by floods.

13.4.5 Cyclone/Storm:

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

(i) Stop the train clear of cuttings, bridges and embankments.
(ii) Guard, Driver and other Railway staff on train shall open all doors and windows of all coaches.
(iii) Station Master shall not start trains when the wind velocity exceeds the permitted level.
(iv) Make announcement frequently to warn the public about the storm/cyclone.
(v) Take all necessary action to provide shelter and other assistance to those affected by cyclone and storm.

13.4.6 Preventive Measures For Chemical Disasters.

Indian Railways Rules for carrying dangerous (Hezardous goods) by Rail have been legislated in the Railway Red Tariff Rule 2000 as per which dangerous goods have been classified into following 8 classes.

i. Explosives
ii. Gasses, Compressed, liquefied or dissolved under pressure.
iii. Petroleum & other inflammable liquids
iv. Inflammable solids
v. Oxidising substance
vi. Poisonous (Toxic Substances)
vii. Radio-active substances
viii. Acids and other Corrosives.

General Rules regarding accepance of above commodities for carriage by rail are given in Rules of Red Tariff No. 20.

Rules regarding packing , marking and leveling of goods , storrage, precautions in handling and storing of goods, modes of transportation, stowage and carriage and others precautions are laid down in Red Tariff No. 20.

Shunting of wagons containing acids and other corosive/dangerous goods shall not be carried out, except under the superintendance of duly authorise officer. Who shall ensured that during shunting operations -

a) The speed of all movements does not exceed 8Kmph.
b) No rough hump , fly are loose shunting take place.

Additional Rules: Any additional are exceptional rules applicable for any specific items regarding packing, marking and leveling, carriage etc. have been discrushed in detail in table VIII chapter -VIII of Red Tariff No. 20.

Rescue Relief Operations: The details of agencies and organizations over N.E.Railway, who have expertise in dealing with hazardous material being handle and transported on the systems.

CHAPTER – 14

TRAINING AND MOCK DRILL

Trained manpower is an essential ingredient of any DM system. Mere provision of sophisticated equipment without trained manpower is futile. For handling an unforeseen situation like managing a Disaster, training of all railway personnel concerned is an

inevitable input. To acquire necessary knowledge and skill, all relevant officials should be given periodic training regarding their duties and that of their department.

14.1 Training :

Training should be conducted at the following three levels:

- Individual Training :
  - (i) For enhancing the skill of staff attached to ARMVs, ARTs, etc., supervisors and staff shall be given general training in Disaster Management.
  - (ii) Special training may be arranged in Extrication, Rescue, Medical relief, Rolling stock restoration technique and Civil Defence by departments concerned.
- Seminars/Workshops: Seminars should be periodically conducted on Disaster preparedness, and the DM Plan.
- Joint Exercises: Full scale Disaster Management Mock Drill to be conducted as detailed below.

14.2 Full Scale Mock Drill :

Disaster Management essentially necessitates a state of preparedness under all circumstances and the efficacy of arrangements therein can be assessed only by conducting periodical full scale mock drills.

(i) Objective of the full scale mock drill would be to :

- gauge the preparedness of DM system including detailed planning and keeping of all equipment in good fettle.

- integrate the operational response to measure overall performance of the exercise.

- measure performance with regard to accident restoration.

(ii) On a division, the first mock drill should be conducted within 3 months of issue of the Zonal DM Plan.

(iii) On a division, the second mock drill should be conducted 3 months after the first one, in order to correct all shortcomings noticed during the first mock drill.

(iv) Thereafter, mock drills shall be conducted once every year.

(v) It should be conducted during the day and in a branch line section.

(vi) 6 hrs. traffic block shall be taken and the ARMV/ART run out to the accident site.

(vii) UCC and CAC should be set up and each department will post their functionaries in the Control Office as also in UCC and CAC.

(viii) All facilities should be provided in UCC and CAC by departments concerned.

(ix) During these full scale mock drill, following aspects shall be closely watched :

- Turning out of ARMV/ART within the prescribed time.

- Speed of the specials., Assembly of staff.

- Handling of ART, HRDs, HREs and other rescue equipment., Logging of events.

- Functioning of field telephones and communication network. , Functioning of generator sets, lighting equipment. , Preparedness of first-aiders and availability of medical equipment.

- Preparedness of commercial department to mobilize adequate manpower.

(x) On completion of the drill, a detailed report shall be prepared detailing deficiencies noticed, corrective measures initiated and improvements required.

DISASTER MANAGEMENT PLAN

PART III

National Disaster Responce Force (NDRF)

Ministry of home affairs, Government of India has formed National Disaster Responce Force (NDRF) at the eight selection locations in the country for dealing with relief and rescue operation related to all type of disaster.

As per Disaster Management Act 2005, various Ministry and departments under Government of India should joints hands for mutual assistance in case of disaster. Assistance from local Government and non Government Agencies. Is invariably required by the Railway

Administration from prompt relief and rescue operation. In case of disaster affecting Railways. Assistance of NDRF be of grate help to the Railway in Major Railway Disaster.

Unit	Commanding Officer	Designation	Telephone No.	Control Room No.	Fax No.
1st Battalion NDRF Patgaon PO-Azara, Distt. Kamrup Metro, Guwahati-781017	Sh. Hitender Pal Singh Kandari	Commandant	07637011337 09435117246	0361-2840027	0361-2840284
2nd Battalion NDRF Near RRI Camp, Haringhata, Mohanpur, Nadia, (West Bengal) Pin-741246	Sh. Gurminder Singh	Commandant	033-25875032 09474061104 09474116775	033-25875032	033-25875032
3rd Battalion NDRF PO-Mundali, Cuttack-Odisha, Pin-754013	Sh. Vardhman Mishra	Commandant	0671-2879711 09437581614	0671-2879710 09429199493	0671-2879711
4th Battalion NDRF Surkcha Campus, Arrakonam, Disst.-Ranipet, Tamilnadu-631152	Sh. Akhilesh Kumar	Commandant	04177-246594 09442140269	04177-246269	04177-246594
5th Battalion NDRF Sudumbare Taluka Mavel, Disst.-Pune (Maharastra) Pin-412109	Sh. Santosh Bahadur Singh	Commandant	02114-247000 09422315628	02114-247001	02114-247008
6th Battalion NDRF Jarod Camp, The-Wagodia, Vadodara, Pune-391510	Sh. Surendra Singh	Commandant	02668-299201 09870006730	02668-299182 09422318427	--
7th Battalion NDRF Bibiwala Road, Bhatinda (Punjab) Pin-151001	Sh. Santosh Kumar	Commandant	0164-2246193 0164-2246570	0164-2246030	0164-2246570
8th Battalion NDRF Kamla Nehru Nagar, Ghaziabad (UP) Pin-201002	Sh. P.K. Tiwari	Commandant	0120-2766618 09412221035	0120-27666 0120-2766013	0120-27666012
9th Battalion NDRF Bihata Patna, Bihar Pin-801103	Sh. Suneel Kumar Singh	Commandant	06115-253939 08544415050 09525752125	06115-253942	06115-253939
10th Battalion NDRF Village Kondapavuluru, PO-Surampalli, Gannavaram Mandal Krishna, (AP) Pin-521212	Mr. V V N Prashana Kumar	Commandant	08333068559 08333068540 08897900037	--	--
11th Battalion NDRF Sanskritik Sankul, Maqbul Alam Road, Varanasi, UP - 221002	Sh. Manoj Kumar Sharma	DIG	0542-2501101 08004931410	0542-2501202	0542-2501101
RRC, GORAKHPUR	Sh Santosh Kumar	DC	8004931432	8004931457 8004931406	
RRC, Lucknow	Sh Anil Kumar Pal	DC	8004931456	8004931431 ,80004931419	
12th Battalion NDRF Itanagar, Arunachal Pradesh -791112	Sh. Virendra Kumar Verma	Commandant	0360-2999545 09485235464	0360-2999577	0360-2277106

13th Battalion NDRF Ladhowal, Ludhiyana, Punjab - 141008	Sh. Biju Kumar Sam	Commandant	0161-2921305	0161-2921304	--
14th Battalion NDRF Nurpur, Jassur, Kangra, Himanchal Pradesh, Pin-176201	Sh. Baljinder Singh	Commandant	01893-292478	01893-292602	--
15th Battalion NDRF PO-Gadarpur, Disst.-Udhamshingh Nagar, Uttarakhand, Pin-263152	Sh. Sudesh Kumar Drall	Commandant	05949-231198 07579098442	05949-231199	--
16th Battalion NDRF Near Dada Dev Mandir Road, Sector-7, Dwarka, New Delhi, Pin-110077	Sh. Ambujam Bijay Kumar Singh	Commandant	011-20892672	-11-20893564	011-20892672

Details of all battalions are as under :

Officers Telephone numbers

Name	Designation	Address	Telephone No.
Shri Piyush Anand (IPS)	Director General	Directorate General, NDRF, 6th Floor, NDCC-II Building, Jai Singh Road, New Delhi-110001	011-23438020 011-23438119
Shri Narendra Singh Bundela (IPS)	Inspector General	-Do-	011-23438021
Shri Manoj Kumar Yadav	Deputy Inspector General(Adm/Works) South & South Central Zone, RRC Chennai	-Do-	011-23438140
Shri Bharat Bhushan Vaid	Deputy Inspector General (Training) East & North East Zone, RRC Kolkata	-Do-	011-23438023
Mr. Mohsen Shahedi	Deputy Inspector General (Ops/IT/COMN/PRO), Director, NDRF Academy, West Central Zone, RRC Dwarka	-Do-	011-23438022
Shri Gambhir Singh Chauhan	Deputy Inspector General ADM/Estt/Work, North Zone, Ladowal	-Do-	011-23438185
Mrs. Sreyashi Chaudhari	Financial Advisor	-Do-	--
Dr. Amit Murari	CMO(SG)	-Do-	011-23438091
Shri Gyaneshwar Singh	Commandant (Prov/Proc)	-Do-	--
Shri Harvinder Singh	Second-in-Command (Procurement) R&D Cell	-Do-	--
Shri Kulesh Anand	Deputy Commandent (OPS)	-Do-	011-23438024
Shri Pranshu Srivastava	Second-in-Command (Trg.-I)	-Do-	011-23438138

Shri Hari Ram Yadav	Deputy Commandant(Trg-II)	-Do-	--
Shri Rakesh Kumar Mishra	Deputy Commandant(DDO)	-Do-	011-23438024
Shri Amit Kumar Pathak	Second in Command(ADM)	-Do-	--
Shri Bhawani Singh	Asstt. Commandant (ADM & SO to DG)	-Do-	011-23438118
Shri Bipin Prasad Singh	Asstt. Commandant/MIN		011-23438091
Control Room	--	-Do-	011-23438091 011-23438136

Jurisdiction of NDRF in N.E. Railway

S.No.	Division	NDRF Battalion	Section/Station
1.	IZN	**8th Battalion NDRF** Kamla Nehru Nagar, Ghaziabad (UP)	Mathura Cantt-Mani Mau (Kannauj), Kasganj-Barreily City-Pilibhit-Mailani, Pilibhit-Shahjahanpur, Rampur-Bilaspur Road, Aliganj-Moradabad
2.		**15th Battalion NDRF** PO-Gadarpur, Disst.-Udhamshingh Nagar, Uttarakhand	Tanakpur-Khatima, Kathgodam-Lalkuan-Kiccha, Lalkuan-Rudrapur City, Ramnagar-Kashipur-Lalkuan, Kashipur-
3.	LJN	**11th Battalion NDRF** Sanskritik Sankul, Maqbul Alam Road, Varanasi, UP	Gorakhpur Cantt-Lucknow, Gorakhpur-Nautanwa, Anand Nagar-Gonda, Gonda-Mailani, Burhwal-Sitapur, Lucknow-Sitapur-Mailani
4.	BSB		Gorakhpur Cantt-Kaptainganj-Paniahawa, Kaptainganj-Tariasujan-Gorakhpur Cantt-Bankata, Bhatni-Mau-Banaras-Prayagraj Rambagh, Mau-Shahganj, Indara-Dohrighat, Indara-Balliya-Bakulha, Phephna-Aunrihar-Jaunpur
5.		**9th Battalion NDRF** Bihata Patna, Bihar	Sasamusha-Thawe-Mushrakh-Chhapra, Chhapra Gramin-Chhapra-Sivan-Mairwa, Thawe-Sivan, Chhapra-Manjhi, Duraudha-Mahrajganj-Mashrakh, Hathuwa-Panchdevri

Coordination with NDRF

Zonal Railways should get in touch with NDRF offices at the nearby locations to have the first hand knowledge of the resources available with them and also to familiarize them with railway related disaster situations and expose them to the issues relevant to the rescue and relief of passengers during railway accident. It has also been advised to associate NDRF in full scale exercise that is held once every year. There are no charges for availing the services of NDRF except the rail transportation which railways may provide at their cost for attending to rail disasters. Railways may also have to provide rail transportation logistics for transporting NDRF in case of non-railway exigencies.

Board had also empowered DRMs to directly requisition the relevant NDRF battalion for relief and rescue operations depending on the gravity of situation so that their services could be made available expeditiously without any loss of time. However requisitioning of NDRF should be judicious and NDM control room under Ministry of Home Affairs and Security and Safety control rooms in the Board's office must be kept informed.

Details of Agencies handling chemical Substance

IOC BAITALPUR,DEORIA(UP)	Amitab Bharti Mob. 9415019179
NDRF ,VARANSI (UP) Control Room	0542-2501101 Mob. 8004931410
NDRF ,GHAZIABAD (UP) Control Room	0120-2766013 Mob. 9412221035

CONTACT NUMBER OF DISTRICT DISASTER MANAGEMENT

SH. GAUTAM GUPTA (DDMA OFFICE GORAKHPUR) - 9935553214

SH. SATAYPRAKASH SINGH (CIVIL DEFENCE CFFICE) - 9554666675

TELEPHONE NUMBER OF OFFICIALS OF SCOUT & GUIDE

CIVIL AUTHORITY GORAKHPUR

Shri Niwas Shukla, Distt.Commissinor Scout & Guide Gorakhpur	-----	9415244689
Dr Dinesh Mani Tripathi Distt.Sec.Scout & Guide Gorakhpur	-----	9838504672
Smt Israt Siddique- DOC Scout & Guide Gorakhpur	-----	9554518101

RAILWAY GORAKHPUR

Shri Rajesh Awasthi, Chief State Commissioner	-----	9794840404
Shri D K Khare State Sec.Scout	-----	9794840001
Shri Ravindra Mehra, Chief Distt.Commissioner	----	9794840210
Shri Sneha Lata Singh,Distt Commissioner Guide		9794840524
Shri. Shailesh Kumar Srivastav, Distt.Sec.	-----	9794840285
Shri Arvind Chand, Distt.Organisational Commissoner	-----	9415280677
Shri C.P.Chauhan, Asstt.State Sec.	-----	9794840057
Shri Ranjeet Sharma, State Org.Commissinor	-----	9794845440

IZZATNAGAR

Shri Sant Jain, District Commissioner	-----	9760541901
Shri Anil Seth	-----	9456408720
Shri Harishanker Sagar	-----	9760918883
Shri Mustaq Ali	-----	9410404678
Shri **Vijay Mohan Sharma**	94 12148705	

LUCKNOW

Shri Ratnesh Kumar , District Commissioner	-----	9794842600
Shri Anooj Kumar	-----	9695172531
Shri S M Azami	-----	9935720920
Shri Sudhir Khare	-----	896245143
Shri Krisna Chandra Dube	-----	9794842817

GONDA

Shri Prakash Thakur	-----	9565388189
Shri R K Mina	-----	9415601326

VARANASI

Shri S P Srivastav DC	-----	9794843400
Shri Shri Asheet Ghosh	-----	9784843972
Shri Vinay Kumar Saran	------	9598560393

Important Telephone Numbers of Railway Board's Officials for reporting Disasters/Accidents

Designation	Name	Rly Telephone No. (Office)	MTNL Telephone No.	Mobile No.
DG Safety	H S Verma	-	-	9740748123
PED/Safety	Sanjay Mishra	47406	23047406	9717190033
PS/ PED/Safety	-	43302,47406	23381344	-
ED/Safety(S&T)	B M Tripathi	47407	23047407	9310811288
PPS/ED/Safety(S&T)	S Muthamizhselvi	47407	23047407	9717647441
ED/Safety(Traffic)	Mukul Kumar	47408	23047408	8882207156
ED/Safety/EE	Asok Kumar Nakra	47427	23047427	8920030843
PS/ ED/Safety/EE	Jyoti Gahlot	43000	-	9540844480
ED/Safety/Civil	S N Joshi	47425	23047425	9717636881
PS/ ED/Safety/Civil	Dalip Kumar	45511	47845511	8826381515EDME/Safety
EDME/Safety	Utkarsh	47428	23047428	8851036848
PS/EDME/Safety	Mh. Farid	47428	23047428	9540781681
DD/Safety(A&R)-I	Sudipta Sen	47415	23047415	9717647325
DD/Safety(IMPL)	Ajit Singh	45589	47845589	9717646245
DD/Safety(Inquiries)	Anupam Verma	44480,47417	23304480	9715647197
OS/Safety(Inquiry)	Apurva Bajpai	47419	47847419	7275080530
OS/Safety-I	-	47422	23047422	-
OS/Safety/DM	Ishwar Singh Brar	43771,47420	23303771	9717641063
OS/SafetyA&R)	Pankaj Nayan	47418	23047418	8920031747
OS/Safety	Santosh Kumar	47464	23047464	8595928028
Chief Contr Safety	-	43599,43399,47423	23382638	-
Safety Inspecter	Suneel Kumar	44425,47421	23304425	9958293592

Chief Commissioner of Railway Safety

LUCKNOW

SN	**Desgnation**	**Teliphone Number**				**Mobile**
		Rly(O)	**Rly(R)**	**Office**	**Residence**	
1	**Chief Commissioner of Railway Safety**	23290	25290	2233108	2237702	9794842049
2	**Commissioner of Railway Safety** **NE Circle/Lucknow**	23291(NE) 31571(NR)	32571(NE)	2234515	2235438	9794842050
3	**Commissioner of Railway Safety N. Circle/NDLS**	030-54752,54753	-	011-26886589	011-22743351	09717630004

Telephone number of high officials of Railway Board

Design.	Railway		BSNL		FAX	Cell phone Office
	Office	Resi.	Office	Resi		
CEO	44700	-	23384010	26886851	**23381453**	-
M (O&B)	44712	44713	23382776	-	23388237	-
MT(Traction&Rolling)	55001	44708	23381477	23381477	23385113	-
M(INFR)	44706	-	23383879	47843124	23385114	-
DG(HR)	43799	23188	47843130	-	23385111 R-44721	-
OSD/MR	44794	-	23382657	-	233386122	-
MF	44702	-	23382754	-	23385095	-
SECY.	44714	43108	23385227	23385227	23382068 R-44728	-
DG(RHS)	43799	23188	47843130	-	23378845	-
DG(RPF)	41511	44100	23382209	23073180	23303984 R-43984	-

Important Telephone Numbers Of Central Control

Design.	Railway		BSNL	
	Office	Resi.	Office	Resi.
Chief Controller Goods	64718, 64722	62719	0551-2208234	9794844941
Goods Control	64718	64722	-	-
Chief controller Coaching	64719	62724	2208231	-
Coaching Control	64719	62720	2208236	-
POWER CONTROL	62520 , 64721	64720	9794842439	-
COMMERCIAL CONTROL	62352,62378 ,	-	2208253	9794845955
ENGINEERING CONTROL	64407, 63466	9794840227	-	-
CARRIAGE CONTROLE	62523,62524	-	9794840430	-
Electrical Control	63333,9794189111	-	-	-

TELEPHONE NUMBERS OF HEADQUARTER OFFICIALS

Design.	Railway		BSNL		CUG
	Office	Resi.	Office	Residence	
GM	62100	62101	2208000	2208100	-
AGM	64100	64101	2208001	2208101	979484006
SECY TO GM	64102	64103	2208003	2208103	9794840001
PCOM	64700	64701	2208090	2208190	9794840900
PCCM	64300	64301	2208095	2208195	9794840950
PCSO	64708	64709	2208091	2208191	9794840901
PCME	64500	64501	2208040	2208140	9794840400
PCSTE	62900	92901	2208080	2208180	9794840800
PCE	64400	64401	2208020	2208120	9794840200
PCEE	63300	63301	2208030	2208130	9794840300
PCMD	64600	64601	2208050	2208150	9794840500
PCSC	64106	64107	2208070	2208170	9794840700
CPRO	62160	62161	2208005	2208105	9794840055
CFTM	64702	64703	2201156	2200925	9794840903
CPTM	64704	64705	2200441	-	9794840902
CCM/FM	64302	62302	2208097	2208197	9794840951
SDGM	64104	64105	2208002	2208102	9794840010
PFA	64200	64201	2208010	2208113	9794840100
FA&CAO/F&G	64202	62203	-	-	9794840101
FA&CAO/C	64205	64206	2281143	2200049	9794845133
CESE	63306	63305	2202128	2205604	9794840302
CPDE	62406	62407	2200598	2201015	9794840203
CTE	62404	62405	2208121	2202121	9794840201
CBE	62400	62401	2200822	2208122	9794840202
CAO/C	64415	64405	2208270	2208271	9794844250
CE/C/West	634837	64406	-	-	9794844258
CPM	65320	65321	2205257	-	9794866000
CWE	64502	62503	2202034	-	9794840401
CRSE/Freight	64504	-	2201480	2201602	9794840408
CRSE/Coaching	64505	-	--	-	9794840404
CRSE/Safety	-	-	-	-	9794840402
CME/PL	64508	64509	2204692	2203845	9794844450
MD	62610	62611	2280119	-	9794840511
C.Staff Surgeon	62614	62613	-	-	9794840512
PCPO	64800	64801	2208060	2208160	9794840600
CSE	62902	62903	-	-	9794840801
CSTE/C	64914	64915	-	-	9794844850
PCMM	64000	64001	2208075	-	9794840764
CMM/G	62000	62001	-	-	9794844782

	VARANASI DIVISION (STDCode 0542)				
DESG.	**Rly office**	**Rly.Resi.**	**P&T office**	**P&T Resi**	**CUG**
DRM	50000	51000	2224801	2370078	9794843000
ADRM/OP	50001	5101		-	9794843002
ADRM/Infra	5007	-	-	-	7307008300
CMS	50500	51500	2222538	2201034	9794843500
Sr.DOM	50900	51900	2224806	2372693	9794843900
Sr DSO	50901	51901	2226043	-	9794843901
Sr.DCM	50950	51950	2224807	2372022	9794843950
Sr.DME/ENHM	50450	51450	2224818	-	9794843422
Sr.DME/C&W	50400	51400	2224812	-	9794843400
Sr.DEN/Coord.	50200	51200	2224808	2372799	9794843200
Sr.DSTE I	50800	51800	2224805	2220354	9794843800
Sr.DEE/G	50300	51301	2224811	2222870	9794843300
Sr.DPO	50600	51600	2220304	2372445	9794843600
Sr DSC	50700	51700	2222076	2370065	9794843700
SrDMM	50770	51770	2224819	2372811	9794843770
CTNL/CHG	50926	-	2226432	-	- 9794843920
		-			
IZZATNAGAR DIVISION (STDCode 0581)					
DRM	22100	22101	2518100	2518101	9760541000
ADRM/Infra	22102	22103	2518102	2518103	9760541001
ADRM/OP	22115	22116	2518110	2518151	9760541010
CMS	22600	22601	2518137	2518144-	9760541500
Sr.DOM	22700	22701	2518123	2518148	9760541900
Sr DSO	22702	22703	2518124	2518125	9760541901
Sr.DCM	22300	22301	2518109	2518108	9760541950
Sr.DEE/TRD	22365	22465	-	-	9760541301
Sr.DME/ENHM	22502	22503	2518120	518176	9760541402
SrDME C&W	22500	22501	2518119	2518149	9760541400
Sr.DEN/Coord.	22400	22401	2518115	2410996	9760541200
Sr.DSTE	22900	22901	2518133	2518180	9760541800
Sr.DEE/G	22350	22351	2518113	-	9760541300
Sr.DPO	22800	22801	2518127	-	9760541600
SrDSC	22150	22151	2518131	-	9760541700
SrDMM/Amin	22110	22111	2547327	2515998	9760541002
CTNL/CHG	22715,	22732	2515932	-	9760541924

LUCKNOW DIVISION (STDCode 0522)					
DRM	31100	32100	2233109	2235482	9794842000
ADRM/O	31102	32102	2233050	-	9794842001
ADRM/O	31101	32101	2233114		9794380002
CMS	36600	-	2320247	2311233	9794842500
Sr.DOM	31700	32700	2233023	2209382	9794842900
Sr DSO	31701	32701	2233033	2238357	9794842901
Sr.DCM	31300	32300	2233098	2238600	9794842950
Sr.DME/Op	31502	-	-	-	9794842302
Sr.DME/C&W	31500	32500	2233119	2236635	9794842400
Sr.DEN/Coord.	31400	32400	2233110	2238603	9794842200
CTNL/CHG	31722	-	2619260	2334101	9794842923

SATELLITE TELEPHONE NUMBERS

HQ/Division	ID Allotted
Gorakhpur	8991112715
Lucknow	8991112711
Gonda	8991112713
Mailani	8991112712
Izzatnagar	8991112708
PILIBHIT	8991112709
Kasganj	8991112710
Varanasi	8991112714
Chhapra	8991112716
Sonpur	00870-764128434
Samastipur	00870-764128437
Mugalsari	00870-762834642
Lucknow (NR)	00870-763095712
Moradabad	00870-763095716
Allahabad	00870-76309568

ASSISTANCE FROM AIR FORCE

(a) Contact Details.

Air Officer Commanding. Air Force Station Gorakhpur.

The Telephone number(Air Traffic control room) is 0551-2745035

(b) Type of helicopters.

Mi-8 helicopters operate from AF Stn Gorakhpur. Mi-8 at maximum fuel load can carry a total of 15 passengers/1.5 tonnes of load. However with reduced fuel and endurance the aircraft can carry upto 24 passengers or 12 stretcher cases or 2.2 tonnes of load and has a radius of operation of 200 km.

(c) Container Size.

Maximum size of container that can be accommodated in the Mi-8 helicopter is 6.5M x 1.8M x 1.6M with reduced endurance and a radius of operation of 200 km. However, with maximum endurance, the size of container would be reduced to 6.5M x 0.8M x 1.6M. These are the maximum volumes available and any container of the same/lesser size can be accommodated provided the weight restrictions are catered for.

(d) Helipad.

Minimum clear area on ground required for landing the rescue team with its equipment is 75M x 35M for a single aircraft operation. Also there should be no obstruction upto a distance of 30M from edges of the helipad. The surface of the helipad must be level, hard and free from dust. The helipad should have a clearly discernable 'H' marking

(e) Rescue Drop.

It is feasible to drop the rescue team in close proximity of the accident site, provided there are no obstructions as specified in sub Para(d) above.

(f) Reaction Time.

The helicopter can be made available within one hour of information reaching the unit on working days and two hours on non-working days/holidays.

(g) Facilities at 12 AF Hospital.

The facilities available at 12 AF Hospital, Gorakhpur are as follows:-

(i) Contact person: Register

(ii) Telephone number: 09793477381

(iii) Facilities: Operation Theatre, General Surgeon, Anaesthetist, Blood Bank, Laboratory, X-Ray, Ultra Sound facilities and 80 indoor beds (male and female) are available.

Assistance From Civil Ambulance

(a) 108

(b) 102

LIST OF VALUNTARY NGO WORK IN RESCUE/RELIEF OPERATION

1.	Bharat Sewa Mission C/o Divyaman Hospital Front of Sports Clooege, Rapti Nagar, Gorakhpur	Mob. No. 9415212566
2.	Poorvanchal Gramin Vikas Sansthan Ismailpur, Gorakhpur	Mob. No. 9936033344
3.	Gorakhpur Enviornmental Action Group HIG First Phase ¼, Siddharth Puram Vistar, Tara Mandal, Gorakhpur	P&T No.0551-2230004,9336414146
4.	Purvanchal Gramin Seva Smiti Fatima Nagar, Padri Bazar, Gorakhpur	P&T No.0551-2284674
5.	Gram Niyojan Kendra (Bibhas Dada)	Mob. No.9415339761
6.	Manav Sewa Sansthan Rajesh Mani – Director (Mani Ji) LIG- Ist. 198-Vikas Nagar, Bargadwa, Gorakhpur	Mob. No.9838070412
7.	Sarwangeen Vikas Sansthan Infront of Jhule Lal Tample (S.N.Pandey) Gorakhnath, Gorakhpur	Mob. No.9839637637
8.	Panmati Devi Sikhs Samiti Sri Bhagwat Singh	Mob. 8707586980
9.	Akshay Patra Rajeev Kumar	Mob. 8009752660

TELEPHONE NUMBERS OF ADJOINING RAILWAY/DIVISIONS

	E.C.RAILWAY-(RLYCODE-025) HEADQUARTER –STD CODE 06224			
Design	**OfficeBSNL**	**Office Railway**	**Mobil**	**ResidenceBSNL**
GM	06224-274728	22000	9771425000	0612-2300100
AGM	06224-272137,	2592846	9771425002	0612-2918606
COM	06224-272691	23300	9771425900	0612-2205353
CSO	06224-272874	23302	9771425940	0612-2524614
CCM	06224-277211	22300	9771425950	0612-2340160
CME	06224-274755	23000	9771425400	0612-2205442
CE	06224-274749	22700	9771425200	0612-221637
CEE	06224-274456	22500	9771425300	0612-2211793
CMD	06224-272693	23200	9771425500	0612-2592843
CSTE	06224-272708	23700	9771425800	0612-2205459
CSC	06224-273201	23500	9771425700	0612-2557355
CPRO	06224-277010	22020	9771425006	0612-221629
Central Control	06224-276914	24206,24242		
Security Control	06224-273260	24224		

TELIPHONE NUMBER OF ADJOINING RAILWAY/DIVISIONS

N.C.Railway

Designation	**Railway**		**P&T- STD CODE-0532**		**Mobile**
	Office	***Residence***	***Office***	***Residence***	
GM	23001	23002	2230200	2616543	9794835000
COM	23401	23402	2230237	2230079	9794835900
CSO	23407	23408	2230442	2623927	9794835902
CPTM	23409	23440	2230445	2230677	9794835903
EMERGENCY	23447,23400		2230151		-
DRM/PRYJ DIV.	22001	22002	2407958	2407227	9794837000

TELIPHONE NUMBER OF ADJOINING RAILWAY/DIVISIONS

Northern Railway

Designation	**Railway**		**P&T- STD CODE-011**		**Mobile**
	Office	***Residence***	***Office***	***Residence***	
GM	38110	55001	23387227	23387227	9717630000
COM	32311	55026	23387976	24121243	9717630900
CSO	32744	55413	23388050	24107208	9717630904
CPTM	32868	-	23386958	26116581	9717630902
EMERGENCY	32215		23384605		
DRM/LKO DIV.					

TELEHPONE NUMBERS OF SENIOR OFFICERS OF U.P.GOVERNMENT

STD CODE – 0522

S.N.	*Designation*	*Office*	*Residence*	*Mobile No.*	*FAX*
1	Chief Secretary	2237135,2238219	2239461,2237299	9839900278	2239283
2	Principal Secretary (Home)	2238291	2236991	9454405001	2236774,2237410
3	Home Secretary	2238291,2215061	2306605	9454405004	2238409,2238407
4	Special Secretary Home	2237129,2215156	2237148	9154405015	2238409,2238407
5	Secretary(CM Secretariat)	2238316	2235949	-	
6	Secretary Home	2238248	2303951	9454405004	2238225
7	Principal Secretary (Information &PR)	2238760	2740400	-	2236937
8	SpecialSecretary (Information &PR)	2238069	2301778	9415105013	2237002
9	Secretary (Coordination)	2238138	2398850	-	-
10	Principal Secretary (Medical, Health & FP)	2627029,2234665	2625449	-	-
11	Secretary (Medical, Health)	2615912,2234767	2721144	-	-
12	Principal Secretary (Revenue & Relief)	2238020	2355478	-	-
13	DG(Police)	2206104,2208596 Controle (Room)	2208085	9454400101	-
14	DG(Railway)	2287242	2270929		2206120,2206174
15	ADG(Railway)	2287241,2287242	22721202	9454400135	2287241
16	IG (Railway)/LKO	2287083	2236414	9454400171	2287083
17	IG (Railway)/ALD	2624439	2561106	94154400170	2624439
18	Relief Commissioner	2238200	2235780	-	-

The Central Management Committee To be Repoted TheCrisis Satuation on Railway During Serious Accident

STD Code Rly -030 BSNL -011

SN	*Designation (Ministry of Rly)*	Railway No.		BSNL No.		Mobile
				Office	Residence	
		Office	Resig			
1	ED /Safety	44505	-	23381344 23782546	21612200	9818798390
2	Add. Member (Tfc)	43575	22797	23382427	23348592	9910487452
3	DG /RPF	43480	24104473	23382209	24101648	921130620
4	Add Member/ Civl Engg	44800	-	233826087	-	-
5	Add Member /Mech Engg	43400	-	23382975	-	9910487434
6	Add Member /Electl Engg	44645	-	23381227	25313356	9818798383
7	Add Member /Telel Engg	44610	55012	23383815	0120-4272169	9717649600
8	Add Member /Signasl	44600	53240	23382122	26112709	9650880000
9	ADG/RHS	43799	55030	23381332	24109024	9810048950

Central Management Committee For Hijacking Of Train

SN	*Designation (Ministry of Rly)*	Railway No.		BSNL No.		Mobile
				Office	Residence	
		Office	Resig			
1	DG /RPF	43480	24104473	23382209	24101648	921130620
2	ADG/RPF	43417	-	23389961	24103157	9910487402
3	Add Member /Telel	44610	55012	23383815	0120-4272169	9717649600
4	DG/RHS	43799	53240	23383638	24109024	9810048950
5	Add Member /Comml	43650	-	23382112	24611640	9818798394
6	Add Member /Mech	43400	-	23382975	-	9910487434
7	Add Member /Signasl	44600	53240	23382122	26112709	9650880000
8	Add Member /Civil Engg	44800	-	23382607	-	-
9	ADG	-	-	23381332	26168671	9810046271

Central Management Committee For Natural Disasters

SN	*Designation (Ministry of Rly)*	Railway No.		BSNL No.		Mobile
				Office	Residence	
		Office	Resig			
1	Add Member/ Civl Engg	44800	-	23382607	-	-
2	Add. Member (Tfc)	43575	22797	23382427	23348592	9910487452
3	Add Member /Mech Engg	43400	-	23382975	-	9910487434
4	Add Member /Electl Engg	44645	-	23381227	25313356	9818798383
5	Add Member /Comml	43650	-	23382112	24611640	9818798394
6	Add Member /Telel	44610	55012	23383815	0120-4272169	9717649600
7	Add Member /Signasl	44600	53240	23382122	26112709	9650880000
8	DG/RPF	43480	24104473	23382209	24101648	921130620
9	DG/RHS	43799	53240	23383638	24109024	9810048950

TELEHPONE NUMBERS OF SENIOR OFFICERS OF BIHAR GOVERNMENT

PATNA STD Code -0612				
Authority	**Office**	**Residence**	**Fax**	**Mobile**
Chief Secretary	2216784	-	2217085	
Home Secretary	2234518	2286222		
Secretary Health	2215809	2215070		
DGP	2217877	2230033	2230033	
IG Rly 2536	2215427	2286200	215253	
SRP/Patna	2219239	2928118		
Control Room Police	2215058	2201978		
Control Room DM	2217305	2220234	2215786	
Control Room Railway	2231968			
Army Assistant/Danapur	06115-221144			
Army Assistant/New Delhi	23017897	25686071		
Fire Brigade	2222223,2221089			
Doordarshan/Patna	2233838		2233838	
Akaswani/Patna	-			
PTI	227411, 2222858			

TELEHPONE NUMBERS OF SENIOR OFFICERS OF UTTRAKHAND GOVERNMENT

STD CODE-0135	
Chief Seceratory	**2712100 , 2712200**
Add.chief Seceratory Disaster managment	2712090 , 70600455
Addl.Seceratory Disaster management	0135- 2721232
Sr.Chief Seceratory Disaster Managment	2712040, 9568002755

अखबार एवं न्यूज चैनल का कानटैक्ट नम्बर

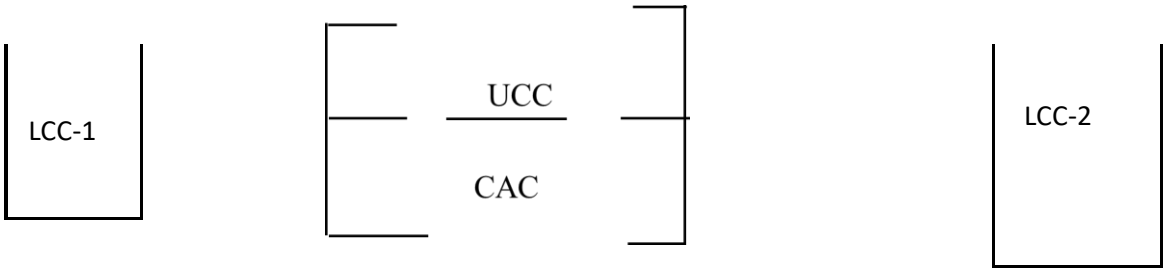
क्र.सं.	नाम	संवाददाता समाचार पत्र/समाचार चैनल	मोबाईल नं0
1.	श्री प्रेम नारायण दिवेदी	दैनिक जागरण	9451813914
2.	'' उदयभान त्रिपाठी	अमर उजाला	9956973056
3	'' राजन राय	अमर उजाला	9675202448
4	'' आशीष राय	हिन्दुस्तान	8127499127
5	'' मनीष कुमार मिश्र	हिन्दुस्ताव	9839903002
6	'' राधेश्याम जायसवाल	राष्ट्रीय सहारा	9415356249
7	अरूण तिवारी	राष्ट्रीय सहारा	8874146661
8	'' दुर्गेश चन्द ओझा	आज	9415456003
9	'' अमरेन्द्र पाण्डेय	आई-नेक्स्ट	7499288488
10	श्रीमती अर्जुमन्द बानो	टाईम्स आफ इंडिया	9621489458
11	'' काजी ए. रहमान	हिन्दुस्तान टाईम्स	9936046287
12	'' राजेश्वर शुक्ला	दैनिक भाष्कर	9451216077
13	'' विजय शंकर श्रीवास्तव	रेल समाचार	9794840097
14	'' रंजीत प्रताप	स्वतंत्र चेतना	9005224022
15	'' प्रमोद पाल	नव भारत टाईम्स	9415672385
16	'' अशोक राव	जन संदेश टाईम्स	9451736411
17	'' दुर्गेश यादव	स्वतंत्र भारत	9450102702
18	'' इशरत शमीम सिद्दीकी	यूनाईटेड भारत	9451445818
19	'' राम गोपाल दिवेदी	न्यूज 18	9161106886
20	'' अरशद जमाल	सहारा टी.वी.	9453623738
21	'' नीरज श्रीवास्तव	ए.वी.पी. न्यूज	9415279392
22	'' गजेन्द्र तिवारी	आज तक	9415823282
23	'' राजीव पाण्डेय	डी.डी. न्यूज	8299467853
24	'' अजीत सिंह	न्यूज 24	9795680000
25	'' डा0 राज श्रीवास्तव	इंडिया टी.वी.	9838954023
26	'' अबरार अहमद	एन.डी. टी.वी. इंडिया	9415659532
27	'' सलीम	एन.डी. टी.वी.	9450439818
28	'' आशीष शाही	जी. न्यूज	9454002266
29	'' उदय पाण्डेय	यू.एन.आई.	9415848752
30	'' सैयद अली	पीटीआई	8869935995

ABRIVIATION

NER	North Eastern Railway	**GM**	General Manager
HQ	Head Quarter	**OC**	Officer Commonding
D M	Disaster Management	**RPF**	Railway Protection force
GRP	Government Railway Police	**SP**	Superntendent of police
DRM	Divisionsl Railway Manager	**S&T**	Signal & Telecommunication
ART	Accident Relief Train	**ARMV**	Accident Relief Medical Van
RCT	Railway Claims Tribunal	**CAC**	Combined Assistance Center
LCC	Local Comand Center	**UCC**	Unified Command Center
NR	Northen Railway	**NCR**	North Central Railway
ECR	East Central Railway	**IAT**	Instant Action Team
TS	Train Superintendent	**TTE**	Train Ticket Eaxaminer
SS	Station Superintendent	**ASM**	Assistant Station Master
SCI	Senior Commercial Inspector	**T I**	Traffic Inspector
OHE	Over Head Equipment	**PWI**	Permanent Way Inspector
CWI	Chief Works Inspector	**HOR**	High Official Requisition
LI	Loco Inspector	**SI**	Signal Inspector
COM	Chief Operations Manager	**CSO**	Chief Safety Officer
CCM	Chief Commercial Manager	**RG**	Rest Giver
LR	Leave Reserve	**CMS**	Chief Medical Superintendent
MS	Medical Superintendent	**PC**	Personal Computer

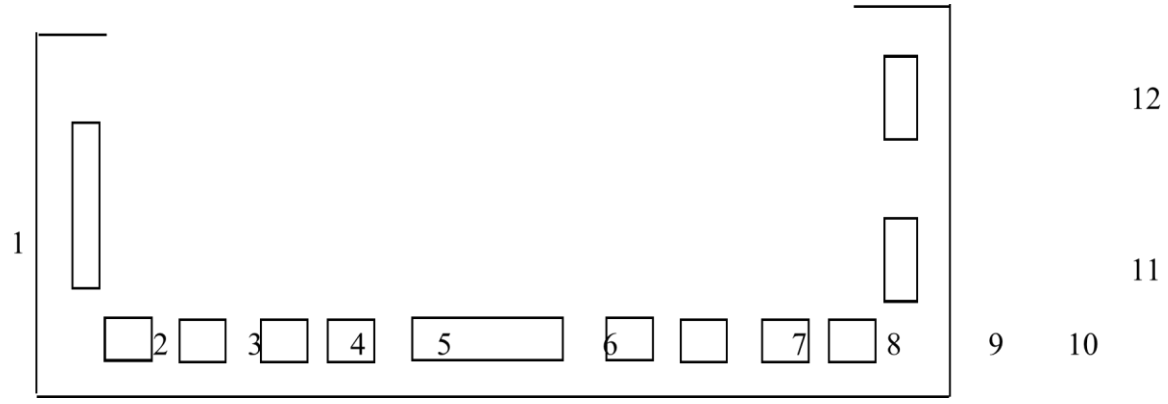
Annexure -I

OUTLINE SCHEMATIC PLAN OF UC C / CAC / LCCs



Annexure -2

DETAILS SCHEMATIC PLAN OF UCC



1- MEDICAL

2- COMMERCIAL

3- OPERATING

4- SAFETY

5- SECURITY

6- PUBLIC RELATION

7- OC SITE & OFFICER

8- MECHANICAL

9- ELECTRICAL

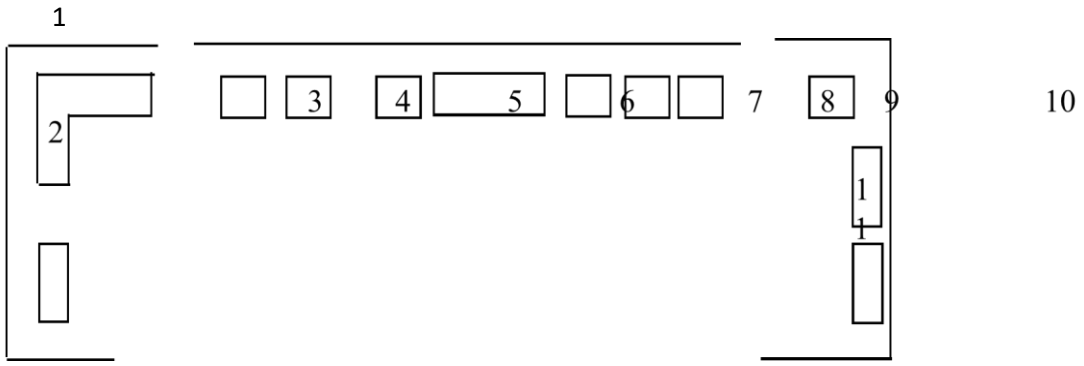
10- S&T

11- CIVIL

12- SPARE

Annexur -3

DETAILS SCHEMATIC PLAN OF CAC



1- Commercial	-	Reservation Chart
2- Medical	-	List of dead & injured
3- Commercial	-	Provision of escort and vehile
4- Railway doctor	-	Issue of medical Death certificates
5- Govt.Doctor	-	Issue of postmortem report
6- CAC in-Charg and officer		
7- Municipality Official	-	Issue of official Death Certificates
8- RPF/ Local Police	-	Issue of authority for handing over dead body
9- Commercial	-	Payment of Ex-gratia,Issue of claim forms
10- Commercial	-	assistance for performing of last rites
11- Personnel	-	Issue of return Journey passes
12-Operating	-	Arrangment for return journey