आज़ादी का अमृत महोत्सव

दक्षिण पूर्व मध्य रेल्वे

SOUTH EAST CENTRAL RAILWAY

क्षेत्रीय आपदा प्रबंधन योजना बिलासपुर

ZONAL DISASTER MANAGEMENT PLAN BILASPUR

Part - I

DECEMBER 2023

संदेश

दक्षिण पूर्व मध्य रेलवे के संरक्षा विभाग द्वारा क्षेत्रीय आपदा प्रबंधन योजना भाग-1 का नवीन संस्करण (दिसंबर-23) , सुनियोजित आपदा प्रबंधन हेतू प्रकाशित किया जा रहा है।

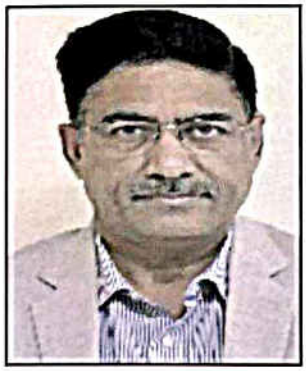
इस नियम पुस्तक में दुर्घटना राहत व बचाव संबंधी सभी प्रकार की सुचनाएं एवं आपदा प्रबंधन के लिए महत्वपूर्ण जानकारियाँ दर्शायी गई हैं। हमारा ध्येय रेल यात्रियों को सुरक्षित यात्रा करवाना तथा आवश्यक सामग्रियों को उचित स्थान तक पहुचाना है।

मुझे विश्वास है कि संरक्षा को प्राथमिकता देते हुए इस नियम पुस्तक में दी गयी जानकारी का सभी रेलकर्मी ध्यान रखेंगे, ताकि आपदाओं से आसानी से निपटा जा सके ।

शुभकामनाओं सहित !

(आलोक कुमार)
महाप्रबंधक
दक्षिण पूर्व मध्य रेलवे

प्रस्तावना



दक्षिण पूर्व मध्य रेलवे, बिलासपुर के संरक्षा विभाग द्वारा क्षेत्रीय आपदा प्रबंधन योजना भाग-1 (दिसंबर 2023) का नवीन संस्करण को रेलवे बोर्ड के निर्देशानुसार तैयार किया गया है। मैं अपने कर्तव्यनिष्ठ अधिकारियों एवं कर्मचारियों को धन्यवाद देता हूँ जिनके अथक प्रयास से यह कार्य संभव हो सका है। इस संस्करण में आपदा की स्थिति में रेलवे के विभिन्न विभागों द्वारा आपसी सामंजस्य एवं तत्परता से आपदाओं से निपटने एवं सरकारी और गैर सरकारी संगठनों के साथ मिलकर राहत कार्यों के लिए उचित दिशा निर्देशों की जानकारी दी गयी है। क्षेत्रीय आपदा प्रबंधन योजना भाग-1 (दिसंबर 2023) संस्करण में आपदा प्रबंधन अधिनियम-2005 के निर्देशों का विशेष ध्यान रखा गया है। इस संस्करण में रेलवे बोर्ड के निर्देशानुसार भूकंप, बाढ़, रासायनिक आपदा एवं सुरंगों में आपदा आदि पर दिशानिर्देश भी शामिल किए गए हैं।

आपदा प्रबंधन योजना का मुख्य उद्देश्य आपदा के समय हमारे प्रयासों को बेहतर तरीके से प्रस्तुत करना है, जिससे जान-माल की क्षति न हो। इस पुस्तक मे दिये गए दिशा-निर्देश समुचित बचाव एवं राहत कार्य करने के लिए अपेक्षित पक्षों के साथ समन्वय मे मदद करेगा।

मै सभी अधिकारियों एवं कर्मचारियों से अनुरोध करता हूँ कि इस पुस्तक मे दी गई जानकारियों का अनुसरण करें।

शुभकामनाओं सहित !

(प्रदीप कुमार)
प्रधान मुख्य संरक्षा अधिकारी
दक्षिण पूर्व मध्य रेलवे

Abbreviations:

AC	Air Conditioned
ADRM	Additional Divisional Railway Manager
AEE	Assistant Electrical Engineer
AGM	Additional General Manager
ALP	Assistant Loco Pilot
AOM	Assistant Operations Manager
APW	Air Pressure Water
ARME	Accident Relief Medical Equipment
ARMV	Accident Relief Medical Van
ART	Accident Relief Train
ASC	Assistant Security Commandant
ASM	Assistant Station Master
ATI	Administrative Training Institute
BDD	Bomb Detection and Disposal Squad
BIS	Bureau of Indian Standards
BLS	Basic Life Support
BN	Battalion
BRO	Border Roads Organization
BSF	Border Security Force
BT	Bio-Terrorism
BW	Biological-Warfare
CAC	Combined Assistant Centre
CAG	Comptroller & Auditor General
CAPF	Central Armed Police Force
CBO	Community Based Organization
CBRN	Chemical, Biological, Radiological, Nuclear CCS
CCRS	Chief Commissioner of Railway Safety
CCTV	Close Circuit Television
CDM	Cyclone Disaster Management
CE	Chief Engineer
CHC	Chief Controller
CEO	Chief Executive Officer
CHD	Chief Health Director
CI	Commercial Inspector
CISF	Central Industrial Security Force
CMD	Chief Medical Director
CMG	Central Management Group
CMP	Crisis Management Plan
CMS	Chief Medical Superintendent
CPMF	Central Para Military Force
CPRO	Chief Public Relation Officer
CRB	Chairman of Railway Board

CRPF	Central Reserve Police Force
CRS	Commissioner of Railway Safety
CSC	Chief Safety Commissioner
CSO	Chief Safety Officer
CTD	Chemical (Terrorism) Disaster
CUG	Closed User Group
CWC	Central Water Commission
DAE	Department of Atomic Energy
DC	Divisional Commissioner
DCP	Dry Chemical Powder
DCM	Divisional Commercial Manager
DIG	Deputy Inspector General
DM	(i)Disaster Management (ii)District Magistrate (iii)Disaster Manual
DMA	Disaster Management Authority
DMO	District/Divisional Medical Officer
DOM	Divisional Operation Officer
DRR	Disaster Risk Reduction
DR ABC	Danger, Response, Airways, Breathing, Circulation
DSC	Divisional Security Commandant
DSO	Divisional Safety Officer
DSCNL	Divisional Security Control
DY CHC	Deputy Chief Controller
DY CSC	Deputy Chief Security Commisioner
DDMA	District Disaster Management Authority
DG	Director General
DOD	Department of Ocean Development
DRM	Divisional Railway Manager
EMS	Electronic Messaging System
MR	Emergency Medical Response
ERC	Emergency Response Centre
ESF	Emergency Support Function
ESIC	Employees State Insurance Corporation
EWS	Early Warning System
FF	Flood Forecasting
FM	Flood Management
FR	First Responders
FOIS	Freight Operation Information System
GAIL	Gas Authority of India Ltd.
GIS	Geographic Information System
GRP	Government Railway Police
GSI	Geological Survey of India
Hazchem	Hazardous Chemical
HFL	Highest Flood Level

HLC	High Level Committee on Disaster Management
HM	Home Minister
HRD	Hydraulic Rescue Device
HRE	Hydraulic Rerailing Equipment
HS	Home Secretary
HSD	High Speed Diesel
I/C	In-Charge
IAN	Integrated Ambulance Network
IAT	Instant Action Team
IDSP	Integrated Disease Surveillance Programme
IG	Inspector General
IPF	Inspector (Railway) Protection Force
IMD	India Meteorological Department
IOC	Indian Oil Corporation
IOC	Integrated Operation Centre
INCOIS	Indian National Centre for Oceanic Information Services
IRIDM	Indian Railways Institute of Disaster Management
IRITM	Indian Railways Institute of Transport Management
IRS	Incident Response System
IRT	Incident Response Team
IS	Internal Security
ITBP	Indo Tibetan Border Police
ITWC	Interim Tsunami Warning Centre
JAG	Junior Administrative Grade
LC	Level Crossing
LP	Loco Pilot
MCE	Mass Casualty Evacuation
MCM	Mass Casualty Management
MI	Member Infrastructure Railway Board
MF	Member Finance Railway Board
MFR	Medical First Responder
MHA	Ministry of Home Affairs
MoAFW	Ministry of Agriculture and Farmer's Welfare
MOBD	Member Operation and Business Development
MoCA	Ministry of Civil Aviation
MoD	Ministry of Defense
MoES	Ministry of Earth Sciences
MoEFCC	Ministry of Environment, Forest and Climate Change
MoH&FW	Ministry of Health and Family Welfare
MoR	Ministry of Railways
MoS	Minister of State
MoRTH	Ministry of Road Transport and Highways
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development

MoWR	Ministry of Water Resources
MPMCM	Medical Preparedness and Mass Casualty Management
MS	Medical Superintendent
MTRS	Member Traction and Rolling Stock, Railway Board
NAHI	National Association of Home Inspectors
NAIR	National Academy of Indian Railways
NCC	National Cadet Corps
NCMC	National Crisis Management Committee
NCRPM	National Cyclone Risk Mitigation Project
NDM	National Disaster Management
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NEC	National Executive Committee
NFMI	National Flood Management Institute
NGO	Non-Governmental Organization
NIDM	National Institute of Disaster Management
NIO	North Indian Ocean
NIOT	National Institute of Ocean Technology
NSG	National Security Guard
NSS	National service Scheme
NYKS	Nehru Yuva Kendra Sangthan
OC	Officer-in-Charge
OFC	Optic Fiber Cable
OP	Outpost
ORS	Oral Rehydration Salt
PCMD	Principal Chief Medical Director
PCSC	Principal Chief Security Commissioner
PCSO	Principal Chief Safety Officer
POMKA	Portable Medical Kit for Accidents
PPE	Personal Protective Equipment
PTWC	Pacific Tsunami Warning Centre
P-way	Permanent Way
QRT	Quick Reaction Team
R&D	Research & Development
RAT	Remote Administration Tool
RAW	Research and Analysis Wing
RDSO	Research, Design and Standards Organization
RMC	Regional Meteorological Centers
RMS	Railway Mail Service
ROB	Road Over Bridge
RPF	Railway Protection Force
RPSF	Railway Protection Special Force
RRC	Railway Response Centre
RUB	Road Under Bridge

S&T	Signal & Telecommunication
SDMA	State Disaster Management Authority
SDRF	State Disaster Response Force
SEC	State Executive Committee
SECR	South East Central Railway
SM	Station Master
SMES	Small and Medium Enterprises
SOP	Standard Operating Procedure
SP	Superintendent of Police
Sr.DOM	Senior Divisional Operations Manager
Sr.DSC	Senior Divisional security commandant
Sr.DSO	Senior Divisional Safety Officer
Sr.DSTE	Senior Divisional Signal and Telecom Enngineer
SPARMV	Self-Propelled Accident Relief Medical Van
SPART	Self-Propelled Accident Relief Train
STC	Supervisor Training Centre
STS	System Technical School
TA	Territorial Army
TC	Tropical Cyclones
TE	Train Escorting
TI	Traffic Inspector
TLC	Traction Loco Controller
TPC	Traction Power Controller
TRD	Traction Distribution
TMS	Terminal Management System
TS	Train Superintendent
TTE	Train Ticket Examiner
UCC	Unified Command Centre
UNISDR	United Nations International Strategy for Disaster Reduction
UNDP	United Nations Developmental Programme
UT	Union Territory
USFD	Ultra Sound Flaw Detection
VCD	Vigilance Control Device
WI	Welfare Inspector
ZDMP	Zonal Disaster Management Plan
ZMG	Zonal Management Group
ZSCNL	Zonal Security Control
ZRTI	Zonal Railway Training Institute

Executive Summary

The Disaster Management Act, 2005 (DM Act 2005) lays down institutional and coordination mechanism for effective Disaster Management (DM) at the national, state, district and local levels. As mandated by this Act, the Government of India (GoI) created a multi-tiered institutional system consisting of the National disaster Management Authority (NDMA) headed by the Prime Minister, the State Disaster Management Authorities (SDMAs) headed by the respective Chief Ministers and the District Disaster Management Authorities (DDMAs) headed by the District Collectors and co-chaired by Chairpersons of the local bodies. These bodies have been set up to facilitate a paradigm shift from the hitherto relief-centric approach to a more proactive, holistic and integrated approach of strengthening disaster preparedness, mitigation, and emergency response.

The National Disaster Management Plan (NDMP) provides a framework and direction to the government agencies for all phases of disaster management cycle It therefore, specifies who is responsible for what at different stages of managing disasters. The NDMP is envisaged as ready for activation at all times in response to an emergency in any part of the country. It is designed in such a way that it can be implemented as needed on a flexible and scalable manner in all phases of disaster management: a) mitigation (prevention and risk reduction), b) preparedness, c) response and d) recovery.

The NDMP is consistent with the approaches promoted globally by the United Nations, in particular the Sendai Framework for disaster Risk Reduction 2015-2030. India will make all efforts to contribute to the realization of the global target by improving the entire disaster management cycle in India by following the recommendations in the Sendai Framework and by adopting globally accepted best practices. The four priorities for action under the Sendai Framework are:

1. Understanding disaster risk.

2. Strengthening disaster risk governance to manage disaster risk

3. Investing in disaster risk reduction for resilience

4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Vision of NDMP

Make India disaster resilient, achieve substantial Disaster Risk Reduction (DRR), and significantly decrease the losses of life, livelihoods, and assets – economic, physical, social, cultural, and environmental – by maximizing the ability to cope with disasters at all levels of administration as well as among communities.

Multi-Hazard Vulnerability

India, due to its, physiographic and climatic conditions is one of the most disaster prone areas of the world. Vulnerability to disasters/emergencies of Chemical, Biological, Radiological and Nuclear (CBRN) origin also exists. Heightened vulnerabilities to disaster risks can be related to increasing population, urbanization, industrialization, development within high-risk zones, environment degradation, and climate change. Hazard vulnerability maps for India are annexed to NDMP.

Reducing Risk; Enhancing Resilience

In the domains of DM planning, preparedness, and capacity building, the central agencies will constantly work to upgrade Indian DM systems and practices as per global trends. The planning framework has arranged the actions envisaged for risk reduction under five thematic areas for action with one of the four priorities for action of Sendai Framework as its dominant feature.

For each hazard, the approach used in national plan incorporates the four priorities enunciated in the Sendai Framework the planning framework for Disaster Risk Reduction under the five Thematic Areas for Action:

1. Understanding Risk
2. Inter-Agency Coordination
3. Investing in DRR – Structural Measures
4. Investing In DRR - Non- Structural Measures
5. Capacity Development

Response

Response measures are those taken immediately after receiving early warning, anticipating an impending disaster, or post-disaster in cases where an event occurs without warning. The primary goal of response to a disaster is saving lives, protecting property, environment, and meeting basic needs of human and other living beings after the disaster. The immediate focus will be on search and rescue of those affected and to evacuate those likely to be affected by the disaster or secondary disaster that is likely to happen.

Different central ministries and departments will provide emergency support to the response effort as per request from the State Government. It may be noted that the SDMA, Department of Revenue of Commissioner of Relief (as applicable) is the nodal agency for coordination of disaster response. The various agencies whose responsibilities are defined in detailed DM plans for the state and district will be responsible specific response measures. The DDMA is the nodal agency for coordination of response at district level supported by other district level agencies. The department wise specific activities at central ministries and state government are summarized in matrix providing clarity to the roles and responsibilities of various agencies.

Structure of Disaster Management plan of Ministry of Railways

Based on the National Disaster Management Plan, context specific changes were made in the DM plan of Ministry of Railways duly indicating the role and responsibilities at Board, Zonal Head Quarters and Divisional level..

Disaster management plan contains detailed guidelines relating to cases of breach/floods, earthquakes, cyclones, manmade disasters like terrorism etc. DM plan at divisional level must include management of rescue and relief operations including care for dead, communication network, restoration operations, maintenance of ART/ARMV & their equipment, media management, check list for officers and supervisors etc.

Accident Manual contains definitions, classification of accidents, reporting of accidents and other unusual occurrences, duties of officials, relief measures, investigation and inquiries, disposal of inquiry reports etc. in case of a train accident. It is a compendium of all instructions, rules, procedures and guidelines issued from time to time on Railway accidents and for safe working of trains in general. These details are not required to be included in DM plans. Accident Manual of Railways may be referred for details related to train accidents.

Division shall identify vulnerable locations and risks associated with natural disasters and incorporate them in the Divisional DM plan. Information flow chart for communicating alerts issued by early warning agencies to the filed officials shall be clearly specified in the DM plan duly indicating preparedness and response to deal with them.

NDMA has issued guidelines on "Managing Crowd at Events and Venues of Mass Gathering". Guidelines on crowd management and role of RPF in crowd control are included in the chapter no. 13 and 14. In events of mass gathering, based on NDMA guidelines, event specific Disaster Management plan for the stations where the crowd is expected needs to be prepared and implemented.

Guidelines issued by NDMA regarding chemical disaster are included in chapter no. 21. Rules for carrying Hazardous chemicals are legislated in Railway Red Tariff Rules, 2000. In Red Tariff, general rules governing acceptance, handling, carriage, storage, delivery and the list of commodities along with the DOs and Don'ts in case of leakage of hazardous chemicals is included. Carriage of commodities other than those specified in Red Tariff, shall not be accepted for transport by rail unless specially authorised by the Railway administration. Dos and Don'ts issued by MHA regarding CBRN disasters is also included in the plan.

Capacity development covers strengthening of institutions, mechanisms, and capacities of all stakeholders at all levels. Chapter no. 06 indicates disaster management training methodology and schedule at all levels.

Structure of Zonal Disaster Management plan (part-I) of SECR Railway

Based on the Disaster Management Plan of Ministry of Railways, specific changes were made in the Zonal Disaster Management Plan of SECR Railway, highlighting the role and responsibilities at Zonal Head Quarters and Divisional level. The structure of the Zonal & Divisional Disaster Management Plans has been revamped.

This revamped Zonal Disaster Management Plan focuses on:

- SECR 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 plans more centric towards prevention, mitigation and preparedness than rescue and relief.

- Information of formation of relief and rescue teams at the accident site, Disaster Management Control Cell, Duties of various officers/officials etc. in addition to the information specific to headquarter.
- Zonal Disaster Management Plan of SEC Railway also contains detailed guidelines relating to cases of breaches/floods, earthquakes, cyclones, manmade disasters like terrorism etc. and preparedness to encounter the same as laid down by NDMA.

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CHAPTER – 1

DISASTER AND TRAIN ACCIDENTS

1.1 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, 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 etc, necessitating large scale help from other Government/Non-government and private organizations*".

Many serious train accidents are also disasters and hence, every Railway staff should be in a position to identify the characteristics of different disaster situations.

1.2 Authority to declare a Disaster on Railways

Railway Board has nominated GMs, AGM and CSOs (when GM/AGM are not available) of a Zonal Railway for declaring an untoward incident as a Railway Disaster as envisaged above. It needs to be understood that a serious train accident may turn into a Railway disaster, if not handled and managed properly; there may be many more Railway related events which may not even involve human lives but may turn into disasters if prevention and mitigation measures are not taken by the Railways beforehand.

'Disaster Management' means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for-

1) Prevention of danger or threat of disaster,
2) Mitigation or reduction of risk of any disaster or its severity or consequences
3) Capacity-building
4) Preparedness to deal with any disaster
5) Prompt response to any threatening disaster situation or disaster
6) Assessing the severity or magnitude of effects of any disaster
7) Evacuation, rescue and relief
8) Rehabilitation and reconstruction

First four points have to be dealt with by the service department before any accident takes place and last four points have to be dealt with jointly by all departments in control organization and all officers in the Divisions. Help from Government, non-Government and private organization may be taken.

1.3 Disaster Management Plan

Disaster Management Plan is a comprehensive document and includes all line of actions to be initiated well in advance, during and after disasters. This plan has to be actualized during course of time to achieve the goal of prevention, mitigation, preparedness, relief and rescue operation in efficient and effective manner to help the affected people of the area.
The plans of the Zonal railway should detail for all types of disasters, and action to be taken for prevention, mitigation and preparedness. The railway should also plan rescue, relief and restoration systems to meet them. Organized and systematic plan will result in accurate and speedy response.

OBJECTIVES

Instant response, relief and rescue are primary objectives of Disaster Management plan. With the enactment of Disaster Management Act 2005, it is widened to the following areas**:**

a. Prevention, Preparedness & Capacity building
b. Preparation of Data Bank
c. Streamlining the logistics of Railways
d. Seeking assistant from State government and involvement of local civilian Authorities
e. Effective Trauma care
f. Proper Trigger Mechanism to ensure adequate medical care within "Golden hour
g. Divisional/Zonal Disaster Management Plan
h. Making use of non railway Resources.
i. Maintenance of ART to have failure proof service
j. Defining responsibilities of various staff/departments

1.4 Strengths of the Railways to handle Disasters

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:

a. Railway's own Communication Network
b. Operating Control on each Division linked with each Station
c. Territorial Army Units
d. Uniformed force of RPF/RPSF
e. Railway's own Medical Infrastructure
f. Civil Defence Organization
g. Gangmen or Track maintainers and other Railway Staff.
h. Scouts and Guides
i. Dedicated Rescue/Restoration and Medical Equipment on Rail

1.5 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 manmade disasters. Different types of disasters are described along with a few examples, below:

(a) **Natural Disaster**
Earthquakes, Floods, Cyclones, Landslides, Snow Avalanches, Tsunami etc**.**

(b) **Train Accident related Disaster**
Collisions (with a huge number of casualties), Train marooned (flash Floods), derailments on a bridge over a river and coaches fallen down, train washed away in cyclone, derailment of a train carrying explosives or highly inflammable material, tunnel collapse on a train, fire or explosions 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 a train on fire, bomb blast at Railway Station/Train, Chemical, Biological, Radiological and Nuclear (CBRN) Disaster.

1.6 Salient Features of Disaster Management Act 2005

Disaster Management Act 2005, has been introduced with a view to provide effective management of disasters and for matters connected therewith following provisions are available in this Act:-

a. Formation of NDMA with Prime Minister as Chairperson and nine(09) other members and an Executive Committee with Secretaries to Govt. of India as members.
b. NDMA shall have powers to lay down policies, guidelines, planning and co-ordination and evaluation & monitoring for Disaster Management. There shall be a National Plan drawn up for disaster management in the whole country.
c. At District level, a District DM Authority with Collector/DC/DM as Chairperson and SP, DMO and other two Dist. Level Officers as member shall be formed with similar function and a District Disaster Management Plan shall be drawn.
d. Central Govt. will take measures for co-ordination among various DMA, with various ministries and Naval, Military and Air Forces for capacity building, preparedness and effective response. Assistance to State Govt. shall be provided. Every ministry shall take measures as per guidelines laid down in national plan and prepare their own Disaster Management Plan. Similarly DMA must have unit branch

at adjacent State / City, so that in case of major Disaster DMA activity will not collapse.

e. Similar action will be taken by the State Govt. and local Authorities at State and District levels respectively.
f. A National Institute of Disaster Management shall be formed for planning, training and research in the area of Disaster Management.
g. A National Disaster Response Force will be constituted for specialist response to disasters.
h. The act provides for punishment for obstruction, failure of officer on duty, for contravention of any order of requisition, false warning, discrimination, etc. by imprisonment or fine or both.
i. **Railway Board Vide letter no- 2003/Safety/DM/6/3 dtd. 09.11.09, informed that, "Ministry of Railway can request NDMA for assistance of NDRF when situation so warrants."**

In case of Railway Disaster, Zonal Railways on request from Divisions may approach Railway Board, who will request NDMA to direct NDRF Battalions for necessary help.

Railway Board Vide letter no- 2003/Safety(DM)/6/3 dated 27.07.10, "Zonal Railway is directed to advise divisional officers to conduct and take part in the mock drills/ Joint exercise in co-ordination with the representative of NDMA as also NDRF battalions located nearest to the divisional offices".

1.7 Important Provisions in the DM Act, 2005 Concerning Railways

a. Section 35

The central government shall take all such measures as it deems necessary 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) Co-operation and assistance to the state governments, as requested by them.
f) Deployment of naval, military, air forces and other armed forces of the Union or any other civilian personnel as may be required for the purpose of this Act.

b. Section 36

It shall be responsibility of every Ministry or Department of the Government of India to take measures necessary for prevention of disasters, mitigation, preparedness and capacity building in accordance with the guidelines laid down by the National Authority.

a) Integrate into its development plans and projects, measures for prevention or mitigation of disasters in accordance with the guidelines laid down by the National Authority.
b) 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.
c) Review the enactments administered by it, its policies, rules and regulations and incorporate provisions for prevention of disasters, mitigation or preparedness.
d) Allocate funds for measures for prevention of disaster, mitigation, capacity building and preparedness.
e) Provide assistance to the National Authority and State Government for:-
    i. Drawing up mitigation, preparedness and response plans, capacity building, data collection, 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 and reconstruction.

f) Make available its resources to the National Executive Committee or 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.

c. 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 specification 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) to (iv).

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

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

Note: No Railway officials are nominated either in National Executive Committee (NEC) or state Executive Committee (SEC), though they can be co-opted as per need.

CHAPTER – 2

PRIME MINISTER'S 10-POINT AGENDA FOR DISASTER RISK REDUCTION

Hon'ble Prime Minister outlined a 10-Point agenda during the 2nd Asian Ministerial Conference on Disaster Risk Reduction in 2016. This edition of ZDMP 2023 is based on the guiding principles of the Ten Point Agenda as given below

1. **All development sectors must imbibe the principles of disaster risk management.**
   This will ensure that all development project are built to appropriate standards and contribute to the resilience of communities they seek to serve. India will work with other partner countries and stakeholders to build a mechanism for promoting disaster resilient infrastructure in the region. This will help generate new knowledge for hazard risk assessment, disaster resilient technologies and mechanisms for integrating risk reduction in infrastructure financing. Railways infrastructure development activities must imbibe the above principle.

2. **Risk coverage must include all, starting from poor households to SMEs to multi-national corporations to nation states.**
   Insurance scheme are increasingly playing a visible role as a means of providing economic security against natural disaster.

3. **Women's leadership and greater involvement should be central to disaster risk management**.
   It is necessary to encourage greater involvement and leadership of women in disaster risk management. Women are disproportionately affected by disasters. They also have unique strengths and insights. India must train a large number of women volunteers to support special needs of women affected by disasters. There is also need for women engineers, masons and building artisans to participate in post-disaster reconstruction and promote women self-help groups which can assist in livelihood recovery. Railway is working towards inclusion of woman volunteers in Civil Defense.

4. **Invest in risk mapping globally to improve global understanding of Nature and disaster risks**.
   It is necessary to invest in mapping risks globally. For mapping risks related to hazards such as earthquakes, there are widely accepted standards and parameters. Based on these, India has mapped seismic zones, with five as highest seismic risk and two as low risk zones.

5. **Leverage technology to enhance the efficiency of disaster risk management efforts.**
   Efforts must be made to leverage technology to enhance the efficiency of our disaster risk management efforts. An e-platform that brings together organizations and individuals and helps them map and exchange expertise, technology and resources would go a long way in maximizing the collective impact.

6. **Develop a network of universities to work on disaster-related issues.**
   It will be helpful to develop a network of universities to work on disaster-related aspects. As part of this network, different universities could specialize in multi-disciplinary research on disaster issues most relevant to them. Universities located in coastal areas could specialize in managing risks from coastal hazards, and the ones located in the hill cities could focus on mountain hazards.

7. **Utilize the opportunities provided by social media and mobile technologies for disaster risk reduction**.
   Social media is transforming disaster response. It is helping response agencies in quickly organizing themselves and enabling citizens to connect more easily with authorities. In disaster after disaster, affected people are using social media to help each other. Those responsible for disaster management must recognize the potential of social media and develop applications relevant to various aspects of disaster risk management.

8. **Build on local capacity and initiative to enhance disaster risk reduction.**
   Disaster management must build on local capabilities and initiatives. Specific actions have to be designed and implemented locally. It is necessary to expand the scope of community-based efforts and support communities to identify local risk reduction measures and implement them. Such efforts reduce risk and create opportunities for local development and sustainable livelihoods. Response agencies need to interact with their communities and make them familiar with the essential drill of disaster response.

9. **Make use of every opportunity to learn from disasters and to achieve that, there must be studies on the lessons after every disaster**.
   After every disaster there are studies and reports on lessons learnt that are rarely applied. Often the same mistakes are repeated. It is necessary

to have a vibrant and visual system of learning and it is important to undertake research studies to understand best practices and improve disaster governance.

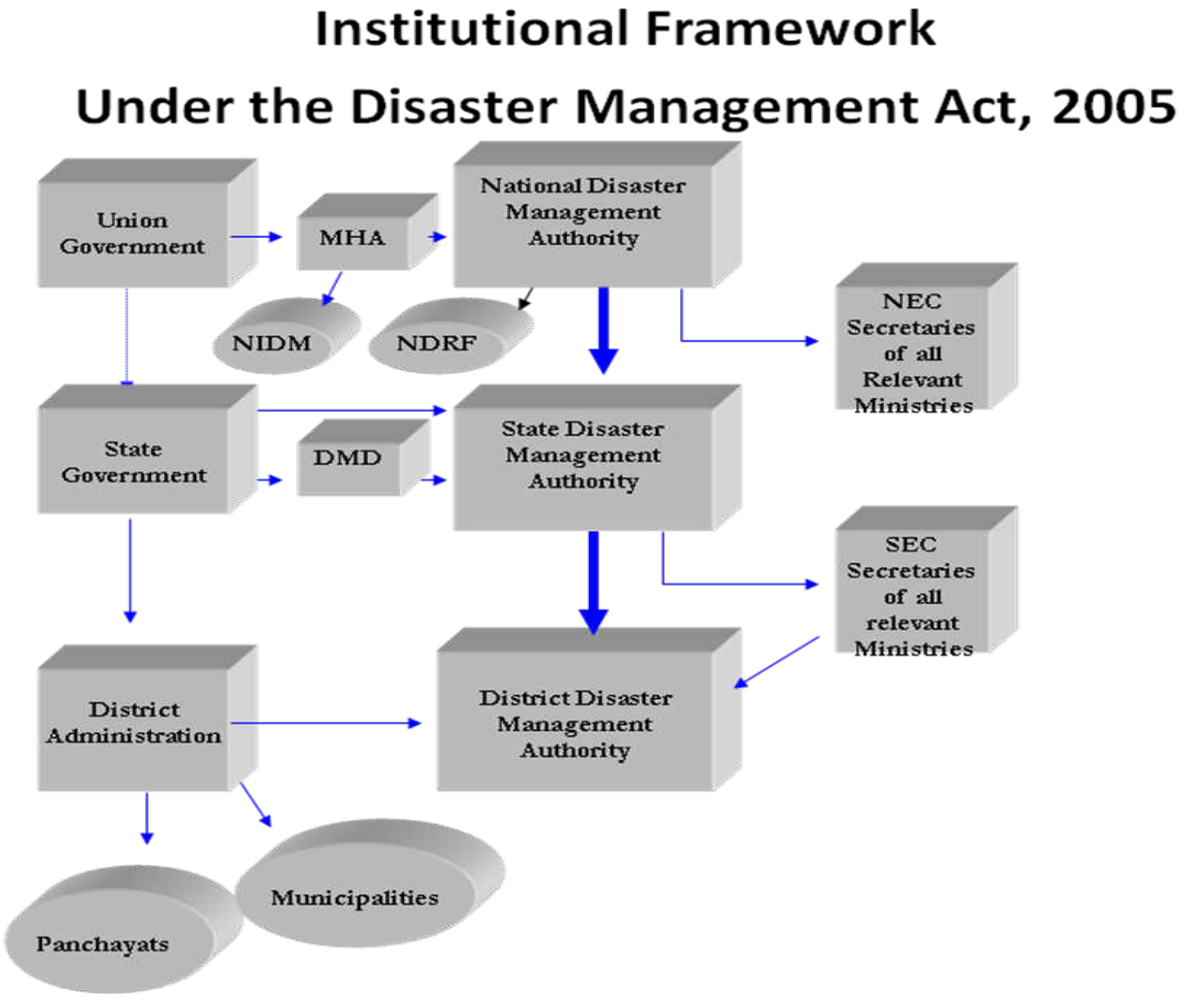
10. **Bring about greater cohesion in international response to disasters**.
    It is necessary to bring about greater cohesion in international response to disasters. In the aftermath of a disaster, disaster responders pour in from all over the world. This collective strength and solidarity could be enhanced further if the activities are organized under a common umbrella. The United Nations could think of a common logo and branding under which all those who are helping with relief, rehabilitation and reconstruction.

CHAPTER – 3

INSTITUTIONAL FRAMEWORK FOR DISASTER MANAGEMENT

3.1 National Level

The DM Act of 2005 provides for the setting up of NDMA at national level and the SDMA at the state level. The role, composition and the role of the key decision making bodies for disaster management at national-level are briefly described in the Table- 3 .1.



(Table-3.1)

3.1.1 Nodal Ministry for Management/Mitigation of Different Disasters

SN	Disaster	Nodal Ministry/Department
1.	Biological	Min. of Health and Family Welfare (MoHFW)
2.	Chemical and Industrial	Min. of Environment, Forests and Climate Change (MoEFCC)

3.	Civil Aviation Accidents	Min. of Civil Aviation (MoCA)
4.	Cyclone/Tornado	Min. of Earth Sciences (MoES)
5.	Tsunami	Min. of Earth Sciences (MoES)
6.	Drought/Hailstorm/Cold Wave and Frost/Pest Attack	Min. of Agriculture and Farmers Welfare (MoAFW)
7.	Earthquake	Min. of Earth Sciences (MoES)
8.	Flood	Min. of Water Resources (MoWR)
9.	Forest Fire	Min. of Environment, Forests, and Climate Change (MoEFCC)
10.	Landslides	Min. of Mines (MoM)
11.	Avalanche	Min. of Defence (MoD)
12.	Nuclear and Radiological Emergencies	Dept. of Atomic Energy (DAE)
13.	Rail Accidents	Min. of Railways (MoR)
14.	Road Accidents	Min. of Road Transport and Highways (MoRTH)
15.	Urban Floods	Min. of Urban Development (MoUD)

3.1.2 National Disaster Management Authority (NDMA)

The Government of India established the NDMA in 2005, headed by the Prime Minister. Under the DM Act 2005, the NDMA, as the apex body for disaster management, shall have the responsibility for laying down the policies, plans, and guidelines for disaster management for ensuring timely and effective response to disaster. The guidelines of NDMA will assist the Central Ministries, Departments, and States to formulate their respective DM plans. It will approve the National Disaster Management Plans and DM plans of the Central Ministries /Departments. It will take such other measures, as it may consider necessary, for the prevention of disasters, or mitigation, or preparedness and capacity building, for dealing with a threatening disaster situation or disaster. Central Ministries/Departments and State Governments will extend necessary cooperation and assistance to NDMA for carrying out its mandate. It will oversee the provision and application of funds for mitigation and preparedness measures.

NDMA has the power to authorize the Departments or authorities concerned, to make emergency procurement of provisions or materials for rescue and relief in a threatening disaster situation or disaster. The general superintendence, direction, and control of the National Disaster Response Force (NDRF) is vested in and will be exercised by the NDMA. The National Institute of Disaster Management (NIDM) works within the framework of broad policies and guidelines laid down by the NDMA. The NDMA has the mandate to deal with all types of disasters – natural or human-induced. However, other emergencies such as terrorism (counter-insurgency), law and order situations, hijacking, air accidents, CBRN weapon systems, which require the close involvement of the security forces and/or intelligence agencies, and other incidents such as mine disasters, port and harbor emergencies, forest fires, oilfield fires and oil spills will be handled by the

National Crisis Management Committee (NCMC). Nevertheless, NDMA may formulate guidelines and facilitate training and preparedness activities in respect of CBRN emergencies.

National Disaster Management Authority (NDMA)

- NDMA control room under Ministry of Home Affairs: Tele No.011-26701728, Fax No.011-26701729,
- Helpline Number: 011-1078,Website:ndma.gov.in

3.1.3 National Institute of Disaster Management (NIDM)

As per the provisions of the Chapter-VII of the DM Act, Government of India constituted the National Institute of Disaster Management (NIDM) under an Act of Parliament with the goal of being the premier institute for capacity development for disaster management in India and the region. The vision of NIDM is to create a Disaster Resilient India by building the capacity at all levels for disaster prevention and preparedness. NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation, and policy advocacy in the field of disaster management. The NIDM has built strategic partnerships with various ministries and departments of the central, state, and local governments, academic, research and technical organizations in India and abroad and other bi-lateral and multi-lateral international agencies. It provides technical support to the state governments through the Disaster Management Centers (DMCs) in the Administrative Training Institutes (ATIs) of the States and Union Territories. Presently it is supporting as many as 30 such centres. Six of them are being developed as Centers of Excellence in the specialized areas of risk management – flood, earthquake, cyclone, drought, landslides, and industrial disasters.

3.1.4 National Disaster Response Force (NDRF)

The NDRF has been constituted as per the Chapter-VIII of the DM Act 2005 as a specialist response force that can be deployed in a threatening disaster situation or disaster. The command and supervision of the NDRF shall vest with the Director General appointed by the Government of India. The NDRF will position its battalions at different locations as required for effective response. NDRF units will maintain close liaison with the designated State Governments and will be available to them in the event of any serious threatening disaster situation. The NDRF is equipped and trained to respond to situations arising out of natural disasters and CBRN emergencies. The NDRF units will also impart basic training to all the stakeholders identified by the State Governments in their respective locations. Further, a National Academy will be set up to provide training for trainers in disaster management and to meet related National and International commitments.

Experience in major disasters has clearly shown the need for pre-positioning of some response forces to augment the resources at the State level at crucial locations including some in high altitude regions.

3.1.5 General – First and Key Responders

The role and importance of community, under the leadership of the local authorities, Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs), being the bedrock of the process of disaster response, is well recognized. For their immediate support, there are other important first responders like the police, State Disaster Response Force (SDRFs), Fire and Medical Services. The NDRF will provide specialist response training whenever required. In serious situations, the resources of all NDRF battalions, on an as required basis, will be concentrated in the shortest possible time in the disaster affected areas. Other important responders will be the Civil Defence, Home Guards and youth organizations such as NCC, NSS and NYKS. The deployment of the armed forces will also be organized on as required basis.

3.1.6 Location, Constitution and Functions of NDRF

These have been formed under the Disaster Management Act at 12 selected locations in the country for dealing with relief and rescue operations related to all types of disasters. The NDRF consists of battalions of Central paramilitary forces drawn from the Border Security Force (BSF), Indo-Tibetan Border Police(ITBP), Central Industrial Security Force (CISF)and Central Reserve Police Force (CRPF) for the purpose of specialist response in disaster situations. Each Battalion has 6 Companies comprising of 3 teams each. Team comprises of 45 men out of which 24 are for Search & Rescue and balance 21 for support functions. Short-listed & trained staffs are on deputation in NDRF.
Details of NDRF organization and 12 battalions are as under:

SN	Location of NDRF units	STD Code	Tele (O)	Unit Control Room no.	Fax Nos.	Teams/Coys Relocations Places
Hd. Qrs.	DG/NDRF, 6th floor, NDCC-II Building, Jai Singh Road, New Delhi - 110001	011	23438020 23438119	_	23438091	New Delhi
1.	Ist BN NDRF Patgoan PO Azara, Distt. Kamrup Metro, Guwahati-781017.	0361	2840027	2840284 09401048790 09435117246	2849080	Aizwal(Mizoram), Agartala(Tripura)
2.	2nd BN NDRF, Near RRI Camp. Haringhata, Mohanpur,	033	25875032	25875032 09474061104 09474116777	25875032	Pakyong,Gangtok (Sikkim) Siliguri (West Bengal)

	Nadia, West Bengal Pin - 741246			5		Kolkata (West Bengal
3.	3rd BN NDRF PO-Mundali,Cuttack, Odisha Pin - 754013	0671	2879710	2879711 09437581614	2879711	Balasore(Odisha)
4.	4th BN NDRF PO-Suraksha Campus Arrakonam,Distt. Vellore, Tamilnadu - 631152	04177	246269	246594 09442140269	246594	Port Blair (Andaman & Nicobar) Chennai (Tamil Nadu) Thrissur (Kerala)
5.	5th BN NDRF, SudumbareTaluka, Distt – Maval Pune (Maharashtra) Pin. 412109	02114	247010	247000 9422315628	247008	Mumbai (Maharashtra)
6.	6thBN NDRF Chilora Road, Gandhinagar Pin - 382042	079	23202540	23201551 9723632166	23201551	Gandhinagar,(Gujarat) ,Nareli (Rajasthan)
7.	7th BN NDRF Bibiwala Road, Bhatinda (Punjab) Pin - 151001	0164	2246193	2246193 2246570	2246570	Srinagar (J&K) ,Nurpur, Kangra (Himachal Pradesh) ,Panchkula (Haryana)
8.	8th BN NDRF Kamla Nehru Nagar, Ghaziabad, (UP) Pin - 201002	0120	2766013	2766618 09412221035	2766012	Dwarka (Delhi) , R K Puram (Delhi), Noida (U.P.), Jhajra, Dehradun (Uttrakhand)
9.	9th BN NDRF, Bihata Patna, Bihar, Pin - 801103	06115	253942	253939 08544415050 0952575212 5	253939	Supaul (Bihar) , Ranchi (Jharkhand)
10.	10th BN NDRF ANU campus, Nagarjuna Nagar, Distt-	0863	2293178	2293050 08333068559	2293050	Bangalore (Karnataka),Hyderabad (Telangana)

	Vijaywada(AP) Pin - 522510					Vishakhapatnam (AP)
11.	11th BN NDRF, Gautam Budh Bhawan, Maqboolalam Road,Varanasi, U.P. Pin - 221002	0542	2501201	2501101 08004931410	2501101	Lucknow (UP) ,Gorakhpur (UP) , Bhopal (MP)
12.	12th BN NDRF, Doimukh, Distt-Papum Pare, Itanagar, Arunachal Pradesh. Pin - 791112.	0360	2277109	2277106 2277104 09485235464	2277106	Kohima (Nagaland

3.1.7 Locations of Regional Response Centers (RRC) of NDRF

NDRF battalions in the jurisdiction of SECR are given below:

Bilaspur and Raipur Division State /district /Area under the responsibility of- 3rd Bn NDRF, PO-Mundali, Cuttack (Odisha), Pin-754006. Office Phone no. 0671-2879710, Fax 0671-2879711 Mobile- 9437581614,09439103170 and 09437964571 E-mail 3rdndrfmundali@gmail.com

Chhattisgarh			
Balod	Bilaspur	Kokdagaon	Narayan Pur
Baloda Bazar	Dantewada	Korba	Raigarh

Madhya Pradesh			
Anuppur	Panna	Chhindwara	Satna
Balaghat	Sagar	Damoh	Seoni
Chhataarpur	Rewa	Dindori	Shahdol
Jabalpur	Sidhi	Katni	Singrauli
Mandla	Umariya	Narsinghpur	

Odisha	
Sunder Garh	Jharsuguda

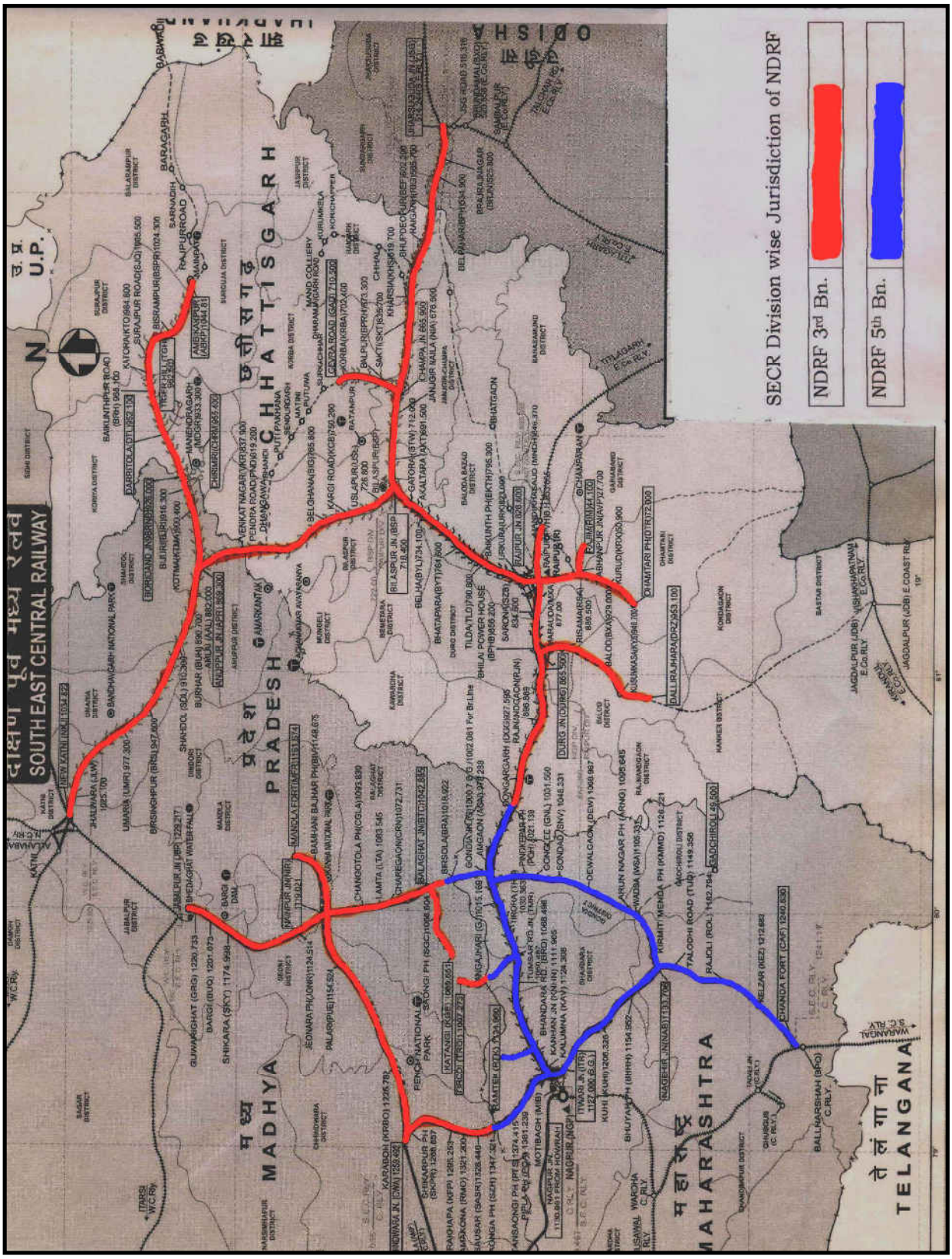
Nagpur Division. State district/Area under the responsibility of- 5th Bn NDRF, Sudumbare Taluka Maval, Disst- Pune (Maharastra) Pin-410507 Office Phone no. 02114-247010 Fax 02114-247008 Mobile- 09423506765 E-mail 145crpf@gmail.com

Maharashtra				
Nagpur	Gondia	Chandrapur	Bhandara	Garchiroli

NDRF HQ

DG/NDRF- (Shri Atul Karwal). Off. 011-23438020 Res. 011-23438119	IPS, IG/NDRF (Shri Narendra Singh Bundela) Off. 011-23438021
NDRF Control Room Tel: 011-23438091, Fax: 011-23438136, email: hq.ndrf@nic.in, dg.ndrf@nic.in, ig.ndrf@nic.in , dig.ndrf@nic.in	

As per the Disaster Management Act, various ministries and departments under Government of India should join hands for mutual assistance in case of a disaster. Assistance from local government and non-government agencies is invariably required by the railway administration for prompt relief and rescue operation in case of disasters affecting railways and, therefore, assistance of NDRF could be of great help to the railways. In most cases of a disaster, other than a train accident, the State Governments as well as the Zonal Railways may requisition the NDRF simultaneously (for the same disaster). Coordination amongst the affected agencies (many departments of the Central Government and the States) is very important before the help of NDRF is required.


दक्षिण पूर्व मध्य रेलवे
SOUTH EAST CENTRAL RAILWAY
SECR Division wise Jurisdiction of NDRF
NDRF 3rd Bn.
NDRF 5th Bn.
छत्तीसगढ
CHHATTISGARH
MADHYA PRADESH
MAHARASHTRA
TELANGANA
ODISHA
U.P.

3.1.8 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. Railways may also have to provide rail transportation logistics for transporting NDRF team even in case of non-railway exigencies.

The Railway Board has empowered DRMs/PCSOs to directly put requisition to 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. NDRF Head quarter office, New Delhi will draw an annual calendar for zone/division-wise meeting between NDRF Battalion Commandants and Railway Safety officials for better coordination and management during disasters/major train accidents. NDRF battalion should carry out at least one mock exercises/coordination meeting with each zonal Railway in a year, for which an annual calendar will be issued by Board in consultation with NDRF HQs office.

Requisitioning NDRF for relief and rescue operations in case of serious Railway accidents

The following format is used by the SEC Railway while the requisition is being made either from the division or from the Zonal Headquarter:-

SOUTH EAST CENTRAL RAILWAY

Office of the----------

No. ---------- Dated: - -------

To,
The Commandant
NDRF, ----------

Sub: - Request for deputing NDRF personnel for relief and rescue operations.

Dear Sir,

There has been a serious accident on ..... Railway over ..... division on ..... station in ..... section at ..... hrs. on .....

From the information received till now it appears that the accident is of a serious nature and could lead to large number of casualties. Although

Railways are making all efforts to take up relief and rescue operations, it is felt that the participation of the NDRF personnel could be of great help in speeding up the process and reducing casualties.

In view of this you are requested to immediately depute adequate number of men from your battalion with necessary equipments to the accident site at the earliest.

The movement of your battalion indicating the time and route of travel from your place to the accident site may be intimated to the undersigned by E-mail / FAX so as to ensure adequate coordination. Kindly also indicate the contact No. of the senior most personnel who will be traveling with the NDRF Group. Detail information about accident are furnished here with in a separate enclosures in Annexure-I.

Encls: - As above.

Thanking you

Yours sincerely

Divisional Rly. Manager/
Chief Safety Officer
Mobile No.

E. Mail ID_____
FAX No. _____

Copy to:

1) Adviser (Safety), Railway Board (Fax No. 011-23386215) for kind information and necessary action please.
2) NDMA HQ (Fax No. 011-267017), NDMA Bhawan, A-1, Safdarjung Enclave, New Delhi.
3) NDRF HQ (Fax No. 011-261059), National Disaster Response Force (NDRF), Sector-1, R.K. Puram, New Delhi...
4) DRMs – Bilaspur, Raipur, Nagpur for information and necessary action please.

Annexure –I

Accident Information

1. Travel Co-ordinate_____
2. Name of the District _____(where accident occurred)
3. Distance from Bilaspur _____
4. Name & Contact No. of Nodal Officer whom to be approached for co-ordination_____
5. Timing of placing special train for swift movement _____

3.2 State Level

As per the DM Act of 2005, each state in India shall have its own institutional framework for disaster management. Among other things, the DM Act mandates that each State Government shall take necessary steps for the preparation of state DM plans, integration of measures for prevention of

disasters or mitigation into state development plans, allocation of funds, and establish EWS. Depending on specific situations and needs, the State Government shall also assist the Central Government and central agencies in various aspects of DM. Each state shall prepare its own State Disaster Management Plan.

The DM Act mandates the setting of a State Disaster Management Authority with the Chief Minister as the *ex officio* Chairperson. Similar system will function in each Union Territory with Lieutenant Governor as the Chairperson. At the district level, District Disaster Management Authority (DDMA), the District Collector or District Magistrate or the Deputy Commissioner, as applicable, will be responsible for overall coordination of the disaster management efforts and planning.

3.2.1 State Disaster Management Authority (SDMA)

As per provisions in Chapter-III of the DM Act, each State Government shall establish a State Disaster Management Authority (SDMA) or its equivalent under a different name with the Chief Minister as the Chairperson. In case of other Union Territories, the Lieutenant Governor or the Administrator shall be the Chairperson of that Authority. For Delhi, the Lieutenant Governor and the Chief Minister shall be the Chairperson and Vice-Chairperson respectively of the State Authority. In the case of a UT having Legislative Assembly, except the UT of Delhi, the Chief Minister shall be the Chairperson of the Authority established under this section. The SDMA will lay down policies and plans for DM in the State. It will approve the State Plan in accordance with the guidelines laid down by the NDMA, coordinate the implementation of the State Plan, recommend provision of funds for mitigation and preparedness measures and review the developmental plans of the different Departments of the State to ensure the integration of prevention, preparedness and mitigation measures. The State Government shall constitute a State Executive Committee (SEC) to assist the SDMA in the performance of its functions. The SEC will be headed by the Chief Secretary to the State Government. The SEC will coordinate and monitor the implementation of the National Policy, the National Plan, and the State Plan. The SEC will also provide information to the NDMA relating to different aspects of DM.

3.2.2 District Disaster Management Authority (DDMA)

As per provisions in Chapter-IV of the DM Act, each State Government shall establish a District Disaster Management Authority for every district in the State with such name as may be specified in that notification. The DDMA will be headed by the District Collector, Deputy Commissioner, or District Magistrate as the case may be, with the elected representative of the local authority as the Co-Chairperson. The State Government shall appoint an officer not below the rank of Additional Collector or Additional District Magistrate or Additional Deputy Commissioner, as the case may be, of the district to be the Chief Executive Officer of the District Authority. The DDMA will act as the planning, coordinating and implementing body for DM at the District level and take all necessary measures for the purposes of DM in

accordance with the guidelines laid down by the NDMA and SDMA. It will prepare the DM plan for the District and monitor the implementation of the all relevant national, state, and district policies and plans. The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness, and response measures laid down by the NDMA and the SDMA are followed by all the district-level offices of the various departments of the State Government.

3.3 Plan Implementation

The DM Act 2005 enjoins central and state governments to make provisions for the implementation of the disaster management plans. In this respect, the sections of the DM Act 2005 applicable for national, state, and district DM plans are 11, 23, and 31. The Chapters V and VI of the DM Act spell out the responsibilities of the central, state, and local governments with respect to disaster management. The DM Act states that every Ministry or Department of the Government of India shall make provisions, in its annual budget, for funds for the purposes of carrying out the activities and programmes set out in its disaster management plan. The Act mandates that every Ministry and Department of the Government of India and every state must prepare a DMP in accordance with the NDMP. Annually, respective DM authorities must review and update their DM plans. Central ministries and state governments will integrate DRR into their development policy, planning and programming at all levels. They must adopt a holistic approach and build multi-stakeholder partnerships at all levels, as appropriate, for the implementation of the DM plans.

CHAPTER – 4

PREPAREDNESS FOR DISASTER

DISASTER PREPAREDNESS – AVAILABILITY OF RESOURCES

4.0 Resources unit

Railways are generally self-reliant in carrying out rescue and relief operations as a result of having a well organized set up including ARMVs and ARTs. However, major accidents, involving heavy casualties in remote areas or in difficult terrain or under adverse weather conditions are possible to be managed efficiently by mobilizing non-Railway resources also.

Disaster Management mechanism in Railways can be maintained at a high level of preparedness and efficiency by keeping all resources readily available and in good fettle. Resources imply both Railway and non-Railway men and material including medical personnel, transport, volunteers, Police and fire services.

Details of these resources, their location, contact numbers and other details have been identified, compiled and placed in a "Data Bank". This Data Bank is available in the Divisional DM Plans of Bilaspur, Raipur, Nagpur divisions & also ZDMP-Part-II (2023). These have also been made available in the Safety Information Management System.

Resources available in case of a major accident may be grouped into 04 different units, depending on the time frame within which these can be made available after an accident. These are as follows:

1. Resource Unit I — Railway and non-Railway resources available on the train, and at nearby surroundings.
2. Resource Unit II — Railway resources available at ARMV / ART depots and elsewhere within the division.
3. Resource Unit III — Railway resources available at ARMV/ ART depots and elsewhere on adjoining Zones and Divisions.
4. Resource Unit IV — Non-Railway resources available within or outside the division.

4.1 RESOURCE UNIT – I

4.1.1 Resources available on passenger carrying Train

a) First Aid Box available with the Guard.
b) First Aid Box available with Train Superintendent and in the Pantry Car.
c) Fire Extinguishers in Brake Van, AC coaches, pantry cars and Locomotives.

d) Portable Telephones, available in Locomotives and with Guard.
e) Walkie- Talkie and CUG mobile phones with Guard and Loco Pilot.
f) Cell Phones /Mobile communications with Railway employees and passengers.
g) Emergency lighting box available with the Guard.
h) Information collected by Train Superintendent/Traveling Ticket Examiner about Medical Practitioners traveling on the train.
i) Information collected by TS/TTE about Railway Officers traveling on the train.
j) Railway Staff traveling on the train - either on duty or on leave as passengers.
k) Passengers traveling on the train who volunteer their help for rescue and relief work checked

4.1.2 Non - Railway resources available nearby

a) Volunteers from nearby villages and towns including NGO.
b) State/Local administrative machinery as available nearby.
c) Contractual agencies working/not working with Railway in nearby location.
d) State disaster management authority.
e) Police line (barrack) & Army unit if any.
f) Transport facilities and vehicles available at site or passing through nearby LC Gates.
g) Tractors with trolleys from nearby villages both for transport purposes and for lighting up the accident site.
h) Generators from nearly villages for lighting up accident site.

4.1.3 Railway resources available nearby

a) Engineering gangs, Contractual laborers.
b) OHE, Signal, Engineering Depot & Mechanical staff available.
c) Other resources such as medical facilities, communication facilities.
d) Availability of near by Machineries ,cranes, payloaders, pocklains .

4.1.4 Resources at adjoining Stations

a) Staff available at adjoining or nearby stations.
b) Railway resources as given in respective Divisional DM Plans.
c) Non - Railway resources as given in respective Divisional DM Plans.
d) Resources should be mobilized to send medical team at short notice as given in the respective Divisional DM Plans.

4.2 RESOURCE UNIT – II

4.2.1 SPARTs, SPARMV, ARMVs, ARTs with 140 T crane are stabled at nominated stations.
Their locations are given in this chapter at para 4.5

4.3 RESOURCE UNIT – III

4.3.1 Location of ARMVs, ARTs with 140 T crane based on adjoining Zones/Divisions are given in this chapter at para 4.6.

4.3.2 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 Control offices.

4.4 RESOURCE UNIT – IV

Non-Railway resources available within the division are included in the Divisional DM Plan and Zonal DM Plan part-II (2023).

4.5 ART/ARME available in SECR

4.5.1 ART class and locations

S. No.	Div.	Location	Type of ART
1	BSP	Bilaspur	A – Class
2		Shahdol	B – Class
3		Korba	B - Class & BD Truck
4		Brajrajnagar	Tool van
5		Manendragarh	Tool van
6	R	Bhilai	A - Class & BD Truck
7	NGP	Gondia	A – Class
8		Itwari	B - Class & BD Truck
9		Dongargarh	Tool van
10		Chindwara	Tool van
11		Nainpur	Tool van

4.5.2 ARMV scale and locations:

S. No.	Div.	Location	Class of ARMV
1	BSP	Bilaspur	SPART
2		Shahdol	Scale - I
3		Raigarh	SPART
4	R	Bhilai	SPART
5	NGP	Gondia	SPART(3 Coaches)
6		Itwari	SPART(3 Coaches)
7		Nainpur	Scale-2

4.5.3 140 T BD crane locations

S. No.	Div.	Location	Type of ART & Capacity	Make of Crane,Design (old/new)&Year of manufacturing	Maximum speed
1.	BSP	Bilaspur	A,140 T	GOTTWALD No. 142032/Old/1985	100 KMPH
2.	R	Bhilai	A,140 T	GOTTWALD No. 142041/Old/1994	100 KMPH
3.	NAG	Gondia	A,140 T	GOTTWALD No. 144021/New/2010	100 KMPH

4.6 ART/ARME available in adjoining Railway

4.6.1 Location of ART with 140T Crane on adjoining Zones/Divisions

i) BNDM (CKP Division, SER) (A Class)
ii) KTE (JBP Division, WCR) (A Class)
iii) SBP (SBP Division – E.Co.Rly)
iv) WAT (WAT Division – E.Co.Rly)
v) Ajni (NGP Division) - CR Rly)

4.6.2 Location of ARME on adjoining Railway

i) BNDM (CKP Division, SER)
ii) NKJ (JBP Division, WCR)
iii) SBP (SBP Division, ECoR)
iv) NGP (NGP Division, CR).

4.6.3 Breakdown Equipment of Adjoining Railways

Breakdown Equipment	Railway	Division	Station
LUKAS	WCR SER	JBP CKP	NKJ JSG
ART	SER WCR CR	CKP JBP NGP	JSG NKJ AJNI
ARME	SER, WCR, ECOR, CR	CKP, JBP, SBP, NGP	BNDM, NKJ, SBP, NGP (CR)

4.7 Disaster Management Mock Drills

Each division should conduct one full scale Disaster Management exercise once in a year similar to such exercise conducted by armed forces. Every possibility to improve State/District/Local Authorities, Armed Forces units and NDRF Battalion pertaining to the area may be ensured while conducting such exercises. A joint report of Mock Drill may also be submitted to all concerned highlighting the achievements as well as the shortages noticed during the exercise.

4.8 Accident Mock Drills for ARME/ART

As per Railway Board letter no. 2010/Safety(DM)/6/23, Dated 30.01.20, it has been brought to the notice of Board that in some of the Divisions, due to ARTs/ARMVs at multiple locations, number of mock drills are required to be carried out every quarter.

During the above causes, the matter has been reviewed and in partial supersession of the letter, the following may be adopted:

a) In general, mock drills have to be conducted once every quarter for every location of ARTs/ARMVs during either day or night.
b) Blocks of quarters should be considered from April to June, July to September, October to December, and January to March.
c) In a division where class 'A' ART/class 'B' ARTs/Scale-I ARMVs are stationed at more than three locations, mock drill may be carried out for all such ARTs/ARMVs in that division at least once in every six months spaced out over the period.
d) ART/ARMV turned out on account of accident will qualify as mock drill.

These drills should be ordered by the DRM and conducted under the direct supervision of Sr. DSO/DSO or an officer not lower in rank than that of a Senior Scale, nominated by DRM.

In carrying out these drills the following points should be carefully borne in mind:-

- Turning out of ARMV /ART within the prescribed time.
- Speed of the specials.
- Assembly of staff within the specified time.
- Handling of ART, HRDs, HREs and other rescue equipment.
- Logging of events.
- Functioning of field telephones and communication network.
- Functioning of generator sets, lighting equipments.
- Preparedness of first-aides and availability of medical equipment.
- Preparedness of commercial department to mobilize adequate manpower.

- Arrangements regarding the drills should be kept confidential.

While circulating the annual calenders for joint exercise/mock drills with NDRF, vide letter no. 2020/Safety(DM)/6/3 dated 02.05.23, Zonal Railways were advised by the Railway Board that "*a self contained report indicating the activities carried out in the joint exercise along with the lesson learnt and corrective action to be taken/taken may be sent to Board with in 15 days of the conclusion of the exercise.*"

As per Railway Board letter no. 2019/Safety(DM)/6/24/CM, dated 25.08.22, the post-mock drill evaluation & assessment of outcome and learning from mock drills (including DOs and DONTs) may be communicated by the Zonal Railways to IRIDM, Bangluru within 15 days of completion of each exercise. IRIDM may also include such learning in their training programs on Disaster Management. Zonal Railway may also take appropriate measures in consultation with IRIDM for suitably sensitizing/training private operators engaged in running and operating of trains, regarding crisis management and also involving them in mock drills to the extent feasible.

4.9 Periodical inspection Schedule of ART/ARME

Periodical inspection of ART/ARME is very important to ensure that all equipments materials in them are in perfect conditions. Guidelines are available for the inspection of ARTs/ARMEs by Supervisors, Assistant/Sr. Scale officers and JAG officers.Some of the inspections are to be done by the departments individually and some are to be done jointly.

4.9.1 Inspection schedule of ARTs

Sl. No.	By whom	Type of inspection to be done	Mandatory (Frequency)
1.	Supervisor of respective department i) Mechanical ii) Electrical iii) S & T iv) Engineering	Responsible for day to day maintenance of their respective equipments.	Once in every month
2.	Joint inspection by Supervisors of all departments.	To ensure proper functioning of their respective equipment and to remove deficiency. (traffic for placement, securing etc)	Once in every two months
3.	Joint Inspection by Jr.	To ensure proper	Once in every

	Scale/Sr. Scale officers of all depts. (as in Sl.No.-1above)	functioning of their respective equipments and to remove deficiency.	three months.
4	Branch Officers of all departments (as above in Sl.No.-1)	Inspections of their respective equipments and ensure immediately, recovery of deficiency after use at site as well as proper maintenance of equipments.	Once in every three months.
5.	Branch Officers of all departments including Sr. DSO of the division along with ADRM.	Assessment on reliability in maintenance practice.	Once in every six months.
6.	Joint inspection by Branch Officers of departments (as in Sl.No.-1above) with Medical Officer in charge of division (CMS/MS) and Sr.DSO/DSO along with ADRM	Complete stock verification to be done.(at the end of November)	Scale-1,Once in every six months
7.	Zonal HQ safety audit team.	Audit of functioning as well as shortfalls in the list of equipments.	Scale-1,Once in a year.

4.9.2 Inspection schedule or ARME

Sl. No.	**By whom**	**Type of inspection to be done**	**Mandatory (Frequency)**
1.	Supervisor of respective department i) Mechanical ii) Electrical iii) S&T	To ensure proper functioning of their respective equipments and to remove deficiency. They are responsible for day to day maintenance of their respective equipments.	Once in a Month.
2.	ADMO/DMO/Sr. DMO	Inspection of medical equipments and immediate replacement of articles found	Once in a month for Scale II & I ARMEs.

		unserviceable or deficient.	
3.	Joint Inspection by Supervisors of Mechanical, Electrical, S&T & Traffic.	To ensure that the equipments are available as per Standard list and functioning properly.	Once in Every Two Months.
4.	Joint inspection by Jr. Scale/ Sr. Scale officers of all departments (as in Sl No.-I above)	To ensure that the equipments are available as per Standard list and functioning properly.	Once in Every three months.
5.	Branch Officer of all departments individually.	To conduct meaningful inspection & to make good the deficiencies after use at site.	Once in every three months.
6.	Joint Inspection by Branch. Officer of departments (as in Sl No.-I above) with Medical Officer in charge of division. MS/CMS and Sr. DSO/DSO along with ADRM.	Complete stock verification to be done. (at the end of November)	Scale –I, once in every six months
7.	Zonal HQ safety audit team.	Audit of functioning as well as short fall in the list of equipments.	Scale –I, once in a year.

Over and above schedules, "the cleaning of water tank and changing of water should be ensured once in every seven days" by train examining officials.

As per HLC item No. 86, a core group of dedicated men should be kept exclusively for ensuring proper maintenance of ART/ARME/Crane and rescue and relief equipments by concerned departments. It shall be the responsibility of concerned branch officers to ensure proper maintenance and upkeep of their concerned equipments. Sr. DSO/DSO in the division should closely monitor and coordinate for the conduct of the joint inspections of ART/ARME. and ensure that the schedules are followed without any violation.

CHAPTER-5

PREVENTION AND MITIGATION PLAN FOR ACCIDENT IN SECR

5.1 Prevention and Mitigation

Prevention is a course of action taken in advance resulting in reduction or avoidance of possible heavy loss of property and human life. Primary prevention is to reduce /avoid the risk of event occurring, by getting rid of hazard/vulnerability whereas the secondary prevention means reorganize properly the event and to reduce its effects. Prevention is concerned with policies and programmed a strategy to prevent recurrence of disaster and covers long term aspect of such disaster.

Mitigation means to reduce severity of human and material damage caused by Disaster.

Objects of mitigation

a) Save Lives
b) Reduce economic disruption,
c) Decrease vulnerability/increase capacity
d) Decrease chance/level of conflict,
e) Matching increase in maintenance support system (manpower, equipments and materials).

5.2 Safety Action Plan initiated to prevent and mitigate Disaster

a) Replacement of over-aged and redundant assets is being taken care of by Railway. Rehabilitation/rebuilding of bridges on the basis of technical obsolescence will be taken up in phased manner. Over-aged rails, turnouts, ballasts, sleepers etc are replaced PSC sleepers, through weld renewal, track renewal, rail renewal etc on regular basis. Maintenance of track and its monitoring are done intensively. Vulnerable areas are inspected frequently and their patrolling is done in seasonal basis and as and when required. Sabotage prone areas are patrolled in emergency and anti-sabotage measures are taken for protection of tracks.
b) Over-aged locos, coaches and wagons are replaced by Railway in a phased manner. Zero defects and Zero missing safety fittings are ensured at the time of turning out of rolling stock from workshop, loco shed and sick line. 100% Brake powers are ensured on air brake trains from originating station/yard. Guide line on overdue maintenance of rolling stocks is strictly followed.
c) Mechanical lever frames, signal gears are replaced by panel interlocking. Track circuiting, provision of axle counters, Data-logger, and LED based signal light and interlocking of L.C gates are being provided through Safety Action Plan.

d) Elimination of LC Gates, construction of rail overbridge/underbridge /subway planned with coordination with state government. Basic infrastructures are provided at manned and unmanned level crossing gates.

e) Technological inputs are given priority in maintenance of tracks, rolling stocks, signals and telecommunications and IT. Instruments/Devices like USFD, GPS, VCD, Thermit welding, twin beam head light for locomotives, fire retardant materials, provision of emergency exit, auto flasher light and provision of micro processor based speed recorder and electronic brake system etc. are guarantying safety in system. Addition of technical inputs will be carried in the system of assets maintenance.

f) Long-hours duty, Breathalyzer tests and periodical rest to safety category staff working in train operation and filling up the vacancies in safety cadres are monitored on regular basis. Ten hours rule to be implemented with all sincerity.

g) Human resource development is managed through
   1. Formal training in training schools
   2. On job training in workshops, loco sheds and maintenance depots.
   3. Safety seminars organized to instill safety awareness on different tropics. Front line staff and supervisors are imparted on job training on newer technology and equipments. Training on Disaster Management is given to officers and supervisors in different institutions to meet any emergency. Focus on development of manpower through major improvements in working environment and training will be given priority.

h) Inspections and Counseling are being conducted in regular basis by all the departmental officers and supervisors and follow up action on field inspections are also monitored properly. Safety-Audit Inspections are done on inter-Railway and intra-Railway basis of critical Railway establishment.

i) Alert-Advices are issued from time to time and Safety Drives are conducted against the weaknesses of the system for rectification.

j) Accidents are taken seriously and all accidents are enquired into and remedial measures are taken to avert the recurrence. Disciplinary actions are initiated against the culprits. GM & AGM/DRM are accepting the findings and review of all accidents enquiry reports.

k) Coordination with other Government agencies for promoting safety at level crossing is maintained. Media campaigns are launched time to time.

l) In case of any Disaster, Government, Non-Government organization and private agencies are mobilized to meet the emergency jointly to save life and property of people involved. Civil and Private Hospitals are also tied up with railway medical department to get medical assistance in time to save the precious life for injured passengers. Fund required for medical

assistance is met with SOP on Disaster Management. Ultimate motto to reduce the humans suffering and material damage is always given paramount importance before and after accidents. To reduce the vulnerability and to increase the capacity are always kept in mind while dealing with prevention and mitigation of disasters.

CHAPTER – 6

CAPACITY BUILDING TO HANDLE DISASTER

Newer concepts are on the integration of Disaster Management into development planning, leveraging on the strength of other non railway agencies etc. Training on disaster management of various tiers of railway officials was envisaged. There was no training given for natural calamities or terrorism related items. Hence concept of training in railway is re-oriented to cover new concepts.

It has also not yet been possible to harness availability and strengths of railway onboard staff who are the "first railway responders" during a serious train accident. With this in view, board have decided to re-map the training on disaster management being imparted to several tiers of railway officials through railway training institutes as indicated below-

Special training modules are being setup at ZRTI and STC for disaster management training of other railway officials.

For the rescue, extrication and other essential aspects of fire fighting, crane operation etc., a Training Institute (IRIDM) is set up at Bangluru.

List of training centers in SEC Railway:-

There are Thirteen number of recognized Training Centers functioning in SEC Railway to train the staff of all Departments to work promptly with Rule and Regulations effectively.

S.N.	Name of Training Centers in SECR
1.	S &T Training centre/SECR/Nainpur
2.	Civil Engineering Training Centre/SECR/Nainpur
3.	Divisional Traffic Training Centre/Dongergarh
4.	Staff Training Centre (Operating/Bhilai)
5.	Divisional Training Centre(Engineering/Dongergarh)
6.	Engineering Training centre/SECR/Bilaspur
7.	Diesel Traction Training Centre(ng)/SECR/NAG
8.	Electrical Training Centre/SECR/Bilaspur
9.	Divisional Loco Training centre/SECR/Bilaspur
10.	Zonal Multi Disciplinary Training Institute/Bilaspur
11.	Multi Disciplinary Divisional Training Institute/Raipur
12.	Workshop /Basic Training Institute/Raipur
13.	Workshop /Basic Training Institute/Nagpur

No training centre is available in SEC Railway for DMP training. Hence non-gazetted staff is taking DMP training in ZTC/Sini. Frequency of DM training of supervisors is once in three years.

Officers in SEC Railway are taking Disaster Management Training in IRIDM/Bangluru, IRITM/LKO, NAIR/BRC and NCDC/NGP to promptly and effectively respond in Disaster. Frequency of DM training of officers is once in five years.

As per Railway Board letter No. E(MPP)2015/3/7 dated 24.04.2015 and DG/NDRF L.No.1-17018/Trd/DGNDRF/2015-793 dated 07.04.2015 that high level committee on Disaster Management (Vide SL.No.105) has recommended for periodic training in disaster management for frontline staff such as RPF, TTEs, Catering staff, TXR, AC attendants, safaiwalas, guards, drivers/assistant drivers, PWIs gangmen etc. In this regard A committee has been constituted by Railway Board to finalize the syllabus and duration of training for the front line/onboard staff in collaboration with NDRF.

As recommended by the Committee, it is proposed to impart training to the trainers working in the various training centers over Indian Railways along with the ART/ARMV supervisors looking after rescue and relied activities. These trained trainers will further be utilized for training to the frontline staff in their respective zonal railways at the locations as deemed fit. The tentative schedule for TOT for Railway first responders is being prepared from Railway Board/NDRF to cover the training in the respective zones according to tentative schedule.

CHAPTER – 7

GOLDEN HOUR

In the period, immediately after the accident where grievous injuries to passengers, loss of property etc. takes place, action has to be taken on war footing by Railway Officials/officers on- board to render definite medical care which gives relief to affected persons and also helps them to overcome the trauma. This first one hour period is known as the **Golden Hour**.

i. Render definite medical care to the extent possible preferably by qualified medical practitioners
ii. Stop bleeding and restore Blood Pressure
iii. Persons under shock should be relieved of shock immediately
iv. Shift 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.

7.1 DISASTER SYNDROME

Victim's initial responses after any Disaster are shock stage, suggestible stage and recovery stage. These initial stages are called Disaster Syndromes.

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 individual may be tense and apprehensive and may show generalized anxiety.

7.2 DIFFERENT PHASES OF DISASTER RESPONSE

These 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 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 area 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.

Disaster Response in case of a railway accident consists of 3 phases. These 3 phases are:-

The first phase, which is of shortest duration, lasts for about half an hour. It is the spontaneous reactions of the persons available at the time of

accident, 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 hrs. duration is comparatively much better equipped. The contribution of persons/team is vital since the 'Golden Hour' period comes to an end during the phase. Number of critically injured passengers depends solely on the efficiency of the persons/teams working in this phase.

The third 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 also with the departure of most relatives and next of kin from the accident site and disposal of all bodies. Few of the grievously injured that 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 who function as a team. The three groups which are active during the above mentioned 3 phases of Disaster Response, may be classified as follow –

i. Instant Action Team (IAT)
ii. First Responders (FR)
iii. Disaster Management Team (DMT)

7.3 INSTANT ACTION TEAM

When a train is involved in a serious accident with casualties/injuries to passengers an instant action team has to be formed comprising of the staff mentioned below and to be taken**.**

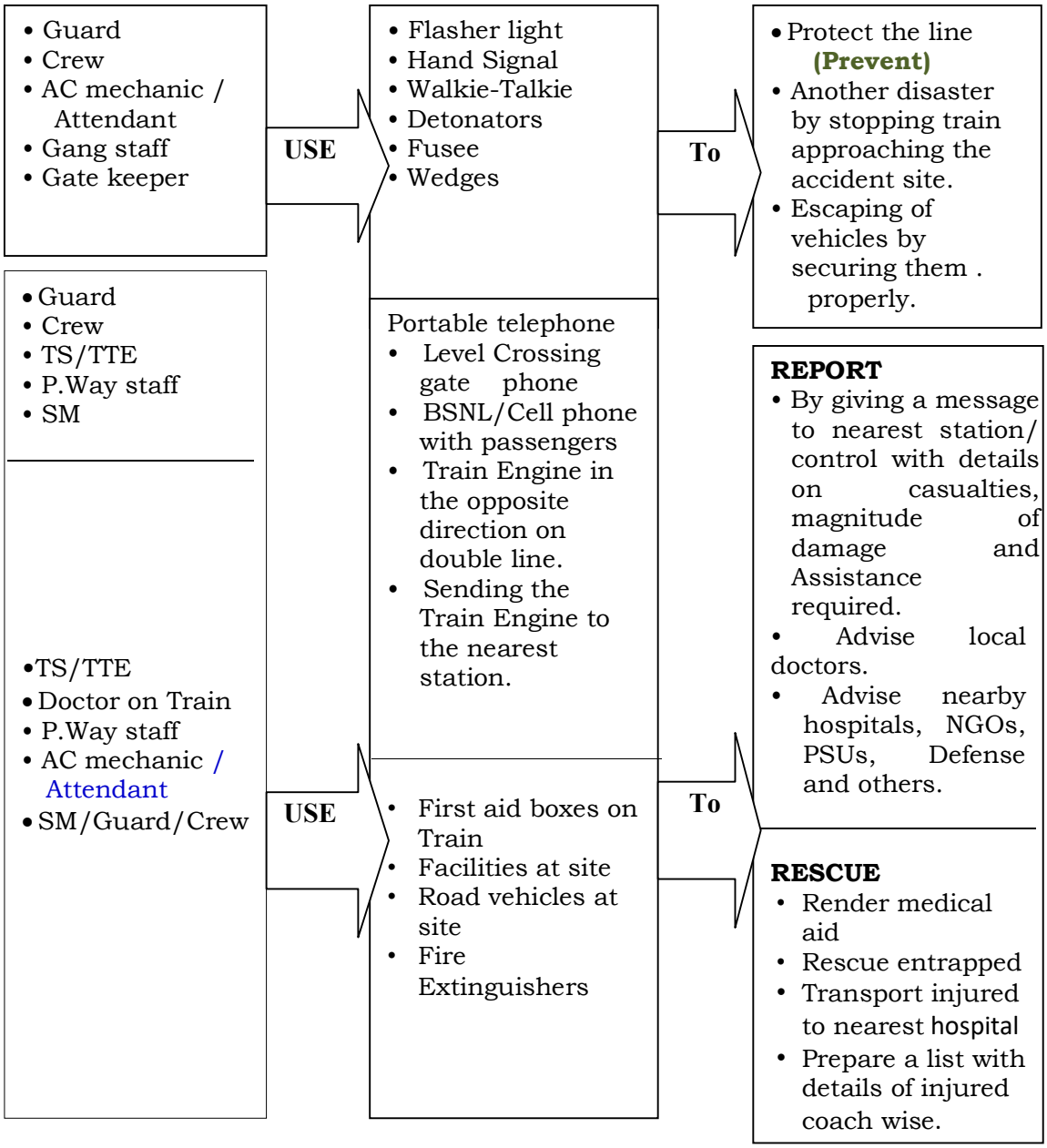
Every member of this team is responsible to ensure that timely action is taken to protect traffic, save lives and communicating the incident to the all concerned properly.

7.3.1 INSTANT ACTION GROUP

i. The Guard, Crew, TS, TTE, AC coach attendant, RPF and other staff on duty by the train
ii. Railway servants ON/OFF duty / as passenger by the train
iii. Doctors and other volunteers travelling by train
iv. Railway staff working at site
v. Non-Railway resources available at site
vi. GRP staff travelling on the affected train on duty
vii. Passenger travelling on the train who volunteer for rescue and relief work
viii. Non-railway local volunteers available at or near the accident site

Instant action group must immediately render assistance to the travelling public in form of the First Aid, rescue & relief operation including shifting of the injured. Duty of instant group within one hour of occurrence is very important and crucial. This one hour is also called **Golden hour**. During this period, if medical care is not given to a critical trauma patient, chances of his ultimate recovery will reduce drastically, even with the best of Medical attention thereafter. This one hour period is generally known as The Golden Hour and duties of every member of instant action team is elaborated in details in chapter no. IV of the Accident manual and chapter No. 8 of this Disaster Management Plan.

7.3.2 SIMULTANEOUS ACTION PLAN



7.3.3 FIRST AID IN EMERGENCY

a) 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

b) For assessing and handling injuries, acronym **DR ABC** is to be followed:

D – DANGER

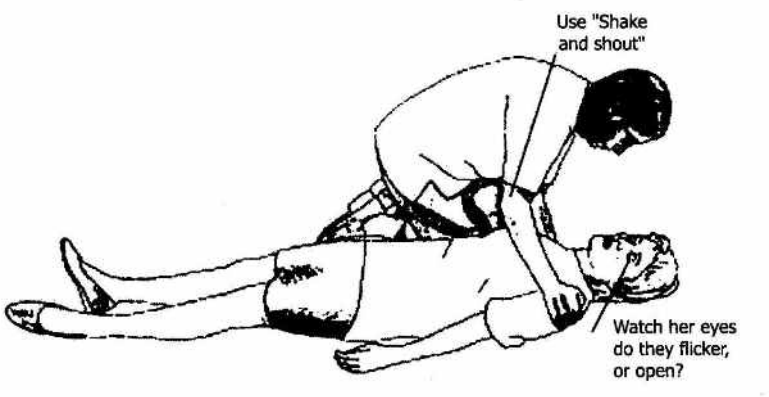
Look for danger; Make sure that no further danger exists either for the patient or for the First Aider.

R – RESPONSE

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

A – AIR WAY

Clear the air way (Trachea) if patient is conscious, then the air way may be narrowed o 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 air way lifts the chin forward with the fingers of one hand while pressing the forehead backwards with the other hand, now the tongue comes forwards and the air way 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 clears the things. Now the air passage is clear.

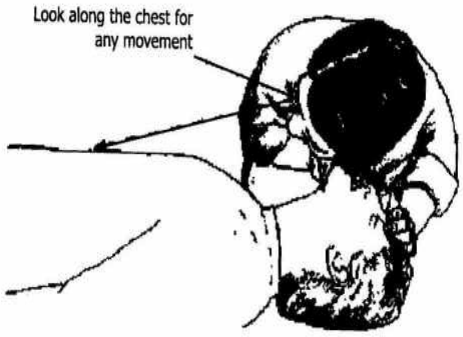


To open the air way lift the chin forward with the fingers of one hand while pressing the forehead backwards with the other hand, now the tongue

comes forward and the air way 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 clears the things. Now the air passage is clear.

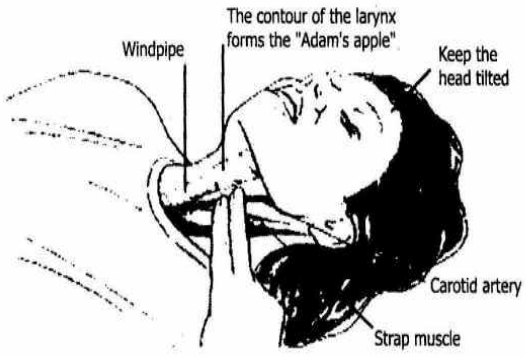
B – BREATHING

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.



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).

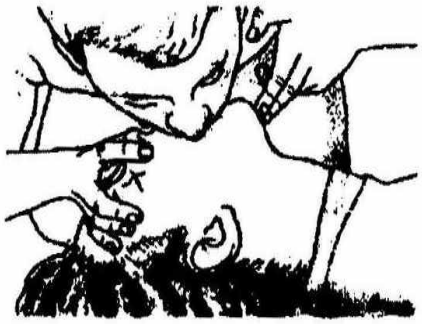


After checking DR ABC, there may be two possibilities.

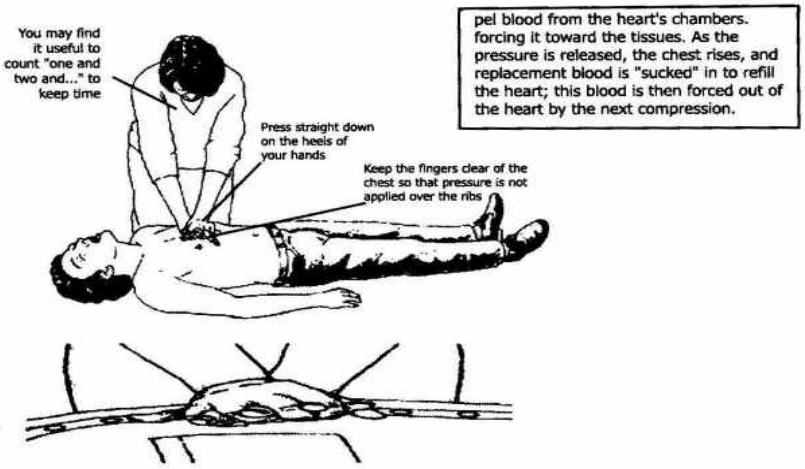
i) If patient is breathing and circulation but is unconsciousness, immediately turn him to recovery position and transport to hospital.

ii) If the patient has failure for 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. Life 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 –



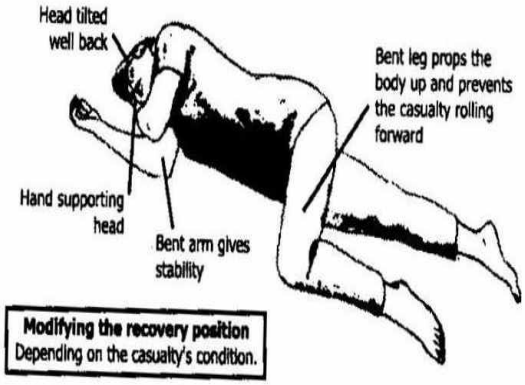
To revive the heart you have external chest compression. The casualty should be made to lie down on a hard surface. Keep heel of the palm on the chest (pit of stomach) of the casualty and keep the other palm over that hand and compress.



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 air way 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 Air due to tense situation. In such circumstances at least turn the injured to recovery position, which would help to save many precious lives.

CHAPTER – 8

FUNCTIONING OF DM CELL AT HEADQUARTER AND DUTIES OF FRONT LINE STAFF

The Disaster Management Cell is operated at HQs and to be attended by nominated Officers.

8.1 Duties of Officers of different department at DM Cell

8.1.1 Safety department

The Officer representing Safety Department shall coordinate the functioning of Disaster Management Cell. He shall report the accident to Railway Board/CRS/GM and update the restoration details from time to time. He shall also ensure ordering of Relief Train for evacuation of involved passengers from the site of accident. The officers attending the Disaster Management Cell shall obtain the full details of the accident from Divisional Control/Site of accident and shall monitor the movement of Breakdown Train and Relief Train. Top-most priority is to be given for rescue operations, for transferring the injured passengers from the site of accident to the nearest hospitals, and for sending medical aid from Civil/Military/private hospitals.

8.1.2 Medical department

The Officer representing Medical Department shall obtain all details regarding casualties/injuries to passengers involved in the accident and shall maintain liaison with the Accident Site/Referral Hospitals and Dispensaries, and shall consolidate the list of injured/casualties in minimum time so that the same can be faxed to concerned station/division for display in Emergency Control and Emergency Information Booths.

8.1.3 Commercial department

The Officer representing Commercial Department shall ensure ordering of refreshments for the passengers of involved train, payment of ex-gratia to the injured and to the next-of-kin of the dead passengers, arrange for trans-shipment of goods and passengers luggage, and hire private buses for transport of passengers from site of accident to the nearest Rail Head. He shall also ensure transmission of detailed information regarding injured/casualties to originating/destination stations, to Railway Board, and to HQ of the originating/destination Railways. He shall also ensure opening of Emergency Information Booths at important junction stations en-route within the Railways.

8.1.4 Operating department

The Officer representing Operating Department shall manage relief and restoration operations at headquarters level. He shall record all events related to the accident chronologically. He shall ensure regulation and diversions of trains keeping in view the likely time of restoration at accident site. He shall ensure that the passenger carrying trains are regulated at such stations where water and catering facilities are available. He shall also monitor the ARTs/ARMVs/Labour Special trains ordered from the adjoining divisions and zones.

8.1.5 Mechanical department

The Officer representing Mechanical Department shall assess the requirement of additional Medical Vans/Breakdown Trains and shall liaison with adjoining Railway/Division for ordering the same. He shall also monitor the movement of Breakdown trains. He shall obtain the details of rolling stock involved in the accident and its repair particulars. He shall obtain the restoration details regarding re-railment/toppling of wagons/coaches done by each individual Breakdown Train. He shall obtain the bio-data of the crew involved in the accident.

8.1.6 Engineering department

The Officer representing Engineering Department shall obtain the information regarding damage to track and shall ensure ordering of material train if required. The details of track structure and other relevant details such as USFD particulars, last inspection, profile of the track, etc. shall be obtained within minimum time. He shall organize ordering of additional Labour and material Specials, as per the requirement at site, from the adjoining divisions/zones.

8.1.7 Electrical department

The Officer representing Electrical Department shall obtain the details of extent of damage to OHE/LOCO. He shall obtain the bio-data of crew involved in the accident. He shall assess the requirement of additional material at the site and shall organize movement of Tower Wagon/Material-special to the site of accident.

8.1.8 S&T department

The Officer representing S&T Department shall ensure efficient communication. A line should be dedicated for the emergency transmission from site of accident/divisional control to Disaster Management Cell at HQ. He shall ensure installation of Public Phone/Railway Phone at the site of

accident involving passenger train. He shall obtain the details of S&T gears involved, if any, in the accident.

8.2 Duties of Guard, Loco Pilot, Assistant Loco Pilot, Train Superintendent/Train Ticket Examiner, AC Mechanic/Attendant

a) Guard –

1. Note the time of the accident and the location.
2. Switch on the Amber Light, if provided, in Flashing Tail Lamp in the rear of brake van.
3. Inform Driver on walkie-talkie set.
4. Inform Station Master on walkie-talkie set, if possible.
5. Protect adjacent line/lines if required and the line on which the accident has taken place as per GR 6.03 in Absolute Block system and GR 9.10 in Automatic Block system.
6. Secure the train and prevent escaping of vehicles.
7. Make a quick survey of magnitude of accident and roughly assess casualty, damage and assistance required.
8. Send information through quickest means to Control office and SMs on either side of the block section. For this purpose.
    a) CUG mobiles/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 should 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.
9. Utilize First-Aid box to facilitate medical aid.
10. Save lives and render First Aid.
11. Call doctors and seek their assistance.
12. Seek assistance of Railway staff and other volunteers from train to rescue injured or entrapped passengers.
13. Direct Railway staff and other volunteers from train for attending to injured.
14. Ensure that Railway staff constantly manned with field telephone.
15. Arrange protection of passenger's belongings and Railway property with the help of Railway staff, volunteers on train, RPF and GRP.
16. Stop running trains on adjacent line and utilize resources on that train.
17. In electrified section if OHE is affected, take steps to switch off OHE supply.
18. Arrange for transportation of injured to hospital.

19. Record evidence or statements, if any, given by passengers.
20. Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.
21. Log your activities. Do not leave the spot unless a competent authority relieves you.

b) Loco Pilot –

1. Note the time of the accident and location.
2. Switch ON the 'flasher light' of the locomotive and give 4 short whistles
3. Inform Guard on warlike-talkie set or CUG phone.
4. Inform station master on CUG mobile phone/warlike-talkie set, if possible.
5. Protect adjacent line and affected train if required as per GR 6.03 and 9.10
6. Take necessary action to keep the loco safe.
7. Take necessary action to prevent Loco/Vehicles/Wagons from rolling down.
8. Make a quick survey of magnitude of accident and roughly asses casualty, damage and assistance required.
9. 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 the above fail, one of the Railway staff on duty on the train should be sent on foot to the nearest station.
10. Render all possible assistance to the guard.
11. Preserve all clues and evidence regarding probable cause of the accident and ensure that these do not get disturbed.
12. Log your activities. Do not leave the spot unless you are relieved by a competent authority.
13. If necessary detach loco and inform SM.

c) Assistant Loco Pilot –

1. Assistant loco pilot should work under the control of the loco pilot with the same duty list of loco pilot. Loco pilot and Assistant loco pilot should drive the work so that the duties are carried out the shortest possible time. The assistant loco pilot will follow instructions given to him by driver.

2. To provide First Aid to injured. First Aid box is available with guard.
3. If necessary use fire extinguishers, which are available in Loco, Guard Brake-van and pantry car.
4. In case if the loco pilot is dead or injured, Assistant Loco pilot will perform all the duties of driver.

d) Train Superintendent/Travelling Ticket Examiners –

1. Preserve reservation charts of each containing names of passengers who actually travelled and in which berth no.
2. Avail services of Doctors travelling by the train and render Medical Aid.
3. Render First Aid to the injured.
4. 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 ARME arrives.
5. Prepare a separate list of dead passengers with address and ticket particulars, if available.
6. Take assistance of local people and other volunteers at site.
7. Transport injured passengers by road vehicle, if available, to the nearest hospital.
8. Inform standard passengers about alternative transport arrangement. Record Evidences or statement given by passengers/other at site.

e) AC Mechanic/Attendant –

1. Switch off the power supply to avoid short-circuiting.
2. Assist the TS/TTEs in their duties at the accident site.
3. Report to the guard of the train for assistance.
4. In case of fire, assist the operations by using fire extinguishers provided in the AC coaches.
5. Assist in providing lighting in affected coaches.
6. Blankets and linen of the AC coaches is to be made available for use by grievously, injured/dead. The record of the same should be kept.

CHAPTER – 9
PASSENGER CARE

9.1 General

i) Providing assistance to passengers and their relatives/dependents is of utmost importance in helping them and relieve their misery.

ii) Injured passengers and their relatives/dependents are to be treated with utmost courtesy and sympathy so as to alleviate their trauma and discomfort.

iii) For dealing with relatives/dependents arriving from far-flung corners of the country, staff fluent in local language of the place from where the train originated, should be used as interpreters.

iv) Commercial Supervisors and Welfare Inspectors should talk to injured passengers and ascertain if they wish to call their relatives /dependents.

v) Injured passengers should thereafter be provided with either mobile or STD phones to enable them to speak to their relatives/dependents.

vi) Transshipment of unaffected passengers and their clearance from the accident site would be arranged quickly. The officer available in the control shall arrange the transshipment on priority.

vii) Even in case of worst possible accident with adverse and extreme circumstances, all injured passengers would be rescued on priority. Site in charge as well as officer in charge in the control shall monitor the situation to do so.

viii) In rescue operations, top priority will be given to all passengers in critical condition for immediate medical attention.

ix) Even in case of worst possible accident, dead bodies would be extricated at the fastest possible speed. The ARME in charge and officials available at the site of accident should act accordingly.

9.2 Hospitalization of the injured

i) In case of railway accidents involving passengers, rapid evacuation of the victims to railway hospital after rendering immediate and necessary first-aid treatment.

ii) In case there are no railway hospitals nearby, they are to be admitted in the nearest Government hospitals.

iii) In the following cases, the injured may be taken to a private hospital:

   a) When there is no railway or Government hospital available within a radius of say 8 kms. from the site of accident, or

b) When the attending doctor certifies in writing that the treatment in private hospital is necessary in the interest of the patient.
c) 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 chalk 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 misunderstanding, PCMD should draw a list of such private hospitals bearing in mind the Railway and other Government hospitals in the vicinity.

vi) PCMD should also fix the charges to be paid in such cases for each class of accommodation. Complete medical care will be taken of all injured passengers, including payment of medical bills till their final discharge from hospitals. Claims compensation booklets containing forms and other instructions will be distributed to all injured passengers and next of kin of all deceased passengers.

vii) Bills by such private hospitals should be submitted through PCMD, who will certify the correctness of charges payable, before forwarding for payment to accounts department.

viii) Payment to private hospitals can be arranged locally by the Zonal Railway, and Ministry of Railway's approval is not necessary.

ix) If the injured are admitted in non-Railway hospitals, railway doctors should be deputed to these hospitals to render necessary assistance, including supplying the medicines that are not available in these hospitals. They should carefully monitor the condition of injured and maintain an updated list with all details.

x) If more than one hospital is involved, apart from deputing doctors to individual hospitals, a railway doctor should also be deputed to co-ordinate and maintain the centralized updated position.

9.3 Facilities to be made available in the hospital

i) There should be a separate reception counter manned by a Commercial Supervisor or by a Welfare Inspector (WI) at the entry to the hospital, to deal with relatives/dependents of patients.

ii) A chart should be displayed at this reception counter indicating ward numbers where the patients are admitted, along with their names, coach number wise.

iii) At the entry to every such ward, a second list should display the name of the patient, coach number and the bed number inside the ward.

iv) Commercial Supervisor or Welfare Inspectors on duty at hospital should carry a list indicating the name, address and telephone numbers of relatives/dependents 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 two mobile telephones readily available to be taken to patients inside the wards for making outgoing calls.
ix) Complete medical care of all passengers, including payment of medical bills till their final discharge, should be provided.

9.4 Communication

i) Telephone with STD facility should be made available to passengers to communicate with their relatives/dependents.
ii) BSNL/Railway telephones available at adjoining stations/cabins/towns 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 such phones.
iv) Payments for such telephone connections will be made from station earnings.
v) Sr. DSTE should hire some mobile phones to meet the needs of stranded passengers.
vi) Wherever cellular phone connectivity is available, stranded passengers should be permitted to use these phones free of charge.
vii) Passenger help lines are provided for enquiry service No. 1072 in all Divisions of SEC Railway in commercial control rooms for collecting information in Disaster or any other major train accidents.

9.5 Arrival of relatives/dependents

i) After a few hours, next of kin of the deceased and relatives/dependents of injured passengers start arriving at the accident site.
ii) Adequate number of display boards should be available on ARMEs/ARTs for being put up at the accident site.
iii) These display boards should indicate the direction of the Assistance Centre at site.

iv) These indication boards should be displayed near those areas where incoming relatives/dependents arrive and congregate.
v) Periodic announcements on loudspeakers should also be made for guiding them to the Assistance Centre at site.

9.6 Taking care of the relatives/dependents

i) At the Assistance Centre at site, Commercial Supervisors & Welfare Inspectors should be available to guide the relatives/dependents. They should go through the reservation charts and list the dead/injured.
ii) Commercial supervisor or WI shall depute a railway servant to accompany the relatives/dependents to the hospital.
iii) A hired vehicle should be provided for carrying them to various hospitals and mortuary.
iv) The commercial supervisor or WI should stay with the relative until they have either found the injured passenger or identified the dead body.
v) Thereafter, they should help them in completing all formalities at the Assistance Centre at site.
vi) CI and WI must be nominated for each ARMV/ART.

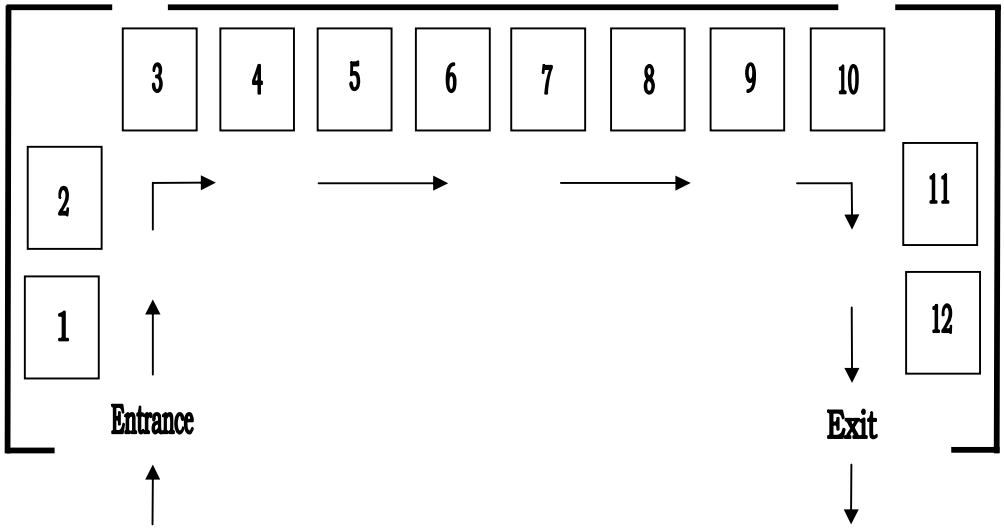
9.7 Single Window Clearance

During major accident of passenger trains, dead and injured passengers including relatives and attendant of the victims to deal carefully in rescue to cure them effectively as far as possible for which one system has been established by the Railway and every needs of victims/relatives/attendant are fulfilled at same place. Assistance Centre at site should provide single window clearance for all legal formalities and paperwork.

It should provide the following facilities:

1. Reservation chart for locating the name.
2. List of dead and injured along with the name of hospital.
3. A vehicle, to take the relatives to various hospitals or mortuary.
4. Railway doctor for issue of railway Death Certificate.
5. Govt. doctor for issue of post mortem clearance.
6. Municipality official for issue of Death Certificate.
7. Local police for handing over of dead body.
8. Claim counter for payment of ex-gratia and issue of Claim Compensation Form.
9. Counter to help in performing last rites in case relatives/dependents decide to cremate the body there itself.
10. Return journey facilitation counter to make arrangements for return journey.

Normally this system is known as single window clearance. This system is being explained with a diagram as under.



1. Commercial – Preparation of Reservation Chart
2. Medical – Identification of Dead and Injured passengers
3. Commercial – Providing of Escort and Rescue vehicle
4. Railway Doctor - Issuing of Railway Death Certificate
5. Govt. Doctor - Issuing of Post-Mortem Report
6. Providing of Joint Help Center by In-Charge and Officer
7. Nagar Palika Adhikari – Issuing Death Certificate
8. RPF/Local Police – Handover of Dead body
9. Commercial – Providing of forms for Ex-gratia
10. Commercial – Help of Burials
11. Personnel - Issuing of Return Journey Ticket
12. Operating - Arrangement of Return Journey

9.8 Stay of relatives/dependents of dead and injured:

i) In all disasters, the families of the deceased should to be made confident that the remains of their loved ones have been correctly identified and returned to them as quickly as possible.

ii) The inheritance of property, access to bank accounts, payment of pensions, compensation, and other mandate but pressingly practical issues, depend for their settlement on the formal identification of the deceased, recorded in the form of a certificate of death.

iii) Commercial supervisor or WI deputed with relatives/dependents should also arrange for their stay and accommodation.

iv) Depending upon the need, accommodation in hotels/dharamshalas should be hired for accommodation passengers.

v) Arrangements should be made for their meals.

9.9 Performance of last rites

i) In many cases relatives/dependents decide to perform the last rites at the place of accidents itself.
ii) Necessary assistance should be rendered to relatives/dependents in locating:
- The nearest cremation or burial ground as the case may be.
- Shopkeepers who sell necessary material for funeral rites.
- Priest for performing the ceremony.

iii) The above information should be conveyed to relatives/dependents and transport provided for carrying the body.
iv) Commercial supervisor or WI should help the relatives/dependents in this endeavor.

9.10 Departure of relatives/dependents of dead and injured

i) Assistance Centre at site should have counters to help the relatives/dependents plan their return journey.
ii) Personnel branch staff at the Assistance Centre at site should be available for issuing complementary passes for their return journey.
iii) Reservation of berths should be provided on trains.
iv) Extra coaches should be attached to trains going to the destination station for the next two or three days. These extra coaches should be brought in locked condition from the originating station.
v) Space should be reserved in SLRs to carry dead bodies in coffins, etc. in case they desire.

9.11 Withdrawal from station earning

i) Money can be withdrawn from station earning with personal sanction of at least a senior scale officer.
ii) Station pay order (withdrawn from station earnings) should be duly signed with official designation, indicating his name.
iii) Proof that the payment has been made and the reason for payment should be kept by payee.
iv) The account should be submitted to Account Officer within 15 days from the date of withdrawal (Para 2425 of Indian Railway Commercial Manual).

9.12 Guidelines for commercial department at the site of accident to deal with affected passengers Ex – gratia Payment

Instructions issued by Railway Board on 18.09.23 ,the amount of ex-gratia relief to be paid to the dependents of dead and injured passengers involved in Train Accidents and Untoward Incidents as defined under Section 123 read with Section 124 and 124-A of the Railways Act, 1989 and to the road users who met with an accident due to Railway's prima

facie liability at Manned Level Crossing Gate Accident. The revised rates and compiled instructions are as below:-

1. **Amount of Ex-gratia for Train Accidents, Untoward Incidents and Manned Level Crossing Gate Accidents**

	Type of accident	**Amount of ex-gratia for Death**	**Amount of ex- gratia for Grievous Injury**	**Amount of ex-gratia for Simple Injury**
1.	**Train Accident** (as defined 1) under Section 124 of the Railways Act, 1989)	Rs 5,00,000/- (Rupees Five lakh only)	Rs.2,50,000/- (Rupees Two lakh Fifty thousand only)	Rs. 50,000/- (Rupees Fifty Thousand only)
2.	**Untoward Incident** (as defined under Section 124-A of the Railways Act, 1989)	Rs. 1,50,000/- (Rupees One lakh Fifty Thousand only)	Rs. 50,000/- (Rupees Fifty Thousand only)	Rs.50,000/- (Rupees Fifty Thousand only)
3.	**Accident at Manned Level Crossing** (due to Railway's prima facie liability)	Rs. 5,00,000/- (Rupees Five lakh only)	Rs.2,50,000/- (Rupees Two lakh Fifty thousand only)	Rs. 50,000/- (Rupees Fifty Thousand only)

2. **Additional Ex-gratia relief in case of Hospitalization of Grievously Injured Passengers beyond 30 days.**

In case of Train Accident	**In case of Untoward Incident**
Rs. 3,000/- per day to be released at the end of every 10 day period or date of discharge, whichever is earlier.	Rs. 1,500/- per day to be released at the end of every 10 day period or date ofdischarge, whichever is earlier upto further six month of hospitalization
	Thereafter, Rs. 750/- per day be released at the end of every 10 day period or date of discharge, whichever is earlier upto further five month of hospitalization
(a) Lump sum amount of ex-gratia for hospitalization of grievously injured passenger up to first 30 days is as mentioned in table at para (1) above. (b)The maximum period for which ex-gratia is payable to the grievously injured passenger will be 12 months.	

2.1 This ex-gratia relief will be exclusively for passengers who are grievously injured in train accidents or untoward incidents as defined under Section 123, read with Section 124/124-A, of the Railway Act,1989.

2.2 The period for treatment as indoor patient for more than 30 days would need to be certified by a Railway Doctor for the purpose of further ex-gratia payment upto the period of remaining 11 months. In case where the injured is taking treatment in other than Railway hospital, the treatment has to be certified by Railway Doctor.

2.3 Sr. Divisional Medical Officers shall also keep track of such injured person taking treatment in other than Railway hospitals. Sr. DCM/DCM shall keep coordination with Sr. DMO for the purpose and arrange payment of ex-gratia as per the prescribed schedule mentioned in the table in Para-2 above at the doorstep of injured person. Every care shall be taken by Sr. DCM/DCM to avoid any inconvenience to injured person in such cases.

3. <u>Mode of Payment of ex-gratia/enhanced ex-gratia</u>

3.1 Maximum amount of upto Rs. 50,000/- to be paid in cash as an immediate relief for taking care of initial expenses.

3.2 Remaining amount to be paid by Account Payee Cheque /RTGS/NEFT/Any other online payment mode.

3.3 Notwithstanding anything contained in Para 3.1 and 3.2 above, Railways may disburse the entire amount of ex-gratia/enhanced ex-gratia by Account Payee Cheque /RTGS/NEFT/Any other online payment mode, if deemed appropriate.

4. Other terms and conditions:

4.1 No ex-gratia relief would be admissible to road users in case of accident at Unmanned Level crossing, trespassers, person electrocuted by OHE (Over head Equipment).

4.2 Ex-gratia payment in case of train accidents and untoward incidents are not to be taken into account at the time of final claim for compensation.

4.3 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 Accident, will be counted towards the amount of compensation payable, if action is tenable against the Railways under the Law of Torts and an award is actually granted by a Court of Law.

4.4 Ex-gratia payments should also be made to railway servants killed or injured by a moving train while performing their duty, for example, gangman working on track run over accidentally by a moving train.

4.5 Payments should be sanctioned/arranged preferably on the spot by a Senior Scale Officer nominated by the General Manager after making

such enquiries as, can be reasonably made on the spot after the immediate needs by way of medical attendance etc. to injured persons are attended to.

9.13 Preservation of dead bodies:

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 Shrouds, Polythene bags, Coffins, Dry ice from local market for dealing with dead bodies.
xvi. 04 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 unhygienic condition that arises due to Decomposed/mutilated bodies.

CHAPTER – 10
MEDIA MANAGEMENT

10.1 Objectives

i. To provide factual information to public with regard to accident.
ii. To convey any other information to the passengers.
iii. To convey specific information to the relatives/dependents of dead and injured passengers.
iv. To create a positive public opinion.
v. To create a healthy relationship with the press and electronic media.

10.2 Duties of Public Relations Organization

i) CPRO and his team will collect whatever information is available and released it to the media within 60 minutes of intimation of accident.
ii) The information shall include telephone numbers of Helpline Enquiry Booths.
iii) Photographers with digital and video cameras should also be taken to the accident site.
iv) Responsible PR supervisors should be deputed during night shift for interacting with the media, if necessary.
v) CPRO will organize press briefings at fixed timings.
vi) PR organization shall monitor various important media channels to keep track of media reporting. Suitable corrections/clarifications may also be issued, if required.

10.3 Spokesperson

i. Only GM, DRM and CPRO are competent to interact with 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. They should ensure that only factually correct and confirmed information is relayed.
iv. No inflated or exaggerated version of any fact should be relayed to the media.
v. No Railway man shall express or voice any criticism, or express his personal opinion or views about the accident, at any point of time.

10.4 Information to be relayed to Press and Electronic Media

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

a. Accident

i) Nature of the accident, i.e. date, time, exact location, train number, 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) Regular reports regarding progress of Rescue & Relief work.
vi) Expected date and time of restoration.

b. Unaffected passengers

i. Steps taken to provided beverages, refreshments and first aid treatment to uninjured passengers.
ii. Steps taken by railway for clearance of uninjured passengers.
iii. Expected time of departure of front portion of the affected train.
iv. Expected time of arrival at the destination.
v. Expected time of departure of rear portion of accident involved train.
vi. Its diverted route and expected arrival at the destination.
vii. In case empty coaching rakes have been arranged, then details of the same.

c. Dead and Injured passengers:

i) Steps taken by Railway to render immediate medical attention.
ii) Number of passengers rescued.
iii) Breakup of the injured passengers, both grievous and simple.
iv) Name of the hospitals where injured are being treated.
v) Numbers of 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/dependents of victims, including free pass for journeys.
x) Special trains being run for bringing relatives/dependents 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:
   1. They were traveling alone or;
   2. Their companions are injured and are not in a position to identify them or;
   3. Their companions are also dead.

xiii) Under such circumstances it is possible to identify dead bodies only when relatives/dependents arrive.

xiv) This aspect of identification of dead bodies and reasons for delay should be explained to the media.

CHAPTER – 11

DISASTER INFORMATION FLOWS AND ALERTS OF DISASTER

11.1 Categorization of Alerts

While there is a need to keep appropriate levels of the Government informed, there is also a requirement to prevent 'information overload' at apex levels, as also thwart undue alarm. Hence, for the purpose of keeping the Prime Minister's Office (PMO) / Cabinet Secretariat and/or senior officers of the MHA / NDMA/ NDRF / ESF / Ministries/ States / UTs informed, a uniform system of Alerts has been devised. This system envisages the Alerts being categorized into '**Yellow**', '**Orange**' and '**Red**' depending on the magnitude, severity and/or effect of each type of disaster

11.2 Action plan for communication of alert messages

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

11.3 The categories of Alert Messages are laid down as under:

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**

11.4 Monitoring/Reporting of Effects of Disaster

The safety control in the Railway Board would give 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.

11.5 Emergency Support Function' (ESF)

The 'Emergency Support Function' (ESF) Ministries/Departments will be as follows: -

- Ministry of Health & Family Welfare
- Ministry of Defence
- Ministry of Power.
- Ministry of Road, Transport & Highways
- Ministry of Urban Development
- Department of Food & Public Distribution
- Ministry of Drinking Water & Sanitation
- Ministry of information & Broadcasting
- Ministry of Petroleum & Natural Gas
- Department of Communication
- Atomic Energy Regulatory Board

11.6 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:-

1. Mobilization of Gangmen.
2. Hospitals to mobilize Doctors and Para-medic staff.
3. Civil Defense units.
4. RPF and RPSF deployment.
5. Scouts and Guides.
6. Operating and manning of the disaster control room.
7. Coordination amongst various stakeholders through advance warnings.
8. Communication system to be ensured and backups to be in readiness for immediate use when required.
9. In case existing railway staff may not be able to maintain train services to be operational, the TA units have to be mobilized. It takes 2-3 days for the deployment of the TA unit after issue of their mobilization order.

CHAPTER – 12

HOSPITAL DISASTER MANAGEMENT PLAN

12.1 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 (Mass Casualty Emergency).

12.2 Hospital Disaster Management Plan:

There shall be a hospital disaster management plan in each Zonal Railway based on the Indian Railways Hospital DM Plan issued by Railway Board.

The Hospital DM Plan shall incorporate relevant items given in the DM Plan of the Railways.

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

Each Hospital has to evolve its own plan and it has to be revised from time to time as each experience will bring new perspectives.

12.3 Objective and Goals of a Hospital Disaster Management Plan –

The hospital disaster plans should address not only mass casualties that has occurred away from the hospital, but also address a situation where the hospital itself has been affected by a disaster i.e. fire, explosion, flooding or earthquake.

12.4 Categorization of Emergencies

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 based on the Number and/or type of Casualties.

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 should be done.

12.5 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 be prepared by the CMS or CMD of the Zonal Railway. Hospital preparedness is crucial to any disaster response system. Each hospital needs to have an emergency preparedness plan to deal with mass causalities and the hospital administration should train their staffs for this emergency. The curriculum for medical doctors does not at present include hospital preparedness for emergencies. Therefore capacity building through in-service training of the current health managers and medical personnel in hospital preparedness for emergencies and mass causality incident management is essential.

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.

12.6 Medical First Responder (MFR)

Railway is not be expected to be a main stake holder in the DM Plan of Disaster like CBRN, it can only be assisting agency. This may be specifically clarified in the Zonal and Divisional DM Plans as to whom is considered as MFR. Presently Railway is the first medical responder in case of train accident involving casualty , level crossing accident involving casualty , stamped at platform, foot over bridge and Railway premises and any non-railway accident occurring in Railway premises and adjacent to Railway premises. During such disastrous situation Medical, Civil Defense and Scout and Guides should be summoned by DRM/Sr. DSO as per requirement.

12.7 Capacity Development

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. Training for Post Trauma psycho counseling is to be imparted to Civil Defence, Scout and Guides in the respective hospitals of the divisions.

12.8 Memorandum of understanding

The HLC recommended (recommendation No. 33) entering into a Memorandum of Understanding (MoU) with the state government so

that the Railway administration could join hands for mutual assistance in case of railway or non-railway disasters. The HLC also suggested entering into MoU with the civil and private hospitals to improve the response time, with the Armed Forces and private air operators for air support to access the disaster sites. Presently there is only verbal consent from Government Hospitals as it is open to general public. Coordination among Railway Government and private hospitals is a must to any medical team to reach a disaster site in a reasonable time in the vast network of railway route kilometers.

12.9 Duties of the Doctors/paramedics involved in rescue operations:

i) Keep stretcher and ambulance ready to transport the sick persons.

ii) Give details of injured persons to the doctor who is preparing the list of injured persons.

iii) Make detailed search and inspection of all the train compartments including lavatories to find out any trapped.

12.10 Points to be considered while dealing with the affected people:-

i) Incident Command system.
ii) Communication and information system.
iii) Telephone Desk.
iv) Patient flow, Triage and category of incidents.
v) Drugs & equipments
vi) Consumable stock
vii) Bed space
viii) Temporary morgue
ix) Mortuary (AC)
x) Linen stores
xi) Staff- medicals, nursing and paramedics their well defined duties at the time of MCE
xii) Volunteers
xiii) Food service
xiv) Information service
xv) Engineering service (for water and electricity supply)
xvi) Security and other matters
xvii) Discharge procedure

12.11 Duties of the doctors/paramedics visiting hospitals where the injured persons are getting treatment:-

i) There should be one paramedical for one hospital.
ii) Before leaving accident spot they must collect telephone number of the site and Sr. medical officer.

iii) He should be constantly available at the hospital and he should be in constant touch with the spot giving the full details of the injured passenger duly updating.

iv) He should be prepared well in advance to take round the VIPs with all information.

v) He should assess the nature of injuries and the capabilities of the hospital to treat them efficiently. As per assessment if there is a need to shift to higher medical center, he will arrange for the shift keeping the Sr. medical officer in the spot informed.

vi) He will do regular daily follow-up of the cases and the progress of the recovery and communicate.

12.12 Important phone numbers of doctors of SEC Railway:

- PCMD: Railway (65500-O, 65501-R), Mobile-9752475500.
- CHD: Railway (65502-O, 65503-R), Mobile-9752475501.
- CMS/BSP: Railway (62470-O, 62471-R), Mobile-9752876500.
- CMS/R: Railway (72500-O, 72501-R), Mobile-9752877500.
- CMS/NGP: Railway (52470-O, 52471-R), Mobile-973007850

CHAPTER – 13

ROLE OF SECURITY DEPARTMENT IN DISASTER MANAGEMENT

13.1 Railway Protection Force

Railway Protection Force is an Armed Force of the union constituted by an act of parliament (Railway protection force Act 1947), for the protection and security of railway property, passenger area & passengers and for matters connected therewith.

13.2 Role of RPF in Disasters

1. In case of Any Disaster Especially Serious Train Accidents, Fire Incidents, Explosion in Trains or on Railway Premise, Terrorist Acts, Hijacking of Train etc. RPF has to Play Lead Role in Coordination with Other Department of Indian Railways and Various Agencies of State and Central Government.
2. RPF has a Major Role in Crowd Control along with GRP and the State Police by Coordinating with the State Governments / District Administration.
3. The deployment of the RPF maybe done on need basis to Provide Relief and Rescue consequent to a Terrorism Disaster.
4. In cases of CBRN Disasters, or a Natural Calamity, RPF has to Provide Support Services in Rescue, Relief and Mitigation Efforts.
5. Regular Anti Sabotage Checks & Dog Squads need to be deployed even for Preventive Checks.

13.3 Inspection of the Disaster Management & BDDS Equipments –

- By RPF Post I/c - Every Month
- By ASC - Quarterly - of Each RPF Post
- By Sr. DSC - Once in a Year - of Each RPF Post
- Reports to be submitted by IPF & ASC to the Sr DSC
- Reports to be submitted by the SrDSC to the PCSC.

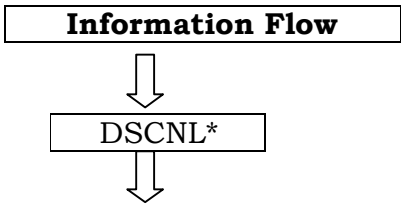
13.4. Training Details

- The List & Contact Details of Officers & Staff Trained in Various Aspects of DM to be Available at the ZSCNL, DSCNL, RPF Posts & Outposts, TE/Reserve Coys.
- This will be checked by the ASCs, DSCs, Sr DSCs, Dy CSCs/CSCs• & PCSCs during their inspection.
- Regular Training, Drills & Mock Drills be conducted. Trained staff to set as Master Trainers.

13.5. List of Equipments and Gadgets Required to be Available at the field Units and preferably in the ART as well

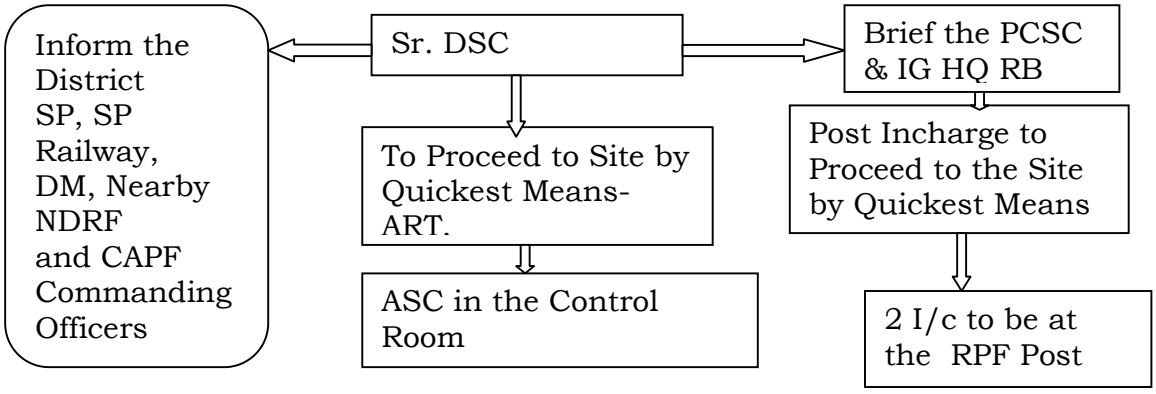
- Light Weight Tents ,Barricades & Fluorescent Barricading Tapes
- Ropes , Pipes/Poles
- Queue Managers
- Traffic Cones
- Hammer ,Climbing Ropes &Ladders

- Foldable Table & Chair
- Body Protector, PC Shields & Shin Guards
- Lathi & Helmet
- Fluorescent Jackets
- Floatation & Lifebuoy Jackets
- Hand Gloves & Gum Boots
- Loud Hailer/Mega Phone/Portable PA System
- Search Light, Emergency Light & Torches
- Night Vision Devices
- Binoculars
- Camera – Still & Video
- VHF Sets & Walkie-Talkie & Charging Equipments & Arrangements
- Power Banks
- Buckets& Mugs.
- Spades& Crowbars
- Fire Extinguishers
- First Aid Box & Masks& Hand Gloves
- Bed sheets & Towels
- Stretchers
- Finger Print Kit
- Cello Tapes, Labels, Plastic Seals



Concerned RPF Posts/Out Posts	Sr. DSC & ASC	GRP Control Room/PS Local Police Control Room/PS, Distt. Control Room /SDM &Tehsildar	ZSCNL*	Adjacent Post/OP

*DSCNL-Divisional Security Control Room
*ZSCNL: Zonal Security Control Room
* TE Coy: RPF Train Escorting Company



Initial Steps

⇩

Post/OP Incharge of the Adjacent Posts to Assemble Maximum Staff for Movement

⇩

Train Escorting Coy/Reserve Coy to make available Maximum Staff for Movement & Deployment at Major Stations as per advice

⇩

ASC at DSCNL

⇩

Mobilize Force

⇩

Ensure Movement of Additional Men, Equipments & Vehicles to the Site

⇩

One Senior IPF deployed by ASC to convey Timely & Verified Information to ZSCNL

⇩

Keep Reserve Force& Vehicle as Escort for Senior Dignitaries Visiting the Spot.

⇩

At Site

⇩

Installation of an Incident Command Centre (rain & sun protected)

⇩

Communication Set up- One SO for Relaying Information to DSCNL, ZSCNL &Security control Railway Board

⇩

Announcement & Duty Distribution Point

⇩

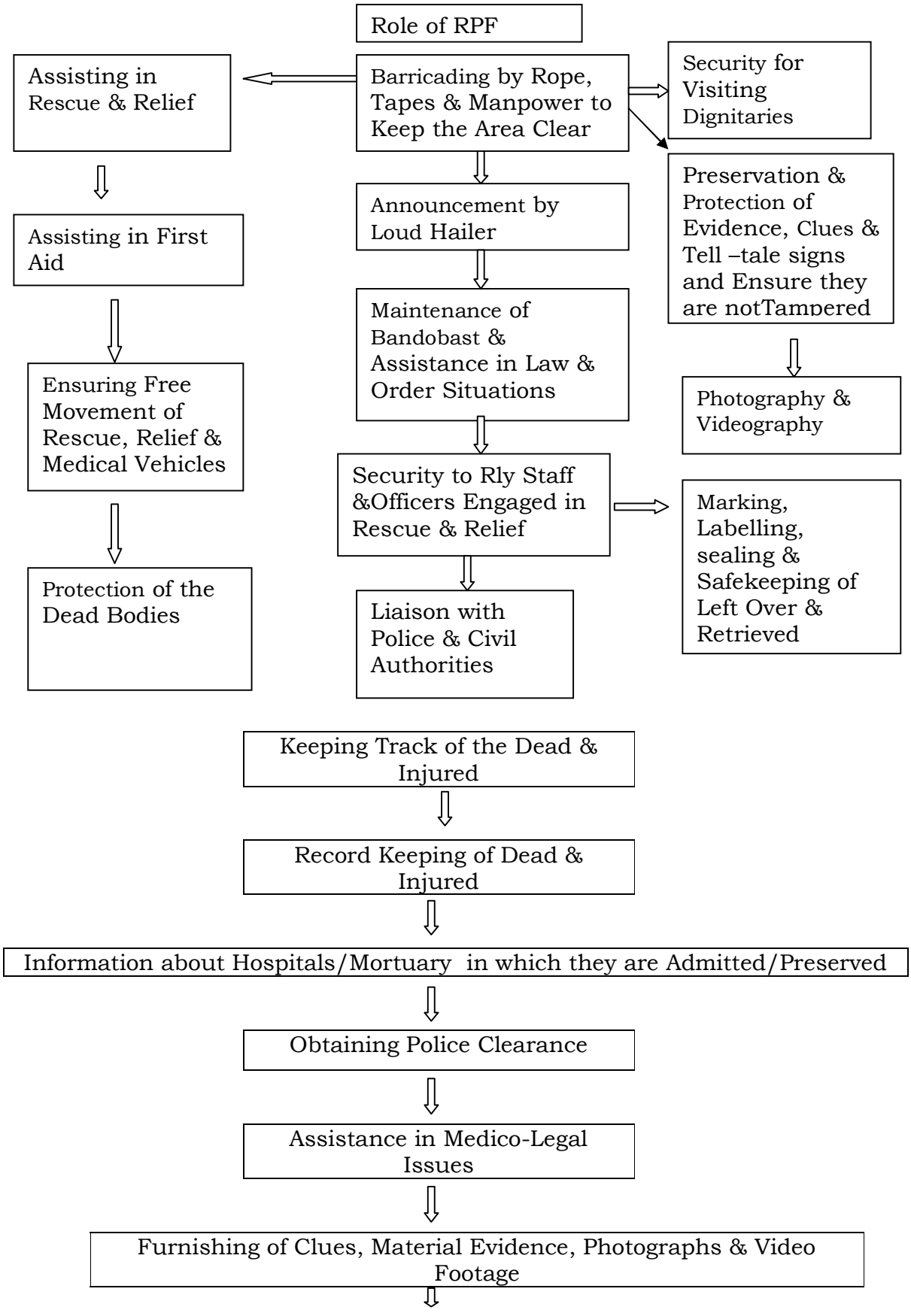
Marking, Labeling, Sealing & Safekeeping of Left Over & Retrieved Luggage

⇩

Maintenance of Inventory

⇩

Liaison with Local Police & GRP in the Event of Registration of Police case, Ensuring Up to date Information-Assistance to Investigating Agencies & Police.


Role of RPF
Assisting in Rescue & Relief
Barricading by Rope, Tapes & Manpower to Keep the Area Clear
Security for Visiting Dignitaries
Assisting in First Aid
Announcement by Loud Hailer
Preservation & Protection of Evidence, Clues & Tell –tale signs and Ensure they are notTampered
Ensuring Free Movement of Rescue, Relief & Medical Vehicles
Maintenance of Bandobast & Assistance in Law & Order Situations
Photography & Videography
Security to Rly Staff &Officers Engaged in Rescue & Relief
Marking, Labelling, sealing & Safekeeping of Left Over & Retrieved
Protection of the Dead Bodies
Liaison with Police & Civil Authorities
Keeping Track of the Dead & Injured
Record Keeping of Dead & Injured
Information about Hospitals/Mortuary in which they are Admitted/Preserved
Obtaining Police Clearance
Assistance in Medico-Legal Issues
Furnishing of Clues, Material Evidence, Photographs & Video Footage

Putting up the Investigation Report of the Police to the Commissioner of Railway Safety during the CRS Enquiry

13.6 Role of Sr. DSC/DSC (Divisional Incharge of RPF)

a) He will be the First Responder.
b) He will reach at the Site with Maximum Possible Force Personnel within the Golden Hour Period with Necessary Equipment's.
c) He will coordinate with SM, GRP, Local Police for Rescue and Relief.
d) Assist other Sister Departments in Rescue & Relief work.
e) Make necessary Arrangements to Guard the Spot of Evidences of the Mishap.
f) Make necessary Arrangements to Protect the Railway Property at Site.
g) Collection, Isolation and Guarding of the Passenger's Belongings.
h) Arrangements of Temporary RPF Assistance Booth.
i) Keeping the Detailed Record of the Persons : Dead, Injured & Hospitalized
j) He will Reach the Site by the Quickest Means-ART/ARMV or By Road
k) He will be the Nodal Officer for Security etc During Disaster
l) As a First Responder, He will take all steps as per the Railway Disaster Management Plan.
m) Provide all Support to the Rescue/Relief work at the Site and to be Present at the Site
n) Inform the District SP, SP Railways, District Magistrate, Near-by NDRF and CAPF Commanding Officer
o) Coordinate with Other Sister Departments and District Administration.
p) He will issue Necessary Instructions to the RPF DM Teams
q) Brief the PCSC & IG HQ RB E.

13.7 Role of DSC/ASC as 2ndIncharge of the Division

a) Reach the DSCNL Immediately.
b) Set up the Control Room as per requirement.
c) Collect all information
d) Assist the Sr. DSC in All Respects.
e) Ensure Dissemination of Verified Information to the ZSCNL and SCNL Rly Board
f) Coordination &Liaison with Police, Civil Administration,NDRF/SDRF, CAPFs etc.
g) Mobilize Manpower & Gadgets /Equipments/Resources.
h) Ensure Movement of Manpower/Equipments/Resources
i) Arrange Additional Vehicles if Required.
j) Monitor Movement of Dignitaries & make Appropriate Security Arrangements.

13.8 Other ASC at the Division/Divisional Inspector

a) Reach the Railway Station of the Divisional Head Quarter
b) Assist in Movement of Manpower & Resources
c) Set-up Assistance Booth
d) Ensure Maintenance of Order at the Station
e) Assist in Movement of GRP, Local Police & Civil Authorities to the Site

f) Mobilization, Distribution , Deployment & Rotation of the Force
g) Attend to Dignitaries Visiting the Site – Security Arrangements.
h) Arrangements for Food Packets & Other Support System to the RPF Personnel at the Site

13.9 Role of the RPF Post Incharge (In whose jurisdiction the accident has occurred)

a) He will be the First Responder.
b) He will reach at the Site with Maximum Possible Force Personnel within the Golden Hour Period with Necessary Equipments.
c) He will coordinate with SM, GRP and Local Police for Rescue and Relief.
d) Assist other Sister Departments in Rescue & Relief work.
e) Make necessary Arrangements to Guard the Spot of Evidences of the Mishap.
f) Make necessary Arrangements to Protect the Railway Property at Site.
g) Collection, Isolation and Guarding of the Passenger's Belongings.
h) Arrangements of Temporary RPF Assistance Booth.
i) Keeping the Detailed Record of the Persons : Dead, Injured & Hospitalized.

13.10 Role of 2 I/c to the Post Incharge

a) Reach the RPF Post at the Railway Station immediately.
b) Set up RPF Assistance Booth
c) Provide Verified Information to the GRP/Police
d) Provide All Assistance to the IPF at the Site
e) 5)Ensure Dissemination of Verified Information to DSCNL .
f) Ensure Bandobast, Law & Order Maintenance in Coordination with GRP & Local Police
g) Monitor Movement of and Security Arrangements of ART/ARMV/Special Trains
h) Coordination & Liaison with Police, Civil Administration, NDRF/SDRF, CAPFs etc.
i) Mobilize Manpower & Gadgets /Equipments/Resources
j) Ensure Movement of Manpower/Equipments/Resources to the Site
k) Arrange Additional Vehicles if Required.
l) Monitor Movement of Dignitaries & make Appropriate Security Arrangements.

13.11 Role of Incharge of Adjacent RPF Post/Out Post

a) Maintain Close Liaison with the Jurisdictional RPF Post incharge and DSCNL.
b) Make Available Maximum Man Power ,Equipments & Gadgets for any Assistance
c) Provide Security at the Station.
d) Arrangement of Additional Vehicle & Resources.
e) Security to the Movement of Dignitaries.
f) Remain in Touch with Sr DSC at the Site & ASC in the DSCNL.

13.12 Role of Coy Comdr.- Reserve Coy/TE Coy

a) Maintain Close Liaison with the Jurisdictional RPF Post incharge and DSCNL.
b) Make Available Maximum Man Power ,Equipments & Gadgets for any Assistance
c) Security to the Movement of Dignitaries.
d) Remain in Touch with Sr DSC at the Site & ASC in the DSCNL

13.13 Role of Divisional Security Control

a) Collect all the Information of the Site and Disseminate Verified Information to all Concerned.
b) Maintain Record of the Force Deployed at the Site.
c) Maintain Record of the Persons: Dead, Injured & Hospitalized.
d) Maintain Close Coordination with others Divisional Control Rooms of Other
e) Departments and District Control Room, District Police Control Room, GRP Control room, ZSCNL, RB SCNL, NDRF/SDRF/Other CAPFs Control Room.
f) Monitor Movement of ART/ARMV/Special Trains
g) Monitor Movement of Dignitaries
h) Remain in Touch with Sr. DSC, IPF at the Site and All Concerned.
i) Ensure Rotation of Staff if so Required.
j) Arrangements for Food Packets & Other Support System to the RPF Personnel at the Site.

13.14 Role of the Zonal IG-cum-PCSC

a) PCSC will attend the Site (as per the magnitude of the disaster) as early as possible along with the Zonal Head Quarter Officers by first available means
b) Keep the DG-RPF Apprised of the Latest Developments,
c) Guide the Sr. DSC
d) Arrange Assistance from Adjacent Divisions/Zones.
e) Coordination with the Higher Authorities of the State Police, Civil Administration.

13.15 Role of CSC/DIG or Dy. CSC

a) Reach the ZSCNL Immediately.
b) Collect all information
c) Ensure Dissemination of Information to SCNL, Railway Board
d) Regularly Apprise IG-HQ, Railway Board
e) Coordination & Liaison with Police, Civil Administration, NDRF/SDRF, CAPFs etc.
f) Mobilize Manpower & Gadgets /Equipments/Resources
g) Ensure Movement of Manpower/Equipments/Resources.

13.16 Role of ASC- HQ

a) Reach the Station at the Zonal Head Quarter
b) Set up RPF Assistance Booth, if the Railway Station is different than that of Div HQ.
c) Security Arrangements for the Movement of Dignitaries and Other Zonal Officers.
d) Monitor the Movement of ART/ARMV/Special Trains from Zonal & Adjacent Divisions
e) Mobilize Manpower & Gadgets /Equipments/Resources
f) Ensure Movement of Manpower/Equipments/Resources
g) Arrangements of Additional Assistance as per Requirement in Coordination with Other departments at Zonal Level.
h) Maintain Close Coordination with other Zonal Control Rooms of Other Departments, District Control Room, District Police Control Room, GRP Control Room, ZSCNL, NDRF/SDRF/Other CAPF Control Room.
i) Collect all the Information of the Site and Disseminate to All Concerned.

13.17 Role of ASC/ Crime & Intelligence

a) Attend the Site and collect all Information and Progress Report of Site and apprise PCSC and IG-HQ,Railway Board.
b) Collection of Intelligence about the Incident.
c) Close liaison with State & Central Intelligence counterparts.
d) Collect Information about the Movement of Dignitaries and Other Zonal Railway Officers.
e) Coordinate with Other Adjacent Divisional SIB Teams.

13.18 Role of Zonal Security Control Incharge

a) Collect all the Information from the Jurisdictional DSCNL and Disseminate to all concerned at Zonal Level and Security Control Railway Board.
b) Maintain Record of the Force Deployed at the Site.
c) Maintain Record of the Persons: Dead, Injured & Hospitalized.
d) Arrangements of Additional Assistance as per Requirement in coordination with Other Departments at Zonal Level.
e) Maintain Close Coordination with other Zonal Control Rooms of Other Departments, District Control Room, District Police Control Room, GRP Control Room, ZSCNL, NDRF/SDRF/Other CAPF Control Room.
f) Collect all the Information of the Site and Disseminate to All Concerned.

CHAPTER -14

CROWD MANAGEMENT PLAN

National Disaster Management Authority (NDMA) has prepared 'Suggestive Framework for Crowd Management Plan for Events/Venues of Mass Gathering' and a working Paper for Preparation of **Crowd Management Plan**, titled 'Managing Crowds- A Guide for Administrators and Organizers of Events and Venues'. These documents would enable state governments/local agencies and the administrators/organizers of events and venues of mass gathering to prepare appropriate guidelines and plan for effective and efficient crowd management. For better effectiveness, RPF, GRP and District Police have to act in a synchronized manner in consultation with magisterial authorities.

One of the intelligence 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.

Planning provides a methodical way to engage all stakeholders in thinking through the life cycle of a potential crisis, determining required capabilities and establishing a framework for roads and responsibilities, taking end objectives into consideration, as a supplement to the national guide on "Managing Crowd at events /Venues of Mass Gathering" issued by NSMA, this document provides a quick reference and outline on preparation risk-informed planning process.
The concise framework navigates the planning process through a mix of instructions describing the content that each section might have as defined in national guide document.

This document suggests that the state Government may formulate guidelines for management of "events/ venues of mass gathering" with a cross reference into SDMP/DDMPs along with description on support mechanism with roles and responsibilities defined. State having guidelines on mass gathering events/ venues may review their existing guidelines/ plan keeping national guide into consideration.

During festivals or events attracting mass gathering- railways, roadways and airways etc. may experience unexpected temporary surge in number of

people at such locations. Agencies responsible for operation and management at such places would need to include "crowd" as one of the hazard while formulating strategic plan for public safety and implement special arrangement necessary for managing surge in number of people at railway stations, bus terminals and airports. Framework suggested in this document paves way in formulating public safety plan by agencies like railways, but transport and airways. These plans are to be developed in consultation with local authorities and event administrator/Organizer. Different event/ venues may have different hazard profile and resources requirements will not be uniform. Hence this may be used as a framework and not as a template. Suitable changes may be made in the contents.

The events are approved as per local by laws. In current scenario-informations /data collected by the licensing authority (police at this point) through the application form is inadequate and does not cover key components like hazards/ vulnerabilities/ risk – an event/ venue may be susceptible to. Capacity building measures can only be identified if hazards and vulnerabilities are known. Plan for event/ venue of mass gathering will facilitate seamlessly connect all phases of disaster cycle (mitigation, preparedness, response and recovery) and will also provide procedures and methodology for putting those capabilities into action during any severe incident.

Authorities responsible for granting License/Registration/Permission for events/ Venues of mass gathering will need to reconcile their exiting format of "application" by suitably integrating requirement of a plan on management of mass gathering into it.

14.1 Guidelines for Establishment of Emergency Operations Centre

(a) This centre will be near to the vicinity of the subject it is going to control.

(b) The centre will be in a safe area where it is not affected by any type of disasters (both man-made and natural), so that it can exercise control over its task under any condition.

(c) A Grid Map of the entire area under jurisdiction will be prepared to facilitate accuracy in pinpointing the troubled area and activate appropriate response.

(d) This map will contain all relevant data like position of volunteers/police, ambulances, fire services, medical emergency room, ticket location etc.

(e) All the staff involved in this activity will have a particular call sign and the grid map person. This will give them leverage in pre-empting a particular activity that ensures safety of the crowd or if they are nearest

to the spot. It will aid them in initiating corrective action and feedback to the control centre.

(f) This centre will exercise positive control over the crowd movement to and from the event venue.

(g) This centre will not act under pressure of any sort from any individual or agency requesting speedy access to event/venue. At the time, it will exercise total discretion in allowing the same only if doing so may lead to safety and security concerns.

(h) The centre will be the hub for information flow about the crowd movement both up and down.

(i) All emergency support services will be coordinated from this centre.

(j) This centre will exercise direct control over the already parked ambulances, fire services and regulating their movement, in and out of the disaster prone area.

(k) This centre will pre-validate and decide the level & distance of accessibility of emergency services in the disaster area to avoid congestion and quick turnaround, there by speeding up the movement of cases and vehicles.

(l) The centre is also responsible for validating the main routes for crowd movement and alternative routes (marked as standby for ingress and egress.

(m) The centre will exercise/regulate the positioning of food stalls, public facilities, watering points, rest areas and display systems for easing the flow of crowd and their anxiety level.

(n) The entire communication network i.e. the public address system, wireless setup, display system etc. will be controlled by a dedicated team under the supervision of one competent person, who will in turn report to the chief of Emergency operations Centre.

CHAPTER-15
GUIDELINES REGARDING FIRE

15.1 Introduction, Scope & Necessity

The fire incidences in trains are among the most serious disasters impacting human lives as well as property of Indian Railways and other stake holders. Thus prevention of train fire has been a serious concern for the Indian Railways. A train fire is different from a fire in other places in the manner in which it breaks out, grows and spreads, and in the method of fighting it, as well as the damages it causes. Fire in a running train is more dangerous than a static one, because the fanning effect may spread the fire very quickly to other coaches.

In case of fire on train, typical time available for rescue is a few minutes before smoke fills up and passengers start getting disoriented. Smoke (toxic/non-toxic) can cause suffocation and loss of consciousness in two minutes. Fire in personal clothing causes loss of consciousness in 10-15 seconds and Death or incapacitation (followed by death) can happen in five minutes. A fire in a train destroys the train carriage(s) completely in a few minutes. Moreover, passengers sometimes jump out of a running train actually caught fire or even on smelling smoke/rumor of fire in the running train, resulting in increased casualties.

Preventive measures in respect of design & furnishing material of coaches, provision of fire fighting logistics in coaches and locos, alertness of Commercial and RPF staff at railway station and in Parcel units, alertness of on board staff and passengers on the train play a vital role in minimizing the fire incidences in trains and in minimizing loss of human lives and railway property in case of fire in a running train. As such, basic training of firefighting, first aid and rescue operation to LPs, Guards, onboard railway and contractor's staff can be of huge relief in saving lives of stranded passengers.

15.2 Characteristics and Classification of Fires:

A		Ordinary Combustibles	Wood, Paper, Cloth, Etc.
B		Flammable Liquids	Grease, Oil, Paint, Solvents
C		Live Electrical Equipment	Electrical Panel, Motor, Wiring, Etc.
D		Combustible Metal	Magnesium, Aluminum, Etc.
K		Commercial Cooking Equipment	Cooking Oils, Animal Fats, Vegetable Oils

Fires are classified according to the type of fuel that is burning. If wrong type of fire extinguisher is used for extinguishing the fire, it might make matters worse. The four different fire (fuel) classifications are as under:

a. **Class A**: Wood, paper, cloth, trash and plastics - solids that are not metals.
b. **Class B**: Flammable liquids - gasoline, oil, grease, acetone etc. includes inflammable gases.
c. **Class C**: Electrical - energized electrical equipment (as long as it's "plugged in" or supply ON), electrical panel, wiring etc.
d. **Class D**: Combustible Metals - potassium, sodium, aluminum, magnesium.
e. **Class K**: Class K fires involve vegetable oils, animal oils, or fats in cooking appliances. Extinguishers with a K rating are designed to extinguish fires involving vegetable oils, animal oils, or fats utilized in commercial cooking appliances.

15.3 Probable Cause of Fire in Railway Coaches:

a. Carrying inflammable goods like stove, gas cylinder, kerosene oil, petrol, fireworks, poll, posters, etc. in passenger coaches.
b. Making/using fire near paper, wood, petrol or such other inflammable articles.
c. Throwing waste material outside dust bin, near door, non-removal of garbage from pantry cars/coaches.
d. Bad habits like carelessly throwing lighted match sticks, cigarette butts and Bidi butts etc.
e. Leakages/Blasts of pantry gas cylinder.
f. Gas regulator, flame arrester and pressure gauge in pantry car are not in proper working order.
g. Improper storage of inflammable materials like newspapers, edible oil etc. in pantry cars.
h. Insertion of cigarette butts, Bidi buts, Gutkha wrapper etc. in fan base, fuse distribution board, roof openings and ventilators etc.
i. Sabotage.
j. Mishandling/Careless use of pantry equipment by pantry car staff.
k. Poor maintenance of electrical equipment and short circuits.
l. Loose or temporary connection, hanging wires/exposed joints etc.
m. Defects in locomotive/traction unit causing fire.
n. Use of open fire near trains carrying petrol/gas/other flammable material.

15.4 Action to be taken

(A) In case of fire in coaching Train

a. Stop the train immediately and switch on the flasher light after observing fire or on receiving intimation about fire. Arrange to stop the train coming from other direction.
b. Loco Pilot & Guard will immediately inform the control directly by mobile telephone or talking nearest Station Master on walkie-talkie about the incident of fire and preliminary details about the fire.
c. Guard of the train to arrange stretcher and first-aid box for providing assistance to the injured passengers.
d. Arrange for isolating the affected coaches from other coaches by decoupling both Mechanical & Electric couplers. The vehicle behind the one on fire shall be detached and the front portion of the train moved forward so as to prevent the rear vehicles catching fire. As soon as the front portion of the train has moved forward a sufficient distance, to secure the desired object, the burning vehicle shall be detached and the vehicles in front of it shall then be moved forward to a safe distance. If required hand shunting may be carried out by taking help of passengers & railway staff travelling in the train.
e. Provide anti rolling arrangements on isolated coaches and train as well by taking help of a staff travelling in train & passengers.
f. Report it to the nearest station/control/fire station, Civil police, RPF/GRP control post through mobile telephone.
g. Use available fire extinguishers, sand, loose earth, water, blankets, etc. to extinguish the fire and help passengers trapped in fire.
h. Render first aid to injured passengers, by obtaining assistance of the railway staff, doctors and volunteers with the help of ambulance service, means available.

   If the fire cannot be controlled, inform the traction power controller through the emergency telephone or any other mode of communication to arrange the affected section of the over head equipment to be made dead after isolating the affected coaches.

(B) In the event of fire on electric engine

a. Loco pilot shall immediately switch off the circuit breaker and lower the pantograph and the train shall then be brought to a stop at once.
b. Loco pilots shall take necessary action to put out the fire, and the locomotive should be separated from the rest of the train.
c. If fire cannot be extinguished by the above means, driver shall advise TPC through Emergency telephone to arrange for OHE of the affected section to be switched off.

d. The Guard and any other staff shall render all possible assistance to the Loco pilot in putting out the fire.
e. Ordinary fire extinguishers shall on no account be used to extinguish fire on live wire or electrical equipment.
f. If services of fire brigade equipment in the vicinity of the fire hat be allowed to commence operation until all electrical equipment in the vicinity of the fire have been made dead.

(C) In the event of a fire on a Diesel Engine

a. Loco pilot shall immediately switch off the circuit breaker and shut down the engine and the train shall be brought to stop at once.
b. Loco pilots shall take necessary action to put out the fine, and the locomotive should be separated from the rest of the train.
c. The Guard and any other staff available shall render all possible assistance to the Loco pilot in putting out the fire.
d. Fire extinguishers of approved type shall be provided on each diesel locomotive when these are turned out from the home shed. The Foreman/SSE in-charge of the shed shall inspect the fire extinguishers and ensure that these are in good working condition.

(D) In the event of fire on EMU/MEMU

In addition to above mentioned action, following also to be carried out:

a. The train shall then be brought to a stop at once.
b. The Loco Pilot/Motorman shall immediately switch off the circuit and lower the pantograph.
c. The Guard shall give all possible assistance to the Loco Pilot in putting out the fire, isolate the other coaches from the affected coach and help the passengers.

(E) Action to be taken when a Person is on fire

a. Approach him holding the nearest available wrap in front of you.
b. Wrap it round him.
c. Lay him flat and smother the flames.
d. Roll him on the floor, smothering the flames
e. On no account should he rush out in the open air.
f. Call for assistance.

(F) Handling of injured passengers

a. Building up confidence of injured passengers by suitable advice is of great importance.
b. First aid should be rendered to the injured passengers.

c. Ordinarily give nothing ORALLY to injured one, but if medical treatment is delayed more than 4 hours, give ORS drinks preferably bio-carbonated soda.
d. In serious case shift the patient quickly to hospital as the injured may require an anesthetist, medical soothing.

(G) In case of fire in Freight train

In addition to action to be taken on relevant points above, crew shall carry out the following:

a. The train will be controlled immediately and brought to the nearest station/yard in the loop line or yard line in consultation with the nearest station & section controller.
b. The affected wagon or wagons shall be separated from the rest of the train.
c. Provide anti rolling arrangement on the isolated wagons and train.
d. Guard and loco pilot shall try to extinguish the fire from nearby tank or water columns at the station.
e. Guard of the train should lodge a FIR, if required.

(H) Fire caused by Petrol or other inflammable liquids, acids or gases

a. Segregate the affected wagon, coach or area involved.
b. On opening a wagon do not enter it immediately. You would thus, avoid fumes, which may be dangerous.
c. Use foam type fire extinguishers and sand. Do not use water or soda acid type fire extinguishers.
d. Do not bring naked lights near the site of fire.
e. Warn the people living in the surrounding areas within one Km Radius.
f. Stay away from ends of tanks, as tanks normally burst from the ends.
g. Cool tanks that are exposed to flames with water from the sides only after the fire is put out.
h. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.
i. Inform the nearest Fire Station intimating that Petrol or any other inflammable liquids, gases, have caused the fire.

(I) Fire caused In case of fire due to Explosives/Inflammables Dangerous Goods

a. Extinguish by closing the valve or isolating LPG feed to fire by other suitable controls.
b. The following steps may be taken if no undue risk is involved
    i) Move unheated cylinders to a safe place after ensuring closing of valves

ii) 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.

c. 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.
d. Inform the Chief Controller of Explosives by fax/telephone.
e. Inform officer in charge of nearest police station.
f. Inform department officers concerned.
g. Pending the visit of the Chief Controller of Explosives/his representative, the wreckage and debris shall be left undisturbed except to save lives.
h. After getting information from the Chief Controller of Explosives that he does not wish any further investigation, the restoration work may be commenced.

15.5 Different types of Fire Extinguisher & its uses:

Portable fire extinguishers are classified by the type of fires they are designed to extinguish. There are five basic classifications of fire extinguishers. Extinguishers are labeled with either letter-shaped or pictorial symbols that indicate what types of fires they are intended for.
It is vital to know about type of extinguishers. Using the wrong type of extinguisher for extinguishing of fire can be life-threatening. Locos, EMU's and AC coaches are being provided with DCP types of fire extinguishers, considering it is the most suitable for electrical fires.

a) Wet Chemical Extinguisher - The wet chemical extinguisher is a specialized type primarily focused on class K fires, those involving cooking media such as animal and vegetable fats or oils. These extinguishers contain a solution composed of potassium that effectively launches a two-pronged assault on fires. First, the liquid mist acts to cool the fire. Second, due to the chemical reaction of the solution with the cooking medium, a thick soap-like substance forms, sealing the surface of the liquid to prevent re-ignition.

b) Dry Chemical Powder (DCP) Extinguishers come in a variety of types and are suitable for a combination of Class A, B, C& D fires. These are filled with foam or powder and pressurized with nitrogen.
DCP (Dry Chemical Powder) extinguishers have an advantage over CO2 extinguishers since that leave a non-flammable substance on the extinguished material, reducing the likelihood of re-ignition.

c) Air Pressure Water Extinguisher (APW) are suitable for Class A fires only. Never use water extinguishers on grease fires, electrical fires, or Class D fires – the flames will spread and make the fire bigger. Water extinguishers are filled with water and are typically pressurized with air. Again water extinguishers can be very dangerous in the wrong type of situation. Only fight the fire if you're certain as it contains ordinary combustible materials only.

d) Foam Extinguisher - Foam fire extinguishers are suitable for class A and the flammable liquids of class B, though not effective for gaseous fires. They spray a type of foam that expands when it hits the air and blankets the fire. This blanket prevents the vapors from rising off the liquid to feed the fire, thus starving it of fuel. Also, because the foam is mixed with water, it has a cooling effect as well. Foam extinguishers are some of the best for liquid fires, such as gasoline fires, but can also be used on Class A fires involving solid combustibles like wood.

e) Carbon Dioxide (CO2) Extinguishers are used for Class A, B and C fires. Carbon Dioxide extinguishers contain dioxide, a non-flammable gas, and are highly pressurized. The pressure is so great that it is not uncommon for bits of dry ice to shoot out the nozzle. They don't work very well on class A fires because they may not be able to displace enough oxygen to put the fire out, causing it to re-ignite. CO2 extinguishers have an advantage over DCP (Dry Chemical Powder) since they don't leave a harmful residue – a good choice for an electrical fire on a computer or other favorite electronic device such as a stereo or TV.

DCP type Fire Extinguisher:

1. Cartridge type

a. Carry to the place of fire and keep it upright.
b. Remove the safety clip.
c. Strike the knob located in the cap and grounded by holding upside down.
d. Sealing disk of the cartridge gets broken and allows carbon dioxide gas to escape to the main shell and powder is pushed out.
e. Direct the stream of the powder at the base of the flame.
f. For effective result stand at about 1.5 to 2.5 meter near the seat of the fire.

g. Move forward with moving the nozzle rapidly from side to side in sweeping motion.
h. When using on outdoor fires, operate from the upwind side for effective spray.

2. Stored pressure type

a. In this nitrogen gas is kept stored at 4.2 kg/cm2 along with dry chemical powder.
b. At the time of use, keep it upright remove safety pins and pull the trigger .The chemical powder stored under pressure comes out through nozzle.

c. Direct the stream of powder towards the base of the flame.
d. Once fire is reduced/extinguished, release the trigger.
e. The stored pressure type DCP extinguisher can be used multiple times depending upon remaining pressure.
f. Minimum pressure in DCP stored type fire extinguisher is to be 3.5kg/cm2.

15.6 Fire Fighting System in Coaches

(i) Fire Fighting Arrangement in Coaches/Trains

Guard-cum-Brake Van, AC coaches and Pantry Cars in all trains are provided with portable fire extinguishers to cater for emergencies due to fire accidents. Presently, in sleeper coaches, fire extinguishers are not provided. It may be provided in those coaches with TTE seats. Efforts may be made to provide portable fire extinguishers in other Non AC coaches also.

The Dry Chemical Powder (DCP) Type Fire Extinguishers should be provided at the following locations on trains–

S. N.	Locations	No. of Fire extinguishers
1.	Each Electric / Diesel Loco	4
2.	Each Brake Van (SLR) (Front & Rear)	2
3.	Each AC Coach	2
4.	Each Pantry Car	4
5.	Each Generator Van	4
6.	Each Motorman Cabin of EMU coaches	2

As per RB letter no.95/Sec. (Spl.)/75/1,dated 30.05.97 &76/M(C)/137/31 Vol IV pt. , dated 21.11.2017 fire extinguishers to be provided in all AC coaches ,power cars, Locomotives and SLRs with valid testing dates

AC coaches of Premium Trains like Humsafar, Duranto, Tejas and Rajdhani, Vande Bharat Express trains are being provided with smoke and fire detection systems which give alarm in case of fire or smoke. Gradually, all AC coaches are being provided with smoke and fire detection systems which give alarm in case of fire or smoke.

(ii.) Operation of Automatic/Manual Fire Suppression Systems

The pantry and power cars are being provided with smoke and fire detection as well as suppression systems. The suppression systems provided may be manual or automatic.

a. The Operating Instruction is pasted by the side of the Suppression System and members of Instant Action Team should be well aware of.

b. In case of Manual Suppression System, whenever there is a fire / smoke inside the coach, sensor will activate smoke alarm which will give audio / visual signal at this stage, if required. Fire Suppression System can be activated by pressing manual activation switch.

c. In case of Automatic Suppression System, whenever there is a fire / smoke inside the coach, sensor will activate heat alarm which will give audio / visual signal and the Suppression System will automatically operate within 30 seconds.

d. If in case the system is not functioning, the suppression system can still be activated manually by pressing the lever in the nitrogen cylinder as detailed in the operating instruction pasted near the suppression system. Staff travelling should be trained to operate the system.

15.7 Emergency Response System:

Fire in train has been classified in B1 to B7 Categories as indicated below:

Accident Classification 'B' – Fire in train		***Officials to be advised***
B1	Fire in a train carrying passengers, resulting in i. Loss of human life and /or grievous hurt and /or ii. Damage to Railway property of the value exceeding Rs. 2 crores and /or iii. Interruption of any important through line of communication for at least 24 hours.	CRS, GM, OC/RPF, DRM, TI, SE/C&W, Officer in charge of Railway Police Station, SE/Works, P-Way, if Concerned, RMS if Mails affected, Chief Inspector/Explosives in case of Fires and explosives/ and suspected to be due to explosives, dangerous or inflammable goods, AEE, TPC, TLC if concerned. AEE/TRD, in case of electrified section.

Accident Classification 'B' – Fire in train		Officials to be advised
B2	Fire in a train not carrying passengers, resulting in i. Loss of human life and /or grievous hurt and /or ii. Damage to Railway property of the value exceeding Rs. 2 corers and /or iii. Interruption of any important through line of communication for at least 24 hours.	-do-
B3	Fire in a train carrying passengers not falling under B-1 above but i. Loss to Railway property is Rs.50,000/- or above and /or ii. Interruption to traffic is more than the threshold value and / or iii. Resulting into detachment of coaching stock/ stocks from the train.	CRS, GM, OC/RPF, DRM, TI SE/C&W, Officer in charge Railway Police Station, SE/Works, P-Way, if Concerned, Supdt. RMS (if Mails affected), Chief Inspector/Explosives in case of Fires and explosives/ and suspected to be due to explosives, dangerous or inflammable goods, AEE/TRD, for OHE in case of electrified section.
B4	Fire in a train not carrying passengers not falling under B-2 above but i. Loss to Railway property is Rs.50,000/- or above and /or ii. Interruption to traffic is more than the threshold value and / or iii. Resulting into detachment of goods stock/ stocks from the train.	-do-
B5	Fire in a train carrying passengers not falling under B-1 or B-3 above.	-do- (except CRS)
B6	Fire in a train not carrying passengers and not falling under B-2 or B-4 above.	-do-
B7	Fire is occurring in shunting, marshalling yards, loco yards and siding etc. involving rolling stock but not involving a train.	-do-

15.8 Safety Instructions and Role of various officials

(a)Train Superintendents/TTES and other commercial staff

i) Pull the Alarm Chain and stop the train immediately. Inform the crew of the fire incident.
ii) Observe any alarm or buzzer from smoke detectors provided in AC coaches. In case of any buzzer from smoke detectors, find out where smoke or fire is from.
iii) Report to the Commercial Control immediately & also dial 101 to call fire service people by giving the location as Km No. & Train No. Also call 138 Helpline to arrange rescue & relief on war footing
iv) Use fire extinguishers available in coaches to extinguish fire or use water available in coaches.
v) Evacuate passengers to the adjacent coaches which are away from the fire through vestibules, if fire is not extinguished. After complete evacuation, rolling shutters of coaches on fire to be closed with the help of available railway men and passengers to contain spread of fire.
vi) Advise passengers to take a cloth, wet it in their drinking water and cover their nostrils. This reduces smoke inhalation and subsequently its bad effects.
vii) Insist that should save themselves first and not to bother about their valuables/luggage which can be retrieved later on.
viii) Take assistance of volunteers from passengers, travelling Railway employees, doctors on trains etc in rescue operation.
ix) Call the doctor after checking the charts & advise him about the passengers affected by fire.
x) Take the help of other railway staff including RPF and GRP and Samaritan passengers.
xi) Arrange stretcher and first aid box for the injured passengers.

(b) Pantry Car Staff: In case of fire in pantry car

i) Immediately close all cooking gas appliances in the pantry and remove the gas cylinders into the open away from fire.
ii) Immediately switch off all electrical appliances and isolate them electrically.
iii) Inform TTES etc of the fire incident and seek assistance.
iv) Protect the inflammable material available at pantry car.
v) Extinguish fire by using fire extinguishers available at pantry.
vi) In all other cases of fire, follow the Instructions laid down above for instant action team.
vii) Provide necessary assistance to TTEs and other staff in extinguishing the fire and extricating the trapped passengers.

(c) C&W staff and onboard Housekeeping staff

i) Open the doors of both sides of coaches.
ii) Open Emergency Windows for Evacuation of the passengers.
iii) Evacuate the passengers to the adjacent coaches which are away from the fire through the vestibules; if the fire is not extinguished. After complete evacuation close the rolling shutters of coaches on fire to contain the spread of fire.
iv) Help the train crew in physically isolating/separating the affected coaches from the remaining train.

(d)AC Coach Maintenance staff

i) Immediately isolate the affected coach/coaches electrically
ii) Break the box and take out hammer to break glass paries of AC coaches so that fresh air flows in and smoke goes out.

(e) Power Car staff

In case of fire in power cars:

i) Stop train by pulling alarm chain immediately.
ii) Inform guard/driver/TTEs etc of the fire incident and seek their assistance.
iii) Shut down the power car engines and disconnect power supply
iv) Use fire extinguishers and fire ball provided in engine room in case of fire in power car to extinguish fire.

(f) RPF/GRP

i) Pull alarm chain to stop the train.
ii) Rush to the affected coach/coaches immediately and provide necessary assistance to TTEs and other staff in extinguishing the fire and extricating the trapped passengers.
iii) Follow the instructions laid down above for instant action team
iv) In case doctor/doctors are available, necessary assistance will be provided to ease working of doctor.
v) Separate the area of incident by establishing temporary barriers and ensure that the onlookers and spectators do not enter the affected area to disturb the scene or hamper the rescue operations.
vi) Baggage of passengers should be isolated and protected and should be taken care of, till they are handed over to claimants or taken over by Railway authorities.
vii) RPF personnel should respond to any call for assistance to rescue victims and transport them to the nearest hospital.
viii) Check, save and record the evidences/clues of the fire.
ix) Help Guard in lodging of FIR.

(g) Station Master at Station or Nearby Station of Fire Incident

i) Inform the nearest Fire Brigade office of the location of the incident and requisition their services.
ii) Advice the section controller and/or TPC of the fire incident indicating the affected section and/or for OHE isolation.
iii) Inform the local hospitals and requisition the services of the doctors and paramedical staff as per the requirement.
iv) Inform all officers and supervisors of all departments available at the station.
v) The controlling station master shall proceed to the site with staff of various departments to help in rescue and relief operations.
vi) Station master shall not allow any train to enter on the adjacent track of the affected section.
vii) After clearance of affected train from the section, advice section controller.
viii) On receipt of advice from section controller allow the train service on the section on releasing the emergency power block and OHE power is switched on in the section.

(h) Section Controllers

i) Section controller, on receipt of fire incident, shall advice adjacent stations/station masters to regulate the train services in the affected section.
ii) Depending on the requirement, order ART/ARME.
iii) Advice traction power controller to switch off OHE power supply in the affected section if required.
iv) In case of fire in Freight train, train will be controlled immediately and brought to the nearest station/yard in the loop line or yard line in consultation with Dy.CHC/CHC.

(i) Traction Power Controllers

i) The Traction power controller shall switch off the OHE power supply of both the lines of relevant affected section on the advice of Section Controller.
ii) Advice section controller in writing that OHE power supply has been switched off in the affected section.
iii) On advice of section controller, TPC shall switch-on the OHE power supply in the affected section.
iv) OHE supply effected lines and adjacent lines which are close vicinity to be kept off.

(j) Role of Dy. CHC/CHC

i) Inform the Fire Brigade office of the location of the incident and requisition their services.
ii) Inform casualty of Divisional Hospital to inform Doctors.

iii) The local hospitals will requisite the services of the doctors and paramedical staff as per the requirement.
iv) Promptly inform all the concerned officers.
v) Order ARME/ART immediately & arrange Diesel/Electric power accordingly with Crew & Guard.
vi) Hooter to be sounded in the Divisional control and in the Loco shed.
vii) Promptly inform C&W, Engineering, Loco, Commercial, Security, TRD Controllers
viii) In case of fire to a passenger carrying train, Civil authorities should be promptly advised.
ix) In case of fire in Freight train, that train will be controlled immediately and brought to the nearest station/yard in the loop line or yard line.
x) Fill up the Performa about the accident as applicable and advise all concerned.

CHAPTER-16
LAND / HILL SLIDE:

When a huge land/rock mass suddenly gets displaced from its position and comes down with tremendous force, it can cause intensive damage to Railway Track, Buildings and other Railway Installations, with blocking of traffic movement. It can also cause loss of human Lives. This can be caused due to prolonged torrential rain, blasting of rock nearby and Earthquake etc.

16.1 Actions to be taken during Land/Hill Slide

After receiving the message from the concerning Station Master under whose jurisdiction the Section is situated, the Section Controller will inform concerning Operating Officer to stop the movement of trains in the adjacent sections and inform DRM/ADRM, Sr.DEN(Co-ord) (through Engg. Control), Sr.DME, Sr.DEE(OP), DSC and other Concerning Branch Officers.DRM with Sr.DEN(Co-ord) and Sectional DEN will proceed to site. ART/MTRS will be ordered, if required.

a) Sr.DEN(Co.)will requisition earth moving equipments including, Pay loader, JCB, Dozer, Proclains & Jack Hammer Dumper & Trucks from the nearest available Railways & Non-Railway sources.

b) Licensed Rock Blasting staff, with sufficient quantity of explosive & detonators, Rock drills, Rock drilling equipments and Air compressors available from the nearest sources also should be rushed to the site. Only trained experts having license to handle explosive should only be deployed for rock blasting.

c) DRM, after getting detailed information from site will seek the help of Army, Border Road Organization Units, as the case may be.

d) Sufficient quantity of explosive & detonators has to be sent to the site for replenishment.

e) The residents of the nearby houses/Staff quarters must be evacuated to safer places before starting the Blasting of Rocks.

f) Requisite quantity of P. Way material should be kept ready in the nearest station to move to the site in case the P. Way is damaged.

g) Similarly, Signaling, Electric, TRD staff also should be kept in readiness with men & materials for immediate repair of installation.

h) Sufficient number of labors to be requisitioned and deployed at site to help in clearing the landmass. Causality/injured persons/staff should be shifted to nearest Hospital for treatment.

i) The loose boulders to be dislodged and the need for flattening its slope by earthwork or protection of cutting by boulders nets or rock bolting or short creating to be explored.

16.2 Alerts issued by Geo

Geological Survey of India (GSI) issues alerts and warnings to all designated authorities and agencies of the Central Government and State Governments/ District Administration for landslides in the following categories.

Category IV (Green): Landslides of small dimensions that occur away from habitations/ communication corridor/ infrastructure site, and do not affect humans or their possessions and/ or property/ infrastructure.

Category III (Yellow): Landslides that occur in the vicinity of inhabited areas/ communication corridor/ infrastructure site that can adversely affect either humans or properties or infrastructure. This category also includes Landslides that block smaller natural drainages and posing insignificant to limited risk to lives and properties.

Category II (Orange): Landslides that occur and/ or have damaging effects on inhabited areas/ communication corridors/ infrastructure sites and that result either loss of lives or damage to property or infrastructure.

Category I (Red): Landslides that occur and/or have damaging effects on inhabited areas/ communication corridors/ infrastructure sites and that result in significant losses of lives and properties/ infrastructure. This category also includes large landslides that cause damming and blocking of major rivers leading to the possibility of breaching of dam and flooding of downstream low-lying areas (Landslide Lake Outburst Flood –LLOF).

CHAPTER-17

DISASTER IN TUNNELS/DEEP CUTTINGS OR IN A WATER BODY

17.1 Expertise To handle Rail Disasters in Tunnels

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 could be mobilized for this job.

17.2 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, alarm will be sounded automatically in the control room to alert the Ventilation Operator controller or if Guard /Loco Pilot 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.

17.3 Handling Rail Disasters in a Lake, River & Sea

The Railway 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.

17.4 Assistance of NDRF and State Governments

The Zonal Railway has to contact the respective NDRF Battalion for assistance or trained manpower along with available equipments, even the resources of the State Government can be made use of.

CHAPTER 18

TERRORISM DISASTER

18.1 Terrorism:-

Terrorism is the perpetrated act in a clandestine manner against civilian. It is committed in order to create a fearful state of mind in a civilian.

18.2 Loss due to terrorist attack:- Terrorism is a manmade disaster and cost the most in terms of the followings;

a. Loss of lives
b. Loss of properties.
c. Workers' compensation.
d. Accident and health.
e. Disability.
f. Political and social instability in the region and between countries.
g. Long term damage to a country's economy and production capacity

18.3 Types of Terrorism

Researchers in the United States began to distinguish different types of terrorism such as Hijacking, Bombing, Diplomatic kidnapping and assassination to assert their demands.

18.4 Terrorism Management Measures

Before terrorist attack

i) Keep security alert and aware of the surrounding area.
ii) Take precaution when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers or leave luggage unattended.
iii) Leave where emergency exits are located. Think ahead about how to evacuate a train, subway, building or congested public area. Learn where staircases are located.
iv) Terrorist may damage the Railway track or Railway bridge, therefore for patrolling to be intensified.
v) In a terrorist attack there may be many injured, so medical department should store sufficient stock of life saving drugs and blood.
vi) The explosion can result in collapsed building and fire. People who live or work in a building review emergency evacuation procedure and know where fire exits are located.
vii) There may be general Power Supply (Electricity) failure during a terrorist attack. One Power Car of suitable capacity per Division at Divisional Head Quarter may be kept.

viii) If you receive a bomb threat, get as much information from the caller as possible. Keep the caller on line and record every thing that is said. Notify the police and building management.

ix) During terrorist attack train may be detained for a long period due to damage of traction installation. On receiving warning messages from authorized sources, Diesel power(engine) should be kept ready as stand by at suitable strategic locations.

x) After you have been notified of a bomb threat, do not touch any suspicious packages. Clear the area around the suspicious packages and notify the police immediately. In evacuating a building, avoid standing in front of window or other potentially hazardous area.

xi) Install Video camera at the busy Railway station to watch movement of suspicious person.

xii) Bomb detecting machine to be installed at every important Railway stations to examine the luggage of the passengers boarding a train.

xiii) Random checking of the luggage of the passengers.

xiv) Deploy sufficient number of RPF staff at stations and on trains.

xv) Tight security at all work places and residential colony.

During terrorist attack-

i) In a building/train explosion, get out of the building/train as quickly and calmly as possibly. If exits are blocked, get out through emergency exits or get under a sturdy table or desk.

ii) If there is a fire, stay low to the floor and exit the building as quickly as possible.

iii) Cover nose and mouth with wet cloth.

iv) When approaching a closed door, use the palm of your hand and fore arm to feel the lower, middle and upper parts of the door. If it is not hot brace yourself against the door and open it slowly. If it is hot, do not open the door and seek an alternate escape route.

v) Heavy smoke and poisonous gases collect first along the ceiling, stay below the smoke at all times.

After a terrorist attack, If you are trapped in debris

i) Use a flash light.

ii) Stay in your area so that you don't kick up dust. Cover your mouth with a handkerchief or clothing.

iii) Tap on a pipe or wall so that rescuer can hear where you are. Use a whistle if available. Shout only as a last resort. Shouting can cause a person to inhale dangerous amount of dust and smoke.

iv) Assist victims, However, you should not attempt to rescue people who are trapped in side a collapsed building. Wait for emergency personnel to arrive.

v) Where a chemical agent attack occurs, authorities would instruct citizens either to seek shelter where they are and seal the premises or to evacuate immediately. Explosion of chemical agent can be fatal.

18.5 Duties of different Departments

After a terrorist attack at station/train, the DRM of affected Division should take the situation under control and immediately advice the RPF and other department to rush the spot immediately for relief and rescue work. The duties of RPF are vital in the terrorist attack. They should immediately inform state police and rush to the spot with full force to handle the situation.

18.5.1 Duties of RPF department

i) Evacuate the injured and un-conscious persons from the affected zone with the help of NDRF, GRP and Local Police etc. Permission has been accorded by Home Ministry (vide their letter no-VI-24022/11/2002-PM-I, dtd. 24-12-2002, addressed to Home Secretary of all states), that State Govt. or Police clearance is not required for lunching rescue operation for the purpose of saving human lives.

ii) If there is a fire or collapse of building, State's fire service to be informed immediately.

iii) They should be careful to stop panic.

iv) Affected area is to be cordoned.

v) Attack of terrorist may be at any place, even religious places are not left, but Railway disaster is mainly concerned with Railway property such as Railway stations, trains, colony, offices, workshops. So they should be prepared in all respect.

vi) They should protect the belongings of the passengers.

18.5.2 Duties of medical department

i) Terrorist attack may cause loss of life, serious/minor injury to people. On receipt of the information of a terrorist attack on any Railway establishment, the ARME in-charge should rushed to the spot immediately with sufficient nurse and doctors.

ii) They should have sufficient number of stretchers.

iii) Ambulance with life saving medicines, dressing materials, Tetanus toxoid and Intravenous fluids.

iv) First aid to be given to injured and seriously injured to be shifted to the nearest hospital.

18.5.3 Duties of Mechanical department

i) During terrorist attack train may be seriously damaged/de-railed, in such situation senior most Officer should rush the site immediately by fastest means.
ii) 140 T crane /ART/ARME may be ordered as per the requirement.
iii) Senior most officers should monitor the rescue operation at site.

18.5.4 Duties of Operating Department

Movement of Advance Pilot:- In case there is a threat to Railway assets such as track, bridge tampering, threat of sabotage by terrorist, Chief Operations Manager shall decide to run an advance pilot ahead of important mail/express or other trains as occasions demand. In this case, an advance pilot shall be an engine (preferably a Diesel engine) with composition as required as well as with necessary security arrangement to be run. The speed of advance pilot should not exceed 80 Kmph and 60 Kmph during day and night respectively and 10 Kmph during bad weather impairing visibility. The first train should follow the advance pilot after a time interval of 10 minutes. The speed of the following train shall not exceed 60 Kmph and 40 Kmph during day and night respectively. In case of any sabotage to the track or advance pilot, efforts may be made to protect the site. The loco pilots of the following train must be most vigilant, cautious and be prepared to stop his train short of any obstruction.

18.5.5 Duties of Commercial Department

i) Commercial staff should guide the affected passengers regarding their safety.
ii) Adequate food and drink to be arranged for the distressed passengers.
iii) Alternative arrangement may be made for the safe return of the distressed passengers.
iv) Payment for compensation to be made to the kin of the dead.

18.5.6 Duties of Personnel Department

i) Welfare Inspectors of Personnel Department should keep the record of the dead/injured for the payment of compensation
ii) They should assist the Commercial Department for the payment.

CHAPTER-19

NUCLEAR AND RADIOLOGICAL EMERGENCY DISASTER

19.1 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 radiation limits can lead to a nuclear/radiological emergency. In the incident of Fukushima, the plant released a large-scale of radiation in the environment due to failure of cooling system of nuclear facility. The nuclear reactors using radioactive resources burst due to uncontrolled nuclear reaction, in 11th March 2011 earthquake and tsunami resulting in triggering of fires, explosions and radiation leaks in the world's worst nuclear disaster since Chernobyl in 1986. This disaster is believed to have killed more than 24,500 people.

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

a. An accident in a nuclear fuel cycle facility where an uncontrolled nuclear chain reaction takes place inadvertently, leading to bursts of neutrons and gamma radiations.
b. An accident during the transportation of radioactive material.
c. The malevolent use of radioactive material as a Radiological Dispersal Device by terrorists for dispersing radioactive material in the environment.
d. 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 points (a) to (d) above) of 19.2 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 (d)) 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 terrorist attacks, these facilities have elaborated 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 shall not 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 rigidly during actual transportation.
A network of 18 Emergency Response Center 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 Centers 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.

In this chapter a concise concept has been provided regarding, how a nuclear and radiological disaster can takes place and how to tackle the disaster.

CHAPTER-20

BIOLOGICAL DISASTERS

20.1 Cause 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, Noval corona virus etc. The existence of infectious diseases has been known among human communities and civilisations since the dawn of history. 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.

20.2 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 in the recent past 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.

20.3 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.

Therefore proper surveillance mechanism and response system should be developed in places where epidemics can be detected at the beginning stage of their outbreak and can be controlled easily.

In 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 sensitized.

20.4 Support of others

To manage these challenges medical department coordinate with the nodal Ministry-Ministry of Health and Family Welfare (MOH&FW) with inputs from the Ministry of Agriculture for agents affecting human, animals and crops

20.5 Handling CBRN Disaster

With the help of trained Doctors, Medical Department should be able to handle and provide adequate medical relief for all cases of CBRN disaster in consultation with Local Civil Administration and Health Administration.

CHAPTER – 21

GUIDELINES DURING CHEMICAL DISASTERS

21.1 Classification of Dangerous/Hazardous Goods

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

i. Explosives
ii. Gases, 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 & other Corrosives.

21.2 Dangerous Goods dealt in Railway

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

21.2.1 CLASS – II (compressed, liquefied or dissolved gases under pressure)

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

Dissolved Gases:

1. Acetylene (compressed into porous substances).

Compressed Gases:

1. Air Compressed
2. Argon
3. Coal Gas
4. Hydrogen
5. Methane
6. Neon
7. Nitrogen
8. Oxygen

9. Sulphur Hexafluoride

Liquefied Gases:

1. Ammonia (Anhydrous)
2. Chlorine
3. Liquefied petroleum Gas(Commercial Butane or Propane)
4. Carbon dioxide (Carbonic Acid Gas)
5. Cyclopropane gas
6. Ethyl Chloride
7. Freon, Arcton or Genetron
8. Hydro-cyanic Acid
9. Medical Mixtures (Oxygen and Carbon dioxide & Oxygen and Helium mixture)
10. Methyl Bromide
11. Methyl Chlorine (Chloromethane)
12. Nitrous Oxide
13. Sulphur Dioxide Toxic (Sulphurous Acid Gas)
14. Liquid Air
15. Liquid Nitrogen
16. Liquid Helium

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

Packing

Before the above commodities are transported by rail, it must be packed as per rules 207.1 & of Ref Tariff No. 20.

However, Rule 207.2 i.e. rule for protection of cylinder valves during transport shall not apply to cylinders containing oxygen or nitrous oxide for medical purposes having water capacity less than 5 liters.

Marking & labeling of Cylinders or Containers

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

Storage

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

Following points must be ensured:

a) Thin wall cylinders such as liquefied petroleum gas cylinders and dissolved gas cylinders shall not be stacked in a horizontal position.

b) Cylinders containing flammable gases, other toxic gases shall be kept away from cylinders containing other type of gases.
c) Cylinders shall not be stored along with any combustible material.

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

Precautions in handling & storing of gas cylinders or containers: (Refer Rule No. 212 of Red Tariff No. 20)

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

Modes of Transportation

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

Additional Rules

Exceptional or Additional Rules regarding packing, marking and labeling, carriage by Goods/ Mixed/Parcel train and storage and Carriage rules have been specified in Table II, Chapter II of Red Tariff No. 20. Characteristic property of gas & pictorial level indicating main characteristics of the gas is also indicated in column 2 & column 3 of table II.

21.2.2 CLASS – III (PETROLEUM & OTHER INFLAMMABLE LIQUIDS)

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

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

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

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

Packing, Marking & Labeling

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

Storage

Time of Loading and Unloading: All operations of loading, unloading and handling of petroleum and other inflammable liquids shall be conducted between sunrise and sunset.

Prohibition of smoking, fires etc.: Smoking, taking fire, naked light matches or other articles of inflammable nature is strictly prohibited near petroleum and other inflammable liquids.

Transportation

a) Petroleum and other inflammable liquids, Class 'A", shall be transported by goods trains only.
b) Petroleum and other inflammable liquids, Class 'B' and "C' may be transported in wagons by all trains except passenger trains.

Conveyance in tank wagons

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

Storing in wagons, labeling, sealing and locking

A **'DANGEROUS'** label must be affixed to both sides of every wagon.

21.2.3 CLASS – VIII: (ACIDS AND OTHER CORROSIVES)

A List of acids and other corrosives which have been considered dangerous goods are given in Chapter VIII (table VIII) of Red Tariff No. 20.

Packing, Marking and Labeling:

More precautions need to be taken by Railway Officials that it is packed strictly in the manner laid down in column 2 of table VIII and as per rules 807 of Red Tariff No. 20.

Handling and Storage

Time of loading and unloading:

All operations of loading, unloading and handling of petroleum and other inflammable liquids shall be conducted between sunrise and sunset.

Transportation:

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

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

Storing in Wagons

Labeling, Sealing and Locking of Wagons

A **'DANGEROUS'** label shall be affixed on both sides of every wagon in which acids and other corrosives are stored for dispatch or delivery or while in transit.

Precautions to be taken during shunting

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

a) The speed of all movements does not exceed 8 KMPH

b) No rough hump, fly or loose shunting takes place.

21.3 Stationary Storage of Dangerous Goods

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

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

21.4 Rescue Relief and Restoration Operations

Railway's expertise in dealing with the mis-hapenings 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 organizations on their system that have expertise in dealing with the hazardous material being handled and transported on the respective zonal railways. Contact details e.g. Name, Designation, Telephone Nos., Mobile Nos. etc. of such agencies should be available in the divisional and zonal Railway Disaster Management Plan so that these agencies can be called for without any delay during any untoward incident. However, not to mention the least nominated staff of ARMVs, ARTs and few of the staff maintaining the rolling stock which is used for transportation of hazardous material may be trained and equipped with the equipment used for dealing with such material in the eventualities.

21.5 PHONE NUMBERS FOR EMERGENCY SERVICES TO DEAL THE PETROLIUM HAZARDS

Division	Designation	STD code	P&T	Mobile No.
BSP	Asst. Manager (IOCL)	07752	261218	9425065519
	Asst. Manager (HPCL) KRBA	07759	271230	8959596238
Raipur	Divl. Manager (IOCL)R	0771	4023157	9425600537
	Area Manager (IOCL) R	0771	4023928	9425602043
Nagpur	Area Manager (IOCL) Gondia			9422804623 9422804639

CHAPTER-22
GUIDELINE REGARDING EARTHQUAKE

22.1 What is an earthquake?

Earthquakes refer to shaking of earth. There is continuous activity going on below the surface of the earth. There are several large plates (size of continents) below the surface of the earth, which move (at a very slow speed). As a part of this movement, sometimes, they collide against each other. And, after the collision, they might still continue to push each other. As they continually keep pushing each other, there is a pressure building up-across these plates below the surface. And, then, at a certain time, one of the plates might slide over another. This causes an earthquake.

Alerts:

Early warning or prediction of earthquake is not possible as of now. However detection and monitoring the earthquakes and the aftershocks are possible. National Centre for Seismology (NCS) is the nodal agency of Government of India responsible for monitoring seismic activity in and around thecountry.NCS is responsible for quickly estimating the earthquake source parameters immediately on occurrence of an earthquake and disseminating the information to all the user agencies including the concerned State and Central Government agencies responsible for carrying out relief and rehabilitation measures. NCS also transmits earthquake information to public information channels, press, media etc. and posts in its Website.

22.2 Characterization of an Earthquake

The impact of an earthquake (at any location) is characterized by two primary characteristic:

Intensity

This measures the magnitude of the event. Higher is the value, the bigger is the magnitude. The most common scale used for measuring an earthquake is Richter scale. It should be understood that Richter scale is a logarithmic scale. What this means is an earthquake measuring 6.0 is 10 times more powerful than an earthquake measuring 5.0.

Epicenter

This denotes the exact location, where the earthquake originated. The deeper it is inside the earth, the lower will be the impact on the surface-where human beings reside.

There are 100s of earthquakes taking place on a daily basis all around the world. Most of these earthquakes are really of low intensity, too-low to be noticed. However, some of the earthquakes are significantly intense.

22.3 Categorisation of Alerts

Category	**Description**	**Stage**	**Alerts to be transmitted to**
Small Moderate	Less than 5.0 5.0-5.9	**Yellow**	• Joint Secretary (DM) & Additional Secretary (DM). • Nodal Officers of NDMA & NDRF. • Concerned State/ Union Territory Governments, with instructions to further transmit the alerts to the concerned/ Districts authorities. • On instruction of Joint Secretary(DM) transmitted to Home Secretary, MHA
Strong	6.0-6.9	**Orange**	• Home Secretary / Additional Secretary (DM / Joint Secretary (DM) / to Home minister/ Personal Secretary to MoS. • Nodal Officers of NDMA & NDRF. • Concerned State / UT Governments with instructions to further transmit alerts to the concerned/District

			authorities. • All designated officers in Prime Minister's Office / Cabinet Secretariat
Major Great Giant	7.0-7.9 8.0-8.9 9.0 and above	**Red**	• Home Secretary / Additional Secretary (DM / Joint Secretary (DM) / to Home minister/ Personal Secretary to MoS, Nodal officers of NDMA & NDRF. • All designated officers in PMO/ Cabinet Secretariat. • Emergency Support Function Ministries /Departments. • Concerned States/ Union Territories with instructions to further transmit alerts to the concerned /District authorities

22.4 Injuries

During an earthquake, there are many ways by which one can get hurt (many times, fatally)

a) People inside buildings could get hurt (even critically) by fall of objects, walls & ceilings.
b) People outside the buildings could get hurt by falling debris from damaged buildings, glasses etc.
c) People travelling could get hurt by their vehicles falling off the tracks, bridges, material falling from overhead bridges etc.
d) People could get electrocuted by snapped electrical wires.
e) People could get washed away by floods-caused due to tsunamis, breaches in dams etc.

22.5 Safety Precautions

Hence, in case of an earthquake, the safest place would be in an open ground-away from all kinds of buildings. If you cannot rush out of your building, you can duck under some sturdy desk etc, which might provide protection against heavy objects falling on your body. If even that is not possible, sit against a wall, with your back pushing the wall firmly, and

lean forward to take your head in between both your knees, and, put your hands at the back of your head to provide protection to your head and spine. You could stand directly below one of the door frame in your house. This one appears a bit strange to many people. In fact, there are jokes that after an earthquake don't see all those door-frames standing. So, what's the reason behind advising people to stand below door frames? In most styles of construction, doorframes are made very strong, or, would have a "RCC beam" running right above these frames. Either way, this "strong" structure would take the impact of objects falling from above, and would break the impact of the heavy objects falling on the person.

Some simple thump rules to follow for constructing a house in an area prone to earthquake:

1. The entire construction should be a single monolithic, so that the whole structure can move as a whole.
2. To the extent possible, material used should be something that has been available locally. This would allow very little differential in the movement of your building vis-à-vis the material over which the house sits-thus reducing the chances of sinking.
3. Minimum use of glass in building facades. These decorative pieces could be deadly, during an earthquake. Glass being very brittle, even a minor twist in the structure could cause breakage. And, glass being very heavy and injurious could cause severe damage.

CHAPTER- 23
GUIDELINES REGARDING FLOOD

23.1 What is Flood?

A temporary overflow of normally dry area due to overflow of a body of water, unusual buildup, runoff of surface water, or abnormal erosion or undermining of shoreline. Flood can also be an overflow of mud flow caused by buildup of water under underground.

23.2 National Mitigation project

The NDMA has proposed to take up a national flood mitigation project in the eleventh five year plan whose aims and objectives will be evolved in due course. Broadly, it will address the following issues and training and educating people to cope up with floods at district/block levels.

(a) Securing prompt and people friendly dissemination of information to the public.
(b) Establishing a dedicated communication network that can remain functional during floods.
(c) Setting up of Flood shelters.
(d) Suitably locating flood disaster relief centers/basic infrastructure like hospitals, stores, etc. on high ground, so that they remain functional during floods.
(e) Creating and maintaining an adequately trained disaster response force.
(f) Identifying road transport/Rail/communication networks that connect flood disaster relief/supply centers to flood prone areas and including construction of new rail/road infrastructure that may be reliably used during floods.
(g) Identifying suitable high grounds where people can be shifted during floods.
(h) Strengthening the flood forecasting and warning network.

23.3 Action Plan at Various levels

These guidelines have been drawn up in the context of a rigorous risk management framework to ensure the effectiveness of action plans that are developed by various agencies. All key agencies, including the central ministries and departments, state government, local bodies including Panchayati Raj institution and Urban Local Bodies like metropolitan development authorities, municipal corporations, municipal councils and district authorities will develop detailed Flood Management Plan based on these Guidelines. State governments and local authorities will play an important role in the formulation and effective implementation of such action plans. The communities and other stakeholders will play an important part in ensuring compliance to the regulations and their

effective enforcement. The State Disaster Management authorities will be responsible for reviewing and monitoring the implementation of the action plans at the state level.

These Guidelines rest on the following objectives:

i) Shifting the focus to preparedness by implementing, in a time-bound manner, an optional combination of techno-economically viable, socially acceptable and eco-friendly structures.
ii) Ensuring regular monitoring of the effectiveness and sustainability of various structures and taking appropriate measures for their restoration and strengthening.
iii) Continuous modernization of flood forecasting early warning and decision support systems.
iv) Ensuring the incorporation flood resistant features in the design and construction of new structures in the flood prone areas.
v) Drawing up time-bound plans for the flood proofing of strategic and public utility structures in flood prone areas.
vi) Improving the awareness and preparedness of all stakeholders in the flood prone areas.
vii) Introducing appropriate capacity development interventions for effective FM (including education, training, capacity building, research and development, and documentation.)
viii) Improving the compliance regime through appropriate mechanisms.
ix) Strengthening the emergency response capabilities.

23.4 Activities for minimizing flood risk and losses

The activities to minimizing the flood risk and losses are implemented in three phases in addition to recurring activities.

Phase-1

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

Phase-II

These include implementation of the schemes for expansion and modernization of the flood forecasting and warning network, execution of flood protection and drainage improvement schemes, modification and adoption of revised reservoir operation manuals, enactment and enforcement of flood plain zoning regulations and planning and preparation of detailed project reports for storage reservoirs and

implementation of the schemes for real-time collection of hydro-metrological data on rivers in Nepal, Bhutan and China.

Phase-III

Implementation of activities, which include construction of dams and catchment area treatment (CAT) works in India as well as neighboring countries, is likely to take considerable time as they entail major environmental, social, inter-state and international implications. These need careful study and interaction with the stakeholders. It is envisaged that all feasible schemes will be completed by the year 2025.

Alerts:

Category	Description	Stage	Alerts to be transmitted to
Above Normal	Water level between Warning Level and Danger Level	**Yellow**	• Joint Secretary (DM) & Additional Secretary (DM). • Nodal Officers of NDMA & NDRF. • Concerned State/ Union Territory Governments, with instructions to further transmit the alerts to the concerned/ Districts authorities. • On instruction of Joint Secretary(DM) transmitted to Home Secretary, MHA
Severe	Water level between Danger Level to the HFL* attained at that location	**Orange**	• Home Secretary /Additional Secretary (DM / Joint Secretary (DM) / to Home minister / Personal Secretary to MoS. • Nodal Officers of NDMA & NDRF. • Concerned State/UT Governments with instructions to further transmit alerts to the concerned/District authorities. • All designated officers in Prime Minister's Office / Cabinet Secretariat
Extreme	Water level higher than the HFL at that location	**Red**	• Home Secretary / Additional Secretary (DM / Joint Secretary (DM) / to Home minister / Personal Secretary to MoS, Nodal officers of NDMA & NDRF. • All designated officers in PMO/ Cabinet Secretariat. • Emergency Support Function Ministries /Departments. • Concerned States/ Union Territories with instructions to further transmit alerts to the concerned /District authorities

CHAPTER – 24

CYCLONE DISATER MANAGEMENT

Cyclone is a system of winds rotating inwards to an area of low barometric pressure, with an anticlockwise or clockwise circulation**.** The cyclones moving more than 90 Km, 120 Km and 225 Km per hour respectively have been classified as Tropical, Severe and Super cyclones.

The most complex task of mitigation is to map the hazard, risks and vulnerabilities of cyclone at all levels, analyze and assess the levels of risks and monitor it continuously. It is only on the basis of such knowledge base that a proper and effective strategy for cyclone risk mitigation and preparedness can be developed.

The time series data on cyclones are now utilized to map and zone the areas, prone to the hazards of cyclone. Such maps are now available at a regional, district and even sub district levels in most of the countries. Such maps are also available in digital formats which enable integration of various spatial data with socio-economic, housing, infrastructure and other variables that can provide a quick assessment of the ricks and vulnerabilities of cyclone. On the basis of which appropriate mitigation and preparedness strategies can be developed.

Therefore the ideal tool for assessment of cyclone risks and vulnerabilities at the local level should be a combination of scientific and traditional knowledge each supplementing the other.

24.1 When a train is caught in a cyclone 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.

CHAPTER – 25
CRISIS MANAGEMENT PLAN OF RAILWAY BOARD

25.1 Introduction

Indian Railway has a vast network of freight and passengers per day. In any national level crisis, where major transport requirements are envisaged, Indian Railways will have to play an important role. However, Indian Railways can also get involved in a Crisis situation having national level repercussions needing assistance for other ministries/departments of Govt. of India.

25.2 National Crisis Management Committee (NCMC):

The NCMC is the apex body comprising senior officials of the Government of India to deliberate on the problems at national level. Chairman & CEO will overall in charge of all issues. However, following officers will represent the Ministry of Railways (Railway Board) in NCMC for the various crisis situations:

(i)	**All India Railway Strike**	:	Chairman & CEO Member-Traction & Rolling Stock (Alternate)
(ii)	**Terrorism/Security related Crisis**	:	Chairman & CEO Member-Operations & Business Development (Alternate)
(iii)	**Natural Factor (s) related Crisis**	:	Member (Infrastructure) Member-Operations & Business Development (Alternate)
(iv)	**Major Train Accidents**	:	Member-Operations & Business Development. Member-Traction & Rolling Stock (Alternate)
(v)	**Crisis where Railways have to help other Ministries**	:	Member-Operations & Business Development. Chairman & CEO (Alternate).

25.3 Central Management Group (CMG):

The CMG is the Executive Authority responsible for dealing with the crises and shall work under the broad guidelines and directives issued by NCMC. It shall be in constant touch with the NCMC on the one hand and the concerned Zonal Management Group on the other. In addition to the concerned officers of the Railway Ministry, nodal officers from the concerned Ministries should be contacted if help is needed from the other ministries for effectively dealing with the various crisis situation; e.g. Ministry of Defence should be contacted for air support and/or for expert help like divers, boats

etc. However, control Room of MHA should be kept informed of the developing situation for assistance as warranted.

The overall composition of the Central Management Group including the names is available in crisis management plan.

	Crisis situation	:	Convener/overall composition of central management Group.
(i)	**All India Railway Strike**	:	Additional Member (Staff)
(ii)	**Terrorism/Security related Crisis**	:	Director General (RPF)
(iii)	**Natural Factor (s) related Crisis**	:	Additional Member (CE)
(iv)	**Major Train Accidents**	:	Additional Member (Traffic Transportation)
(v)	**Crisis where Railways have to help other Ministries**	:	Additional Member (Traffic Transportation)
(vi)	**Cyber crisis**	:	Additional Member (M&BD)

25.4 Zonal Management Group (ZMG)

ZMG is the same for all types of crisis. The Zonal Management Group (ZMG) shall be established at the Zonal Railway Headquarters and would comprise of the following officers of the Zonal Railway Headquarters:

(i)	Additional General Manager	Convenor
(ii)	Principal Chief Engineer/Chief Engineer (Coordination)	Member/Alternate Convenor
(iii)	Principal Chief Security Commissioner	Member
(iv)	Principal Chief Personnel Officer	Member
(v)	Principal Chief Operations Manager	Member
(vi)	Principal Chief Mechanical Engineer	Member
(vii)	Principal Chief Electrical Engineer	Member
(viii)	Principal Chief Signal & Telecommunication Engineer	Member
(ix)	Principal Chief Safety Officer	Member
(x)	Principal Chief Commercial Manager	Member
(xi)	Principal CMD	Member
(xii)	Chief Public Relations Officer	Member

25.5 The Crisis Management Plan deals with National level crisis situations which are as under-

25.5.1 ALL INDIA RAIWAY STRIKE

1. All the zonal railways have 'Strike Scheme' based on the vulnerabilities on their system. Strike Scheme is updated and reviewed by the zonal railways from time to time. All the ZMGs will implement their respective 'Strike Scheme' at all levels and will keep CMG informed of the developments and assistance needed.

2. The board guidelines and general instructions of the strike scheme are to attain the following objectives:

   a. To provide an emergency organization to operate the Railway under such conditions as large section of the Railways employees may go on strike which may also be accompanied by sabotage, intimidation of loyal staff or even civil unrest.
   b. To keep open in the event of a strike, Railway lines along with communication lines and to run the greatest possible number of passenger and goods services of an essential nature.
   c. To safeguard and, in general, to prevent damage to Railway property, especially vital installations.
   d. To protect, as far as practicable, Railway personnel who do not wish to join the Strike and enable them to continue their work unmolested.

3. Role of other Ministries/Departments

   i) Railway is the nodal agency to deal with this crisis situation. Other ministries/departments will render help and assistance to the railways to deal with this crisis.

   ii) Strike Scheme of all the concerned zonal railways is circulated to the district Magistrates and superintendents of police of the concerned districts and the Chief Secretaries and directors General of police of the concerned states. They will ensure that the provisions contained in the Strike Scheme booklet are read and understood by them so that the same can be implemented at the time of actual happening. Local SOPs will be drawn by the police and civil administration for facilitating ground operations at the time of crisis.

   iii) Railway and civil intelligence agencies will exchange and share information indicative of any developments leading to the railway strike. Local intelligence agencies will also communicate information about the confidential activities of the Striking employees to the Railway Administration on continuous basis.

iv) Local Civil administration and the police will actively associate in the deployment plan to be prepared by the Railway protection Force to guard the critical operational installations like signaling rooms, ASMs cabins/offices, running rooms, vulnerable locations like tunnels, bridges, manning and escorting of selected strategic trains, etc.

v) On contacting by the Railway Administration in the event of the strike, local police and Civil Administration will extend assistance to maintain law & order to facilitate working of the railway. Local Police Agencies will also act as per the development plan to extend help in guarding the critical railway installations and for escorting of trains.

vi) Local civil administration will ensure and assist railway in mustering the assistance from non-railway agencies like Public Works Departments, Irrigation departments, Private agencies in having the equipment available with them to facilitate smooth operations.

vii) Services of Para-Military services available in the affected region will also be extended, if needed through Ministry of Home Affairs.

viii) Territorial Army will be deployed as demanded by the Railways through Ministry of Defense.

ix) Local fire services will be on the alert for their movement at the short notice in the event of fire/arson as reported by railways.

x) Government owned hospitals, private hospitals and other rescue resources will be on alert to take care of any medical related contingency that may occur during this period.

xi) All the other agencies of the local administration will be on alert to render help on short notice to ensure that railways run as smoothly as possible with all the resources pooled together.

25.5.2 TERRORISM/SECURITY RELATED CRISIS

1. Crisis like explosions on the Railways, large scale sabotage involving blowing up of bridges and tracks require assistance of a more elaborate nature from outside Ministries or other agencies which may have to be tackled at the national level. Under such situations, Railways need to take the help of other Government and Non-Government Agencies for their expertise. Contact details of all such agencies should be included in the Disaster management plans of Zonal railways and divisions, which should be updated once every year in January. In addition to the hard copies, Railways should also have the web-based electronic

versions of Disaster management plans on their Rail net server for expeditious search of the key information at the time of Crises.

2. Under these situations, the instructions contained in the Railway Accident Manual/Disaster Management Plan would be applicable with suitable modifications as required by local circumstances. In these situations the GRP and Civil Police would play a more important role as they would be investing the criminal case relating to sabotage/explosion, which would need a lot of assistance from the railway authorities. While Co-ordination among different railway agencies would be done by the senior-most railway officer present at the site, he should specially nominate a senior RPF officer to coordinate with the police agencies.

3. In cases of large scale incidents of sabotage of explosion on railways, requiring assistance from Ministry of Home Affairs, Cabinet Secretariat and the State Governments, Director General, Railway protection Force, will coordinate on behalf of the railways as convener of CMG for this crisis.

4. Role of other Ministries/Departments

i) Ministry of Home Affairs is the nodal agency to deal with this crisis situation. Railways at operational level will render help and assistance and will facilitate to deal with this crisis on the railway system.

ii) Intelligence agencies will keep informing the railway administration and the local police about the likely terrorist attacks/sabotage on the railway system. Local police will co-ordinate and liaison with railway authorities in warning of any imminent danger.

iii) Local police responsible for the maintenance of law and order in that region will have SOPs in place in co-ordination with all the other agencies like Railway Protection Force, Government Railway Police, and locally deployed staff of the railway to guard vulnerable railway installations like major railway stations, trains, vulnerable locations, etc. It will act accordingly to this SOP on receipt of intimation of any terrorist/security related crisis. It will take command of the situation and order the railway authorities at the site of the incident to facilitate their operation. It will cordon of the affected area to facilitate the rescue, relief and restoration work.

iv) Civil administration will alert government and private hospitals and rescue resources to reach the site to take care of the victims. Trauma centers, if any, in the region should be alerted to receive the victims for their expeditious treatment. Local civil administration will organize surveillance of the terrorism prone area after the event to preclude another happening.

v) MHA will activate National Security Guard and help from other security related agencies to reach the site of crisis and take over from the local personnel for larger operation.
vi) MHA will also requisitioned national disaster response force, if so considered essential for the crisis and will direct the force to reach the place of crisis.
vii) Ministry of Health and Family Welfare will procure a container based Mobile hospital. Once it is in position, it can be deployed for major disasters, if the situation so warrants.
viii) Ministry of Defense will mobilize defense personnel to take over the crisis situation as per the need.

25.5.3 NATURAL FACTORS RELATED CRISIS

i. On receipt of warning about any imminent cyclone, flood etc. that can affect the railway system, the concerned railway administration will take immediate steps to warn the field units well in advance to mitigate the effect of such an event. For this purpose every zonal railways will have provisions in their respective disaster management plan which should be immediately invoked to action.
ii. ZMG in the zonal Headquarter will assemble in the disaster management control room and will take appropriate measures to mobilize resources from all the agencies to manage the situation. It will assist, help & guide divisional railway managements in their endeavors and will organize to supplement their efforts under such crisis situation.
iii. ZMG will also approach other ministries through NDM control room and also through the CMG in the Railway Board for any help needed at their level.

1. Role of other Ministries/Departments

a. Meteorology department will communicate the natural factors like cyclone, heavy rains, and earthquake related information to the local railway administration to have them warned of any imminent crisis situation.
b. SOP for transmission of the warning to the field units will be immediately activated to take appropriate preventive measures.
c. On serious disruption of traffic on the railways, local agencies like public works department, irrigation department, local defense and Para-military units will assist railways as per the request from the railway administration.
d. Local civil authorities and police will assist railways in ensuring security of passengers in the stranded trains and at the stations. They will also assist in reaching water and food to the stranded passengers with help of defense/Para military personnel, if so needed.

e. Local civil administration will assist railways in harnessing resources from non-government agencies also e.g. divers, earthmoving equipment, etc.
f. Resources with all the agencies will be polled and leveraged to help evacuation, if so needed.
g. Department of Space will provide flood inundation map/information to the concerned Railway Administration to facilitate their being warned of any imminent crisis situation.

25.5.4 MAJOR TRAIN ACCIDENT

1. On received of information of a Train Accident involving/suspecting injures or death of passengers, Accident Relief Medical Equipment Vans (ARMVs) and Accident Relief Trains (ARTs) which are stationed at strategic locations, are immediately turned out for the site of accident with Doctors, Paramedical Staff, rescue workers and Engineers.
2. All Railway men, since their recruitment, are made aware of sacredness and vital importance for dispatch and movement of ARMVs and ARTs within prescribed time.
3. The Medical Team attends to the injured passengers and seriously wounded are transported to nearby hospitals.
4. The cost of such treatment is borne by the Railways. Dead bodies are handed over to Police for further action such as autopsy etc. for medico- legal purposes.
5. ZMG will also approach other ministries through NDM control room and also through the CMG in the Railway Board for any help needed at their level.

ROLE OF OTHER MINISTRIES / DEPARTMENTS

With the enactment of the Disaster Management Act- 2005 which envisages participation by all stake holders based on their expertise, the golden hour i.e. first hour after the accident is to be generally managed by the few on board railway staff, railway staff working at the nearby areas, unaffected train passengers, local police and fire brigade, local hospitals and doctors, other relief rescue workers in the nearby areas. Keeping the above in view, zonal railways are coordinating with the non-railway, govt./non-govt. resources available with various agencies so that the same can be requisitioned immediately to help the affected persons. This information has been made part of the Disaster Management plans of the Zonal Railways.

25.6 CRISIS WHERE RAILWAYS HAVE TO HELP OTHER MINISTRIES

Ministry of Railways will provide emergency support and assistance to other ministries mostly in regard to rail transportation. For this purpose Ministry of Railways has issued an Emergency support Function plan(ESF) vide 2003/Safety(DM)/6/3 dated 25.10.04 nominating Quick

response Teams (QRTs) at the Ministry level and Zonal railway level as well. QRT at the level of Ministry of railways is CMG for dealing with the crises situation to help other Ministries.

The CMG will obtain directions from NCMC and organize the necessary relief operations through field level QRTs.
The concerned Ministry will make their own Contingency plan bringing out the assistance required from the Railways, which will be mobilized.

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 fact, 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) Persons noticing a bomb like object, should bring it to the notice of the nearest available officer.
(vii) Inform GRP, RPF and 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.

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.

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 Biological or Chemical

(i) Isolate-don't handle.
(ii) Call police/Fire service/Bomb squad.
(iii) Wash your hands with soap and water.

(c) For Radiological

i) Limit exposure-don't handle.
ii) Evacuate area.
iii) Shield yourself from the object.
iv) Call police/Fire service/Bomb squad.
v) Shield yourself from the object.

CHAPTER – 26

SITE MANAGEMENT PLAN

There are three aspects of Disaster management work at the accident site.

- Rescue, relief and restoration operation, which is carried out by one set of functionaries.
- Rehabilitation of accident involved passengers,taking care of dead bodies ,dealing with their relatives etc.for which a different set of functionaries are required.
- Transportation of stranded passengers

For managing these three distinct aspect of DM work that are required to be discharge by railways, three separate establishments should be set up at an accident site.

26.1 Disaster Management Team

a. Trained Railway-men from Medical, Commercial, Safety, Civil, Electrical, S&T, Mechanical, Engineering, Security, Personnel and other departments.
b. In case of fire accidents, trained fire service personnel shall be the part of the team.
c. In case of an accident on water body, divers and Naval cadets will also be part of the team.
d. In case of sabotage or bomb explosion, bomb disposal squad and GRP/Local police will also be involved.
e. Various rescue units shall accompany ARMVs, ARTs or move by road as quickly as possible.

26.2 Officer-in charge at 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 Head/quarters officers, GM shall be OC at Site. In the absence of GM, the senior most officer shall be OC at Site. He will be responsible for forming Core Groups as required and direct them to carryout efficient rescue, relief and restoration operations.

26.3 Rescue, Relief and Restoration Operation

DM Team on arrival by ARMVs and ARTs shall undertake following actions:

a. Crowd control and Law and Order
b. Rescue operation

c. Relief operation
d. Video coverage of accident site
e. Installation of Communication Network
f. Clearance from State Police for restoration
g. Preservation of clues and evidence
h. Medical Management at site
i. Salvage operation
j. Restoration operation

26.4 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.

a. Such photographs should clearly indicate:
   i) Severity of the accident.
   ii) Illustrate the damage to P-Way, Rolling Stock, Signal, OHE and other structures and equipment.
b. Separate set of photographs to be taken to preserve clues and evidence of sabotage. If suspected.
c. Victims and unidentified bodies should also be extensively photographed.

26.5 For efficient Disaster Management, responsibilities of various departments are to be executed by deputing responsible officers and supervisors. Important duties of OC at site are enlisted as follows:-

a. Ensuring setting up of Unified Command Center (UCC), Central Assistance Center (CAC) and Local Command Center (LCC) at the earliest.
b. Collect information from OC Site of IAT.
c. Take stock of the situation and plan for efficient rescue operation.
d. Estimate quantum of assistance required for each department from:
e. Within the division,
f. Adjoining divisions of SECR,
g. Adjoining Zones,
h. Non-railway agencies
i. Channelize local resources to supplement available railway resources
j. Ensure that duties of various functionaries of different departments.
k. Ensure co-ordination among all departments for efficient rescue, relief and restoration operation.
l. Ensure information to SP and district Magistrate.

m. In case of sabotage, direct RPF to obtain quick clearance from State Police.
n. In case of serious explosion or fire, clearance from Controller of Explosives is to be obtained.
o. Give prima facie cause of the accident along with forecast of expected date and time of restoration.
p. Ensuring timely information on the progress of rescue, relief and restoration work every 3 hours with following details:
   - Number of coaches searched.
   - Nature of injuries to passengers.
   - Number of bodies recovered.
   - Number of bodies identified.
   - Number of coaches dealt with.
   - Supplementary assistance required, if any.
q. Forecast for completion of each activity mentioned below should also be firmed up. These target dates and times should be communicated to all officers at accident site:
   - Re-railment.
   - Track fitness.
   - OHE fitness.
   - Points and inter –locking.
   - Clearance of section.
   - Movement of 1st train.

26.6 Duties of Divisional Railway Manager

a. Ensure that functionaries of different branches at the site of accident carry out duties assigned to them as per accident manual.
b. Co-ordinate with Divisional Emergency Cell regarding assistance required.
c. 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.

26.7 Duties of Divisional Control/Officers

a. Control will co-ordinate and arrange supplementary assistance to the accident site.
b. It shall function in a separate cubicle at Divisional Control Office provided with centralized communication networks, hot line to the site and headquarters.

c. 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 restoration operations from divisional level.
d. In case Sr.DOM is not available, DOM/AOM (movement) will be the Divisional Emergency Officer.
e. In case both officers are not available, any other officer nominated by DRM will take over charge.
f. 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.
g. 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.
h. 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 Headquarters. Emergency Cell.
    - Names and phones number of hospitals where injured have been admitted/shifted, along with number of patients.
i. Divisional Emergency Cell will collect updated information regarding all aspect of the accident and pass on the same either telephonically or by E-Mail to :
    - All Helpline Enquiry Booths within the division.
    - Headquarters Emergency Cell.
j. Divisional Emergency Officer on duty shall chronologically record all information and instructions received or given in a logbook.
k. In addition to the division where accident has taken place similar emergency cells will be opened in other divisional control offices over SECR that are involved in restoration and relief operations. Chief Emergency Officer will decide divisions where Emergency cells are to be opened.
l. Helpline enquiry booths outside the accident affected division, but within NER jurisdiction should keep in touch with Divisional Emergency Cell of their respective division.
m. If necessary, similar Emergency cells will be opened at other major terminals as decided by Chief Emergency Officer.

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

26.8 Assistance to be rendered to the relatives of passenger

Assistance to be rendered to the relatives for completing the following formalities:-

a. Locating the name of the passenger on the reservation chart , in case of passengers travelling in reserved coaches.
b. Going through the list of injured and dead passengers to find out whether the name appears.
c. In case the name is not available, then taking a round of different hospitals to find out whether their relatives have been admitted in one of them in an unconscious state.
d. In case the passengers can be located in one of the hospitals, find out the severity of injuries, likely period of hospitalization etc.
e. Collect the ex-gratia to be paid by railway.
f. Try and locate missing luggage of the injured passenger. For this they have take a round of the building where all unclaimed luggage have been kept.
g. Arrange for a place for themselves to stay.
h. Arrange for medicines/diet etc and payment of hospitals bills if required.

26.9 Assistance to be rendered to the relatives of dead passengers

Following assistance are to be given:

a. In case the passenger could not be located in any of the hospitals, then they have to go the building where unidentified dead bodies have been kept.
b. Take a round of various rooms where bodies have been kept, examine each body and inform their near and dear one.
c. Identify the dead body.
d. Obtain medical death certificate from railway doctors. Obtain Post Mortem report from the govt. doctor who performed post mortem of the body.
e. Obtain death certificate from the municipality.
f. Grant of ex- gratia payment from Railways.
g. Collect forms for logging claims for compensation from Railway Claim Tribunal.
h. Make arrangement for their return journey back to their native place

26.10 Refund and claims compensation

Refund of fares must be granted in the CAC for journey as per the rules and to be done on priority.

a. Injured passengers and next of kin of deceased passengers must be supplied blank claim compensation forms along with Claims Booklet explaining procedure.

b. Photocopy of a filled up form may also be given along with the blank form so as to help them in filling up it.

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संरक्षा विभाग

SAFETY DEPARTMENT

द.पू.म.रे./बिलासपुर

SECR/Bilaspur