

EAST COAST RAILWAY



ZONAL

DISASTER MANAGEMENT PLAN

2020

EAST COAST RAILWAY

Bhubaneswar

Issued by

Principal Chief Safety Officer, ECoR

Bhubaneswar

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Date: 06.05.2020

Message

I am pleased with the review of ECoR's Disaster Management Plan to the information level of 2020.

Disasters are unforeseen but the old adage is : "Be prepared for the worst to do the best". This motto must always be the guiding light for each individual having a role in disaster prevention and mitigation.

I am glad that this 2020 update includes cyclones, landslides and medical disasters as ECoR has won accolades in management of these disasters in recent times.

I am confident that information regarding availability of medical facilities, beats of ARME/SPARMV, ARTs, breakdown cranes, tower wagons etc. have been updated.

With its contents, Disaster Management Plan, 2020 of ECoR will be a useful ready reckoner for each member of Team ECoR.

I appreciate and am grateful for the efforts that have been invested in this revision by the Safety Team of ECoR.

Sadaiv Tatpar !

06/05/2020
(Vidya Bhushan)
General Manager

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Message

Date: 7th May, 2020

It gives me immense pleasure to know that Safety department is going to publish the updated Zonal Disaster Plan-2020. This ZDMP-2020 incorporate the management of various disasters covering the detail aspects of role & responsibilities of each department. The guidelines brought out in this plan will help in distributing works precisely to each Department of the Organisation and also help in planning and co-ordinating the action to meet the challenges effectively in an organized and effective manner. This DM Plan will be handy to guide various Department Officials to be in preparedness along with the help of relevant connected agencies to meet the challenges faced during any emergencies.

I sincerely acknowledge and convey my appreciation for the outstanding efforts by Safety Officers & Supervisors of Safety Organization in publishing the updated DM Plan-2020.

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Foreword

Disaster Management Plan-2020 makes it incumbent upon ECoR to have an elaborate and written plan for facing the disasters/natural calamities. It has also been advised to update the same every year keeping in view the latest directives and ground realities.

In view of above, it is a matter of satisfaction that the Zonal Disaster Management Plan is going to be uploaded / published for its 2020 version.

The present version not only updates the existing chapters but also have fresh instructions on cyclone management, land/hill slide management and management of the unprecedented situation arising out of COVID-19.

A latest chart showing the updated locations of ART/ARME/SPARMV & cranes have been included for ready reference. Likewise system map of the Zone and divisions along with medical assistance will work as ready reckoner in time of need.

I am hopeful that this latest edition of Disaster Management Plan 2020 will be of use for all the officers and the staff of the East Coast Railway.

I express my sincere appreciation of the efforts made by the Officers of the Safety Department both at the HQ and divisional level for updation and printing/uploading of the Zonal Disaster Management Plan-2020.

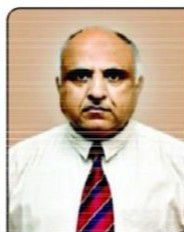
I also express my deep sense of gratitude to the General Manager and Addl. General Manager for their continuous guidance and encouragement.

S. S. Mishra 6.5.2020

(S.S. Mishra)

Principal Chief Safety Officer

शैलेन्द्र कपिल
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संदेश

दिनांक 10.06.2020 को मैंने प्रधान मुख्य संरक्षा अधिकारी का कार्यभार ग्रहण किया है। मुझे अत्यंत प्रसन्नता हो रही है कि संरक्षा विभाग क्षेत्रीय आपदा प्रबंधन योजना-2020 प्रकाशित करने जा रहा है। उच्च स्तरीय समिति की सिफारिशों के अनुसार यह एक अनिवार्य प्रवाधान है कि आपदा प्रबंधन योजना को प्रतिवर्ष आधिकारिक वेबसाइट पर अद्यतित और अपलोड किया जाए।

इस वर्ष जनवरी में स्थानीय आश्रय एवं आपदा से संबंधित कार्मिकों के स्टेक होल्डरों के नाम और टेलीफोन नंबर जैसे कि उनकी शक्ति एवं क्षमताओं को अद्यतित किया गया है। एनडीएमए के हाल ही के दिशानिर्देशों के अनुसार, चक्रवात प्रबंधन, सू/पर्वत स्खलन प्रबंधन जैसे अध्यायों को पुस्तक में पुनः संशोधित किया गया है। इसके अतिरिक्त वर्तमान वैश्विक महामारी कोरोना (कोविड-19) के प्रकोपों के मानदंडों और सावधानियों को भी जैविक आपदा के गहन अध्याय में शामिल किया गया है। चिकित्सा तैयारी और आस्पताल आपदा पर एक नया अध्याय भी शामिल किया गया है।

एआरटी, एआरएमई और क्रेन के संशोधित स्थानों सहित क्षेत्र के गोल्डेन ऑवर के चार्ट को तैयार कर संदर्भ के लिए शामिल किया गया है। विविध विभागीय सूचनाओं एवं विभिन्न विभागीय संपत्तियों जैसे बाढ़ प्रवणता, बोल्टर फालिंग लोकेशनों, सुरंगों, क्षेत्राधिकार और टॉवर वैगनों की स्टेशनिंग तथा भंडार मर्दों के टोल फ्री नंबरों के साथ-साथ कई महत्वपूर्ण टेलीफोन नंबरों के बारे में महत्वपूर्ण जानकारी इस संस्करण में उपलब्ध है।

सभी स्तरों पर तात्कालिक दिशानिर्देशों/संदर्भ के लिए पुस्तक के अंतिम भाग पर डॉक्टरों और स्वास्थ्य कर्मचारियों/अस्पतालों की टेलीफोन संपर्क संख्या एवं चिकित्सा सहायक के आरेख के साथ क्षेत्रीय और मंडलों का एक सिस्टम मैप भी उपलब्ध है।

मैं आशा करता हूँ कि अद्यतित संस्करण आपदा के समय प्रभावी ढंग से कार्य करने एवं स्तरीय सेवाएं प्रदान करने में पूर्व तट रेलवे के सभी फ्रंट लाइन अधिकारियों, पर्यवेक्षकों एवं फिल्ड कर्मचारियों के लिए बहुत उपयोगी होगा।

मैं प्रधान मुख्यालय एवं मंडल मुख्यालयों देगें के संरक्षा विभागों के अधिकारियों एवं पर्यवेक्षकों द्वारा समय से जेडडीएमपी-2020 को प्रकाशित एवं अद्यतन करने हेतु किए गए प्रयासों की प्रशंसा करता हूँ।

मैं आदरणीय महाप्रबंधक एवं अपर महाप्रबंधक महोदय द्वारा दिए गए निर्देशों एवं प्रोत्साहन के प्रति अपना आभार प्रकट करता हूँ। मैं सभी प्रधान विभागाध्यक्षों/मुख्य विभागाध्यक्षों को उनके मूल्यवान परामशों के लिए धन्यवाद ज्ञापित करता हूँ।

शैलेन्द्र कपिल

शैलेन्द्र कपिल
प्रधान मुख्य संरक्षा अधिकारी

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ZONAL DISASTER MANAGEMENT PLAN – 2020			EAST COAST RAILWAY
	FEW ABBREVIATIONS USED		
ART	Accident Relief Train	AEN	Assistant Engineer
ARME	Accident Relief Medical Equipment	Asst.	Assistant
ARMV	Accident Relief Medical Van	AEE	Assistant Electrical Engineer
AC	Air Conditioned	ADG	Assistant Director General
ADME	Assistant Divisional Mechanical Engineer	ARK	Araku - Station's code
ASM	Assistant Station Master	ADMO	Assistant Divisional Medical Officer.
ADRM	Assistant Divisional Railway Manager	Amp	Amperes
ASTE	Asst. Signal & Telecommunication Engineer	AIR	All India Radio
AOM	Assistant Operating Manager	A G M	Assistant General Manager
AMM	Assistant Material Manager	ALP	Assistant Loco Pilot
APDRF	Andhra Pradesh Disaster Response Force		
APO	Assistant Personnel Officer.	B D	Break Down
1AC	First class Air Conditioned coach.	BIS	Bureau of Indian Standards.
INGO	Indian Government Organization	Bd.	Board.
2AC	2nd Class Air Conditioned coach	BAM	Brahmapur- Station's code
3AC	3rd Class AC coach.	BSP	Bilaspur - Station's code
ACM	Assistant Commercial Manager	BNDM	Bandamunda - Station's code
AP	Andhra Pradesh	BSNL	Bharat Sanchar Nigam Limited
BPCL	Bharat Petroleum Company Limited	CHC	Chief Controller.
BHC	Bhadrakh - station's code	CPR	Cardio Pulmonary Resuscitation
BRN	08 wheeler open flat wagon	CCM	Chief Commercial Manager
BLGR	Bolangir- Station's code	DME	Divisional Mechanical Engineer
BIA	Bhilai - Station's code	Sr.DSO	Divisional Safety Officer
PCE	Principal Chief Engineer	DEN	Divisional Engineer
CBE	Chief Bridge Engineer	DOM	Divisional Operating Manager
CISF	Central Industrial Security Force	DMU	Diesel Multiple Unit
CTE	Chief Track Engineer	DRM	Divisional Railway Manager
PCOM	Principal Chief Operation Manager	DMO	Divisional Medical Officer
PCMM	Principal Chief Material Manager	DM	Disaster Management/ District Magistrate.

CG	Chhattisgarh state	DMA	Disaster Management Authority.
CBRI	Central Building Research Institute.	DMT	Disaster Management Team.
CRRI	Central Road Research Institute.	DOT	Department of Telecommunications.
CRSE	Chief Rolling Stock engineer.	DC	District Commissioner
PCSO	Principal Chief Safety Officer	DR	Disaster Response
PCME	Principal Chief Mechanical Engineer	DPC	Diesel Power Controller
PCEE	Principal Chief Electrical Engineer	DG	Diesel Generator
PCSTE	Principal Chief Signal & Telecommunication Engineer	DGP	Dry Chemical Powder
CMPE	Chief Motive Power Engineer	DSTE	Divisional Signal & Telecommunication Engineer
CAO(Co n)	Chief Administrative Officer(Construction)		
CTC	Cuttack - station's code	EC	Emergency Control.
PCSC	Principal Chief Security Commissioner	EMU	Electric Multiple Unit
CSE	Chief Signal Engineer	EFR	Eastern Front Rifle
PCPO	Principal Chief Personnel Officer	ESM	Electronic Signal Maintainer
CNL	Control.	EMR	Emergency Medical Response
CPTM	Chief Passenger Transportation Manager	FA	First Aid
CFTM	Chief Freight Transportation Manager	FC	Finance Commissioner
CAC	Combined Assistance Center	FA&CAO	Financial Advisor & Chief Accounts Officer.
CPRO	Chief Public Relation Officer	FR	First Response
CWC	Cyclone Warning Center	FOB	Foot Over Bridge.
CRB	Chairman Railway Board	FOIS	Freight Operation Information System
CMS	Chief Medical Superintendent	FIR	First Information Report
Co.	Co-ordination.	FT	Field Telephone
PCMD	Principal Chief Medical Director	G	General.
C&W	Carriage and Wagon	GM	General Manager.
CDMO	Chief District Medical Officer	GI	Galvanized Iron
CRS	Commissioner of Railway Safety	GIS	Geographical Information System
CKP	Chakradharpur station's code	GSI	Geological Survey of India.
		GRP	Government Railway Police
HFL	Highest Flood Level	NDRF	National Disaster Response Force.
HLC	High Level Committee on Disaster Management	OP	Operation.

HRD	Hydraulic Rescue Device	OHE	Over Head Equipment
HRE	Hydraulic Re-railing Equipment	OIC	Officer In-Charge.
HSD	High Speed Diesel	OSDMA	Orissa State Disaster Mitigation authority.
HOR	High Official Requisition	ODRAF	Orissa Disaster Rapid Action Force.
HOD	Head Of the Department	PSA	Palasa station's code
HS	Home Secretary/Hand Signal	PRO	Public Relation Officer.
HM	Home Minister	PA	Public Address.
HS	Home Signal	PAS	Public Address System
IA	Indian Airlines.	P-Way	Permanent Way
IAF	Indian Air Force.	PCO	Public Call Office.
IAT	Instant Action Team	POL	Petroleum and Oil
ICF	Integral Coach Factory	PR	Public Relation.
IG	Inspector General	QRT	Quick Response Team.
IIT	Indian Institute of Technology.	RMC	Regional Meteorological Centre.
IMD	Indian Meteorological Department.	RCT	Railway Claims Tribunal.
IOC	Indian Oil Corporation	RGDA	Rayagada.
IRCTC	Indian Rly. Catering & Tourism Corporation.	RMS	Railway Mail Service.
IRITM	Indian Railway Institute of Transport Management	RPF	Railway Protection Force
ISD	International Subscriber Dialling.	RCF	Rail Coach Factory.
ITWC	Indian Tsunami Warning System	RVS	Rapid Vision Screen.
J A G	Junior Administrative Grade	RRI	Route Relay interlocking
Jr.	Junior.	SP	Superintendent of Police
JSG	Jharsuguda station's code	SPARME -Self Propelled Auxiliary Medical Equipment.	
KUR	Khurda Road station code	Sr.	Senior.
KGP	Kharagpur station code	SDG M	Senior Deputy General Manager.
KRPU	Koraput station's code	S&T	Signal & Telecommunication
KRDL	Kirandul station's code	SBP	Sambalpur station code
LI	Loco Inspector.	SS	Station Superintendent.
POMKA	Portable Medical Kit for Accident.	SE	Section Engineer
MLC	Manned Level Crossing.	SSE	Senior Section Engineer.
LP	Loco Pilot	SIS	Senior Inspector of Signal
MSMD	Mohasamund station's code	CLI	Chief Loco Inspector.

MoR	Ministry of Railways	SSO	Senior Safety Officer.
MOSR	Ministry of State for Railways	SR	Subsidiary Rule
MoU	Memorandum of Understanding.	SJAB	St. John Ambulance.
MM	Material Manager.	STD	Subscriber Trunk Dial
NGO	Non-Government Organization	SERC	Structural Engineering Research Centre.
TI	Traffic Inspector.	TCI	Telecommunication Inspector.
TS	Train Superintendent	TCM	Telecommunication Mechanic.
TTE	Train Ticket Examiner.	UCC	Unified Command Center.
TRD	Traction Distribution	VSKP	Vishakhapatnam station's code
TIG	Titlagarh station's code	VZM	Vizianagaram station's code
TPC	Traction Power Controller	WAT	Waltair Division's code
TLC	Traction Loco Controller.	W	Watt
T	Tonne.	V	Volt
TLHR	Talcher station's code	VHF	Very High Frequency.
TXR	Train Examiner.		

INTRODUCTION

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

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

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

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

Despite the earnest efforts taken to manage every disaster efficiently, in some train accidents involving heavy casualty, the relief and rescue operations could not be resolved satisfactorily. Accidents involving heavy casualties and in difficult terrain like ghat sections with a number of bridges, tunnels, cuttings and also bad weather conditions , make the rescue and relief work more difficult and

necessitates the assistance of specialized outside agencies in addition to Railways' own resources.

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

Till now instant response, relief and rescue are primary objectives of Disaster Management Plan.

With the enactment of Disaster Management Act 2005, it has been widened to the following areas:

1. Prevention, Preparedness & Capacity Building
2. Preparation of Data Bank
3. Streamlining the Logistics of Railways
4. Seeking assistance from State Governments and involvement of Local Civilian Authorities
5. Effective Trauma Care
6. Proper Trigger Mechanism to ensure adequate medical care within "Golden Hour"
7. Divisional/Zonal Disaster Management Plan
8. Making use of Non-Railway Resources
9. Maintenance of ART to have failure proof service
10. Defining responsibilities of various staff/departments

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

With the view to build up appropriate capability to manage Disaster at Divisional/Zonal levels, clear instructions, defining the role of various departments are required. This Disaster Management Plan issued by E. Co. Railway covers such instructions to organize an efficient Rescue and Relief operation and lays down the basic framework for immediate action by every Railway Servant. It has been dovetailed with information which has so far been made available from respective State Governments/Armed Forces, etc. as also from Divisional Disaster Management Plans of KUR, WAT & SBP, divisions. Details of Hospitals, NGOs and Organizations having infrastructure facilities and resources available with civil authorities to be useful in Disaster Management are made available in this document.

Disaster Management Plan – 2020 of E.Co. Rly focuses on tackling the following Zonal situations:

Train Accidents Fire Accidents Cyclone/Storm Earth-
quakes

Floods

and

Breaches

Land

slides

Bomb blasts/explosions and other Terrorist Activities

Hazardous Gas (Emergencies/Calamities), which assumes the magnificence of a disaster as prescribed in the definition of disaster in Railway parlance.

Tsunami

CHAPTER-1**LEGAL PROVISION****1.1 Railway Board's Order:-**

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS (RAILWAY BOARD)

No. ERB-I/2002/24/44

New Delhi, dated 17-09-2002

ORDER

The Ministry of Railways have decided to constitute a high level committee to review the disaster management system over Indian Railways and give recommendations for strengthening and streamlining the same. This committee will consist of the following:

- | | | | |
|------|---|---|----------|
| i) | Member Mechanical, Railway Board | - | Convener |
| ii) | Member Traffic, Railway Board | - | Member |
| iii) | Director General/Railway Health Services | - | Member |
| iv) | Director General / Railway Protection Force | - | Member |
| v) | Additional Member (Budget), Railway Board | - | Member |

2. Executive Director / Safety, Railway Board, will be the Secretary of the Committee.

3. The terms of reference of the Committee are :

- (i) To review the existing Disaster Management System over IR related to train accidents and natural calamities and to suggest improvements.
- (ii) To identify the technological and managerial inputs in order to quicken the pace of relief and rescue operations.
- (iii) To institute a standing arrangement with other Central Ministries, State Governments and Armed Forces to enable quick and smooth restoration operations without any legal or procedural hurdles.

The Committee is expected to give its recommendations in two months. Necessary secretarial assistance (one computer literate P.S. and one L.D.C.) would be provided to Executive Director (Safety) during the tenure of the Committee.

(R.R. JARUHAR)

Secretary / Railway Board

5) MEMBERS OF THE HIGH-LEVEL COMMITTEE ON DISASTER MANAGEMENT

- 1) S. Dhasarathy, Member Mechanical & Convener
- 2) M.C. Srivastava, Member Traffic.
- 3) Vijayalakshmi Viswanathan, Financial Commissioner.
- 4) Dr. K. Suresh, Director General/Railway Health Services.
- 5) Dr. A. K. Pandey, Director General/Railway Protection Force.

Site Manager shall be the chief spokesman at site and can be assisted by branch officers concerned, if needed.

-PR/Coml. Department to look after the needs of the media at site.

Checklists for officers and supervisors must be issued in the form of pocket booklet indicating Do's and Don'ts for the benefit of :

First official reaching the site of accident. Senior-most officer at the site.

Divisional/HQ Control ,Organization, Station Manager.

Other Front Line Staff.

The Disaster Management Plan inter-alia includes 'who is responsible for what activities' in detail.

It must be reviewed and updated on the 1st of January, every year.

B) DISASTER MANAGEMENT ACT AND RELATED ASPECT:

1.3 Disaster Management Act:

The Disaster Management Act, 2005 (hereinafter referred to as the Act), enacted by the Parliament was notified in the Gazette of

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

The responsibility of laying down the policies on disaster management, approving the National Policy on Disaster Management (NPDM) and laying down the guidelines on Disaster Management has been given to NDMA under the Act. The NDMA accordingly prepared a draft of the National Policy on Disaster Management in consultation with the Home Ministry and submitted the same for approval of the Government.

The Home Ministry has circulated the draft NPDM to the concerned Central Ministries and all the State Governments/Union Territories. The comments received by the Central Ministries/State Governments/Union Territories were duly examined and the accepted views/comments of Central Ministries/State Governments/Union Territories have been duly incorporated in the NPDM.

Approval of the Cabinet to the NPDM was given in the Cabinet Meeting held on 22.10.2009.

The NPDM envisages a holistic approach to disaster management, encompassing the entire disaster management cycle including prevention, mitigation, preparedness, relief, rescue, rehabilitation and reconstruction. It addresses all aspects of disaster management covering institutional, legal and financial arrangements, capacity building, knowledge management, research and development. It focuses on the areas where action is needed and the institutional mechanism through which such action can be channelized.

A.01 The Disaster Management Act, 2005

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

A.02 Disaster has been defined in this Act as under:

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

Note:- Railway Board has vested the powers to declare a railway accident as disaster with GM/ AGM and in the absence with PCSO.

A.03 Disaster Management has been explained in this Act as under:

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

- prevention of danger or threat of any disaster;
- mitigation or reduction of risk of any disaster or its severity or consequences;
- capacity-building;
- preparedness to deal with any disaster;
- prompt response to any threatening disaster situation or disaster;
- assessing the severity or magnitude of effects of any disaster;
- evacuation, rescue and relief and
- rehabilitation and reconstruction.

1.04 Important Provisions in the DM Act:

Sections 35, 36 & 37 of the DM Act, 2005 detail the responsibilities of Ministries and Departments of Central Govt. as per

which a number of measures/actions are to be taken either on their own or in consultation with NDMA. Drawing up mitigation, preparedness and response plans, capacity building, data collection and identification & training of personnel in relation to Disaster Management is one of the key responsibilities. These provisions are summarized as under:-

1.05. DEFINITION OF DISASTER :-

Railway Board Vide letter No 2003/Safety(DM)/6/2 Pt. dated 06-01-09, defined Railway Disaster in the following way,

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

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 or incidental thereto. The following provisions are available in this Act:-

1. 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.
2. 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.
4. 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.
5. 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 if major Disaster then that DMA activity will not collapse.

6. Similar action will be taken by the State Govt. and local Authorities at State and District levels respectively.
7. A National Institute of Disaster Management shall be formed for planning, training and research in the area of Disaster Management.
8. A National Disaster Response Force will be constituted for specialist response to disasters.
9. 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.

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 or suo-motto 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 dtd. 27.07.10, informed that, "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".

Important provision of DM Act.

section 35

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

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

- b) Ensure the integration of measures for prevention of disasters and mitigation by Ministries or Departments of the Government of India into their development plans and projects;
- c) Ensure appropriate allocation of funds for prevention of disaster, mitigation, capacity-building and preparedness by the Ministries or Departments of the Government of India;
- d) Ensure that the Ministries or Departments of the government of India take necessary measures for preparedness to promptly and effectively respond to any threatening disaster situation or disaster;
- e) Cooperation and assistance to the State Governments, as requested by them and
- f) Deployment of naval, military and air forces, other armed forces of the Union or any other civilian personnel as may be required for the purposes of this Act.

Section 36

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

- a) Take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the National Authority;
- b) Integrate into its development plans and projects, the measures for prevention or mitigation of disasters in accordance with the guidelines laid down by the National Authority;
- c) Respond effectively and promptly to any threatening disaster situation or disaster in accordance with the guidelines of the National Authority or the directions of the National Executive Committee in this behalf;
- d) Review the enactments administered by it, its policies, rules and regulations, with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;
- e) Allocate funds for measures for prevention of disaster, mitigation, capacity-building and preparedness;
- f) Provide assistance to the National Authority and State Government for

- (i) Drawing up mitigation, preparedness and response plans, capacity building, data collection and identification and training of personnel in relation to 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;
- g) Make available its resources to the National Executive Committee or a State Executive Committee for the purpose of responding promptly and effectively to any threatening disaster situation or disaster, including measures for-
 - (i) Providing emergency communication in a vulnerable or affected area;
 - (ii) Transporting personnel and relief goods to and from the affected area;
 - (iii) Providing evacuation, rescue, temporary shelter or other immediate relief;
 - (iv) Setting up temporary bridges, jetties and landing places;
 - (v) Providing, drinking water, essential provisions, healthcare, and services in an affected area;
 - (vi) Take such other actions as it may consider necessary for disaster management.

Section 37

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

- a) Prepare a disaster management plan specifying the following particulars, namely;
 - (i) The measures to be taken by it for prevention and mitigation of disasters in accordance with the National Plan;
 - (ii) The specifications regarding integration of mitigation measures in its development plans in accordance with the guidelines of the National Authority and the National Executive Committee;
 - (iii) Its roles and responsibilities in relation to preparedness and capacity-building to deal with any threatening disaster situation or disaster;

- (iv) Its roles and responsibilities in regard to promptly and effectively responding to any threatening disaster situation or disaster;
 - (v) The present status of its preparedness to perform the roles and responsibilities specified in sub-clauses (iii) and (iv);
 - (vi) The measures required to be taken in order to enable it to perform its responsibilities specified in sub-clauses (iii) & (iv)
- b) Review and update annually the plan referred to in clause (a);
 - c) Forward a copy of the plan referred to in clause (a) or clause (b), as the case may be, to the Central Government which Government shall forward a copy thereof to the National Authority for its approval.

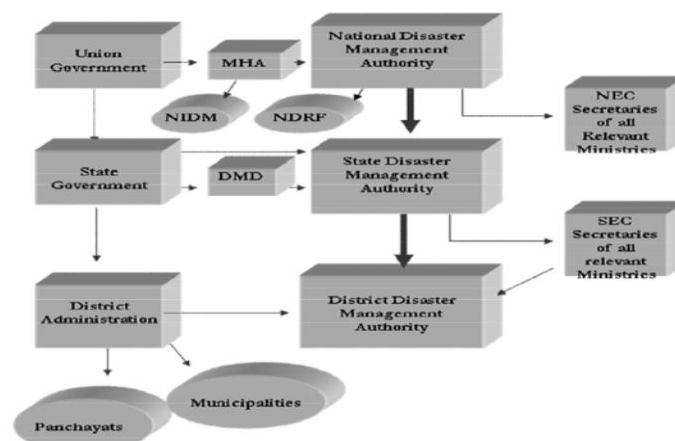
(2) Every Ministry or Department of the Government of India shall-

- a) Make, while preparing disaster management plan under clause (a) of sub section (1), provisions for financing the activities specified therein;
- b) Furnish a status report regarding the implementation of the plan referred to in clause (a) of sub-section (1) to the National Authority, as and when required by it.

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

1.07 Institutional Framework

Under the Disaster Management Act, 2015



1.08.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, E-mail: website@ndma.gov.in) and Security Control Room (Tele No.011-23387981 Fax No.011-23303748) and safety cell (Tele Fax No.011-23382638) in the office of Railway Board must be kept informed.

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

NDMA CONTROL ROOM NEW DELHI

Important Telephone Numbers of NDMA

Sl.No.	Name & Designation	Office Phone No.	Mobile	Email ID
1.	Secretary,	011-26701710	---	secretary@ndma.gov.in
2.	Joint Secretary (Admn)	011-26701780	---	jsadm@ndma.gov.in b.pradhan@nic.in
3.	Joint Adviser	011-26701743	---	narshad@ndma.gov.in
4.	Control Room	011-26701728 011-1078 011-26701729(Fax)	controlroom@ndma.gov.in, ndmacontrolroom@gmail.com, 09868891801, 09868101885	

1.09 NATIONAL DISASTER RESPONSE FORCE (NDRF)

As per Disaster Management Act 2005, various Ministries and Departments under the Government of India should join hands for mutual assistance in case of a disaster. Assistance from local Government and non-government agencies is invariably required by the Railway Administration for prompt relief and rescue operation in case of major disasters affecting Railways. Assistance of NDRF could be of great help to the Railways in major railway disasters.

NDRF HEADQUARTERS

NDRF Battalions:

DG/NDRF	IG/NDRF	DIG/NDRF
Mob. +919818564455	Mob. +919540610101	Mob. +919968262466
Off: 011-24369278, 011-24369280,	Off: 011-24363268 Fax : 011-24363261	Off: 011-24363267 Fax : 011-24363261
Fax : 011-24363261 Email ID: dg.ndrf@nic.in	Email ID: ig.ndrf@nic.in	Email ID: dig.ndrf@nic.in

NDRF Control Room Tel: 011-24363260, 011-24363266, Fax: 011-24363261

NDRF Battalion, MUNDALI / CUTTACK (ODISHA) & Guntur (AP) are in areas of responsibility. The Battalion is headed by Senior Commandant, under the administrative/operational control of Inspector General (Adm.), CISF HQRs., New Delhi and Deputy Inspector General (DM), CISF HQRs., New Delhi.

Details of NDRF Battalions are as under within the reach of ECoR:-

Sl. No.	Div.	COMDT NDRF Bn	LOCATI ON	MOB. NO.	TEL NO.	FAX.NO. /Email
1	KUR & SBP (Odisha+ Chhatisgarh)	Commandant 3 rd NDRF (Jacob Kispatta)	Mundali , Cuttack , Odisha, Pin- 754013	0943796 4571 0947058 7743	0671- 2879711 (Control)	Ori03ndrf@nic.in

					09437581614 (control) 0671- 2879710	
2	WAT (Andhra Pradesh)	Commandant 10th Bn NDRF (Md. Zahid khan)	ANU Campu s, Nagarju na Nagar Guntur (AP) Pin- 522510	7382299 621	08632293178 (o) 08632293050 (FAX) 0863- 2293050 (Control) 08333068559 (control)	AP10ndrf@n ic.in

Zonal Railways should get in touch with NDRF officers at the nearby NDRF locations to have the first hand knowledge of the resources available with them and also familiarize NDRF task force with railway related disaster situations and expose them to the issues relevant to rescue and relief of passengers during railway accidents. Railways may also associate NDRF in the full-scale disaster management exercise on MOCK DRILL that is held once every year. Respective NDRF battalion pertaining to the railway zone has to be coordinated while doing such mock drills.

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

As Para- 5.2 of DM plan of Ministry of Railway issued in April-2016 , Railway Board have also empowered Divisional Railway Managers/PCSOs to directly requisition the relevant NDRF battalion for relief and rescue operations depending upon the gravity of situation so that their services could be made available expeditiously at the time of major Railway Disasters without any loss of time. However, requisitioning of NDRF should be judicious.

CHAPTER-2**OBJECTIVES*****2.01. The objective of the Disaster Management Plan is to achieve:***

Instant Disaster Trigger Mechanism.

Rapid Access to reach the site of accident within "**GOLDEN HOUR and render Medical Care**" - using GIS (Geographic Information System) and data bank to ensure quicker means to render medical help and to prevent avoidable loss of life.

Minimizing disaster effects - using GIS, data bank, quicker means to call for all the data logistics and infrastructure to redress the human calamity.

Saving lives by quick extrication of victims and effective on-site Medical Management.

Stabilisation of condition by quick restoration.

Expeditious extraction and shifting to rescue vehicle(s).

Care and concern for the affected customers/passengers.

Speedy transportation to hospital.

Proper and timely dissemination of information to public in the aftermath of the Disaster.

Defining responsibilities of various staff/departments.

2.2.KEY CONCEPTS:

1. Disaster
2. Disaster Management
3. Disaster Management Act 2005

4. Golden Hour
5. Trigger Mechanism
6. Incident Command Control System
7. NDRF
8. Triage - a) Site Triage & b) Hospital Triage
9. Psychological rehabilitation

2.3.GOLDEN HOUR CONCEPT

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

Render definite medical care within Golden Hour.

Stop bleeding and restore blood pressure within an hour.

Persons under shock shall be immediately relieved of shock.

Transport the casualties to the nearest hospital.

2.4.TRIGGER MECHANISM (EMERGENCY RESPONSE SYSTEM)

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

2.5.The process of preparedness should be well orchestrated and must respond instantly to the information of the disaster.

1. Evolving an effective signal/warning mechanism;

2. Identifying activities and their levels;
3. Identifying sub activities under each activity/level of activity;
4. Specifying authorities for each level of activity and sub activity;
5. Determine the response time for each activity.
6. Working out individual plans of each specified authority to achieve the activation as per the response time;
7. Having quick response teams for each specified authority;
8. Having alternative plans and contingency measure;
9. Providing appropriate administrative and financial delegations to make the response mechanism functionally viable; and
10. Undergoing preparedness drills.

2.6 INCIDENT COMMAND SYSTEM (ICS):

a. Introduction

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

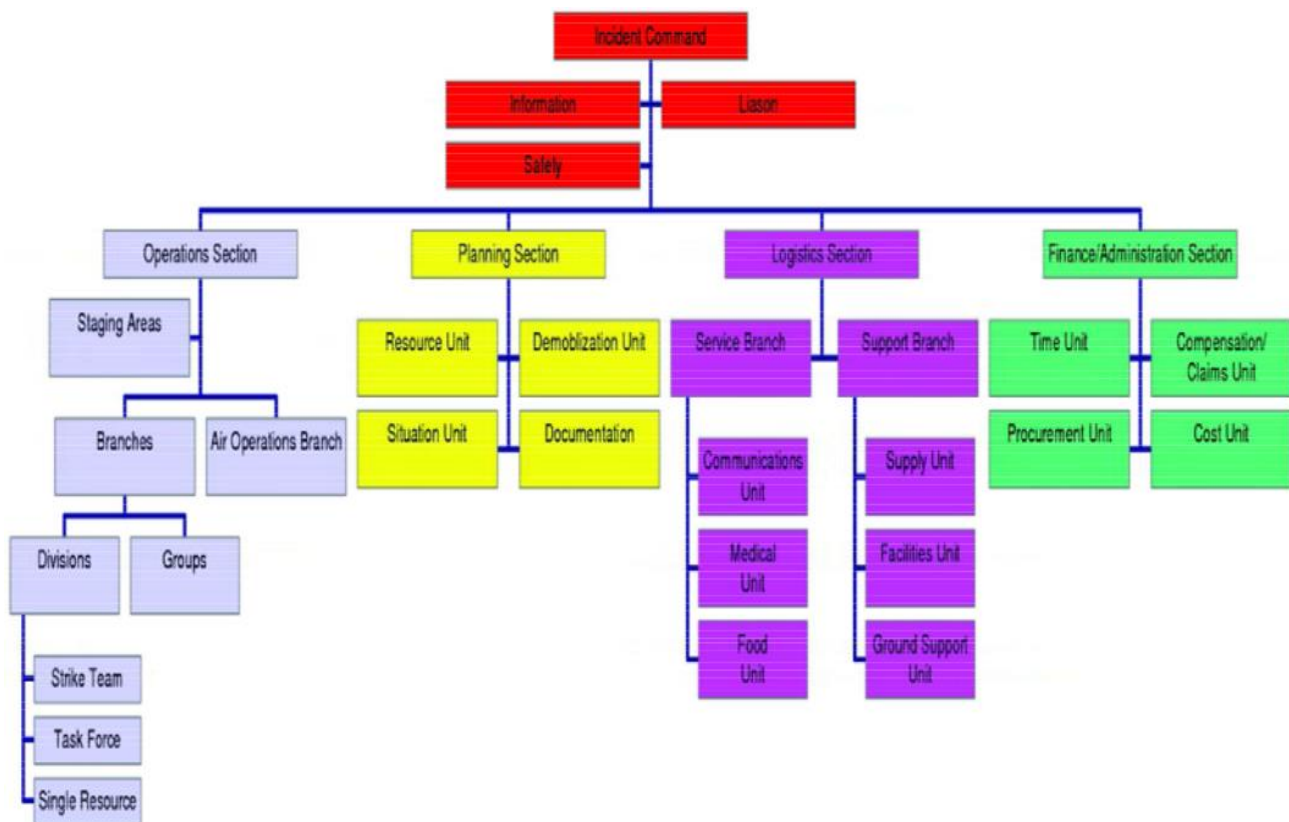
- i) Incident Command - Has overall responsibility at the incident. Determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy.
- ii) Operations - Develops tactical organization and directs all resources to carry out the Incident Action Plan.

- iii) Planning - Develops the Incident Action Plan to accomplish the objectives. Collects and evaluates information, and maintains status of assigned resources.
- iv) Logistics - Provides resources and all other services needed to support the organization.
- v) Finance/Administration - Monitors costs related to the incident, provides proper accounting, procurement, time recording, cost analysis, and overall fiscal guidance.

b. The composition of the ICT is depicted in the following organizational chart:

INCIDENT COMMAND

ORGANIZATION CHART



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

- i. Incident Commander
- ii. Operations section
- iii. Planning section
- iv. Logistics section
- v. Finance/Administration section
- vi. Safety Officer
- vii. Liaison Officer
- viii. Information Officer

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

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

2.7 TRIAGE

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

Severity of injury

Need for treatment

Prognosis

Available medical resources.

Triage is a complex process and includes - sorting and categorization of victims, and initiating life saving measures and treatment at the:

Site

During transportation; and

In the hospital

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

These are two major types of triages:

Site Triage - The non-medical triage and is done by the rescue team or the first aid providers at the site. It is also called pre-hospital triage.

Hospital Triage - Medical triage done by trained physicians and surgeons in the receiving hospital.

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

Red :

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

Yellow :

- a) Second priority
- b) Victim serious but stable vital functions.
- c) Requires prompt care though no immediate risk, but cannot move without assistance.
- d)
- e)

Green :

Victims having light injury and able to walk.

Black :

Dead

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

2.8.PSYCHOLOGICAL REHABILITATION

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

Impact of Disasters on Mental health:

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

Emotional reactions: temporary feelings of shock (that is, for several days, or a couple of weeks), fear, grief, anger resentment, guilt, shame, helplessness, hopelessness, or emotional numbness (difficulty in feeling love and intimacy, or difficulty in taking interest and pleasure in day-to-day activities.)

Cognitive reactions: confusion, disorientation, indecisiveness, worry, shortened attention span, poor concentration, memory loss, unwanted memories, self-blame.

Physical reactions: tension, fatigue, edginess, difficulty in sleeping, body aches or pain, slow reactions, fast heartbeat, nausea, changes in appetite, changes in sex drive etc.

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

Mental health interventions for disasters:

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

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

Basic principles of Emergency Care:

It is helpful to remember several basic principles or objectives of emergency care.

- 1) Provide for basic survival needs and comfort (e.g. water, food, shelter, clothing etc.).
- 2) Help survivors achieve restful and restorative sleep.
- 3) Preserve an interpersonal safety zone protecting basic personal space (e.g. private, quiet, personal effects).

- 4) Provide non-intrusive ordinary social contact (e.g. use of humour, small talk about current events, silent companionship).
- 5) Address immediate physical health problems or exacerbating of prior illnesses.
- 6) Assist in locating and verifying the personal safety of separated loved ones or friends.
- 7) Reconnect survivors with loved ones, friends, and other trusted people.
- 8) Help survivors to take practical steps to resume ordinary daily life (e.g. daily routines, or rituals).
- 9) Help survivors to take practical steps to resolve pressing immediate problems caused by disaster (e.g. loss of a functional vehicle, inability to get relief vouchers).
- 10) Facilitate resumption of normal family, community, school and work roles.
- 11) Provided survivors with opportunities to grieve their losses.
- 12) Help survivors reduce problematic tension, anxiety, or despondency to manageable levels.
- 13) Support survivors' local helpers through consultation and training about common stress reactions, and stress management techniques.

REPORTING OF ACCIDENTS

2.9 Immediate reporting of Accidents

It is reiterated that on no account there be any delay in transmitting information about an accident from the site to the divisional control. The Divisional control will immediately relay the same to the Central Control who will inform to all concerned at the Head Quarters starting with the Principal Chief Safety Officer. The divisional authorities must not wait for investigating the prima-facie cause of accident. However, sketch, the FIR etc. should be sent to the Head Quarters at the earliest.

Transmission of information related to accidents and unusual occurrences related to safety from site to Divisions, to the Zonal Railway Head Quarters, and to the Railway Board must be quick and prompt. No effort should be made to suppress or delay the information. All the accidents, which are reportable to the Railway Board as

per extant instructions should be reported promptly and all details should be uploaded in SIMS.

A telephonic advice should be relayed to nominated officer(s) in Zonal HQ immediately after the accident in case of following categories of accidents :-

- I. All train accidents.
- II. Any yard accident having serious repercussion on movement of traffic on through line resulting in dislocation of traffic more than the threshold value.
- III. Landslides, breaches, OHE breakdown etc., which result in dislocation of traffic more than the threshold value.

In addition to this, periodic (monthly) statement of Accidents in all categories shall be submitted to Zonal Headquarters in prescribed Proforma.

2.10 Reporting of Accidents to the Railway Board

A telephonic advice should be relayed to nominated officer in Railway Board's Office immediately after the accident in case of following categories of accidents:-

- I. All consequential train accidents
 - II. Any yard accident having serious repercussion on movement of traffic on through/ main line resulting in dislocation of traffic more than the threshold value as indicated in the Accident Manual.
 - III. Landslides, breaches, OHE breakdown etc., which result in dislocation of traffic more than the threshold value.
 - IV. Averted collisions.
 - V. Signal passing at Danger -(SPAD).
- 2) The following occurrences shall be reported promptly to the safety directorate of Railway Board over telephone and by Whatsapp.
- a) Collisions falling under A-5 when occurring during shunting in coaching yards or stations even through not involving a train;
 - b) Indicative Accidents falling under Class F, G and H;
 - c) Fire in train engine/other engines attached to a passenger carrying train or goods train including cases falling under Class B-5 and B-6.

- d) Derailments of trains not carrying passengers and falling under D-5;
- e) Trains running into obstruction including fixed structure falling under E-2;
- f) Parting of trains, failure of rolling stock such as failure of tyres, wheels, axles, or braking apparatus etc., during the journey of passengers carrying trains or goods trains falling under class J-3, J-4, J-5 & J-6;
- g) Cases of averted mishaps due to failures of permanent way such as rail fracture, weld failure, buckling of track, etc, during the journey of passengers carrying trains or goods trains falling under class J-3, J-4, J-5 & J-6;
- h) Cases of averted mishaps due to failures of permanent way such as rail fracture, weld failure, buckling of track, etc. or obstruction to track, thus endangering the safety of the train(s);

In addition to this, periodic (monthly) statement of accidents in all categories shall be submitted to Railway Board in prescribed Proforma.

The Reporting to Railway Board be also communicated through SIMS (Rail-net) by generating the Accident ID.

2.11 Important telephone numbers of Railway Board's Safety Directorate for reporting accidents:-

NEW DELHI (MTNL) STD CODE - 011						NEW DELHI RLY STD CODE - 030				
Room No.	Designation	Name	Rly Tel. No. (Off.)	IP Intercom No.	Rly Tel. No. (Resi)	MTNL Tel. No. (Off.)	MTNL Tel. No. (Resi)	MTNL / Rly FAX	Mail Address	Residential Address
301	Principal Executive	/Devendra Singh	43302,	6211	2686 3	233813 44	23745 537	2338 6215	@gov.in	256/1B, Rly.
	Director Safety		47406							Officers Colony, P.K.Road.
371-C	PS/PED/ Safety	R K Bhardwaj	43302,	6212	-	233813 44	-	-	-	D-725, Mandir Marg.
533	ED/Safety	Tej Prakash	47407	6213	-	230474 07	24624 915	2338 7568	edsafety@rb.railnet.gov.in	D-I/34,

		Agrawal								Bharti Nagar,
										Maharishi Raman
										Marg.
564-M	PS/ED Safety	S. Uma	47407	6214	-	23047407	-	-	-	-
355	ED/Safety-II	K.P. Yadav	43446,	6215	-	23389987	26882097	-	-	H.No.T-5/13,
			47408							Railway Officers
										Enclave, San
										Martin Road,
										Chanakyapuri
329	ED/Safety/Me ch.	Dimpy Garg	47425	-	23651	23385047	23744357	-	edsms@rb.railnet.gov.in	7,Chelmsford Road.
321	Dir/Safety-I	Vinay	43667,	6217	-	23387009	-	-	dsfty@rb.railnet.gov.in	-
		Kumar Nama	47409							
318	PS/Dir/Safety-I	Anuradha	43667,	6218	-	23387009	-	-	-	C-703,
		Sharma	47409							Pragjyotishpur
										Appt., sect-10,
										Dwarka.
362	Dir/Safety-III	-	43239,	6221	-	23385047	-	-	dsafety3@rb.railnet.gov.in	-
			47411							
-	Dir/Safety-IV	-	-	-	-	23070944	-	-	dsfty4@rb.railnet.gov.in	-
533-E	JD/Safety (A&R)	V D Sharma	47575	6227	-	-	-	-	-	8/11, Sect-3
										Rajender Ngr
										Sahibabad
										GZB, U.P.
156-C	DD/Safety (A&R)-I	Amit Kumar	43998,	6228	-	23303998	-	-	abr.tripathi@gov.in	Flat No.185,
		Tripathi	47415							Pocket-D
										Dilshad Garden.
372	DD/Safety (A&R)-III	H C Banga	44353	6229	-	23304353	-	-	harish.banga@gov.in	1/202,Subhash Ngr.
345	DD/Safety (Impl)	Anupam Verma	44480,	6230	-	23304480	-	-	ddsftyi@rb.railnet.gov.in	65, Sect-1,
		9456205206	47417						CUG- 9717647197	Scheme-7,
										Shastri Ngr,

										Meerut.
267-A	DD/Safety-III	Sanjeev Kumar	43580, 6231	-	-	23303580	-	-	-	H.No-10673, Pratab Ngr.
			47418							
345	SO/Safety-I	Sushma Mahajan	47417	-	-	2347417	-	-	-	-
345	SO/Safety (Impl)	Manohar Trikey	43533, 47419	-	-	23303533	-	-	-	Q.No.992, Sect-3, R.K.Puram.
423-D	SO/Safety/D M	Ishwar Singh	43771, 47420	-	-	23303771	-	-	sosafetyar@rb.railnet.gov.in	23, Type-III
		Brar								North West Moti Bagh.
267-A	SO/Safety (A&R)	Raj Kumar	43803, 47422	-	-	-	-	-	-	815/7, Govind Puri, Kalkaji.
		Sagar								
341-C	Chief Cntr.Safety	-	43599, 43399, 47423	-	-	23382638	-	-	-	-
345	Safety Inspector	Sunil Kumar	44425, 47421	-	-	23304425	-	-	-	5/11787, 1st Floor
									Tel.: 9958293592	Sant Ngr, Karol Bagh.
	Safety Inspector	Apoorv Bajpai							Tel.: 7275080530	
	Safety Inspector	Mukesh Kumar							Tel.: 9971691965	

Sl. No.	Designation	Office		Residence		Mobile
		Railway	MNTL	Railway	MNTL	
1	Safety Cell (Control)	23382638 98100-17905				9717645611 01123382638
2	PED (Devndra Singh)	43302,23381344			23210429	9910487448
3	ED Safety/II	43446	2338-9987	23151	2374-0092	09810017905
4	ED Safety/III					9717636898
5	ED Safety/III(M)					9870330500
6	Dir.Safety/I	43667	2338-7009		2467-0561	09910487477
7	Dir.Safety/III	43239	2338-		49053824	09910487542

			5047			
8	Dir.Safety/IV					9717646426
9	Dy.Dir/Safety	43998	23303998			09717647406
10	PS/PED Safety	43302	2338-1344			9958293567
11	Ch.Cntr	43599,43399	23382638			9717645611
12	SO/Safety (A&R)	43803				9717647104

Telephone numbers of the CRS (SE Circle) are as under:-

CRS/SE Circle New Koilaghat Bldg.14 Strand Road, (12 th Floor) Kolkata 700001	Sri A.K.Rai	033(Rly).020 (O)22484858 P&T FAX-03322626772 4	CUG-900208085 0	NKG 27062 FAX-22105514, GRC (O>S) 44604 (SER).27064(ER) PS to CRS-033-22484858 (P&T)
Dy crs (T) SE Circle	B.S.K subudhi		CUG-900208086 2	

2.12 System to be followed for reporting of accident to Railway Board:

- The above mentioned accidents shall be reported by Divisional Control to HQ Central Control. The Central Control in turn will inform all concerned officers at HQ office.
- Sr. DSO shall collect all the information and advice PCSO/HQ.
- PCSO / Dy.CSO / (Engg ,Elect., Mech, Traffic) and SSO (S&T) should thereafter inform the nominated officers of Safety Directorate in the Railway **Board**.
- In case of landslide, breeches, OHE breakdown, etc. which result in dislocation of traffic for more than threshold value and also in cases of public agitation, the same shall be reported by HQ Control Office to Punctuality Cell of Railway Board.

-
- e) Cases of blockade of train services due to public agitation shall be dealt with by the Security Directorate. In addition, periodic (monthly) statement of accidents in all categories shall be submitted to Railway Board in the prescribed format.

2.13 To Zonal Railway Headquarters by Divisions:

Sr.DSO/DSO shall give telephonic message to PCSO and in his absence to Dy.CSO, immediately after the occurrence of the following categories of accidents: -

- All train accidents.
- Any yard accident having serious repercussion on movement of traffic on through line resulting in dislocation of traffic more than the threshold value.
- Land slides, breaches, OHE breakdown, etc. which result in dislocation of traffic more than the threshold value.
- Averted collisions.
- Loco Pilot passing signal at danger.

Divisional Control should report all other accidents, equipment failures, and unusual incidents as classified in Chapter-5 of the Accident Manual to the Central Control. The Central Control should record all the relevant information in the accident/unusual register for information of all concerned.

In addition to this, periodic (monthly) statement of accidents in all categories including yard derailments shall be submitted by Sr. DSO to Zonal Headquarters in the prescribed format.

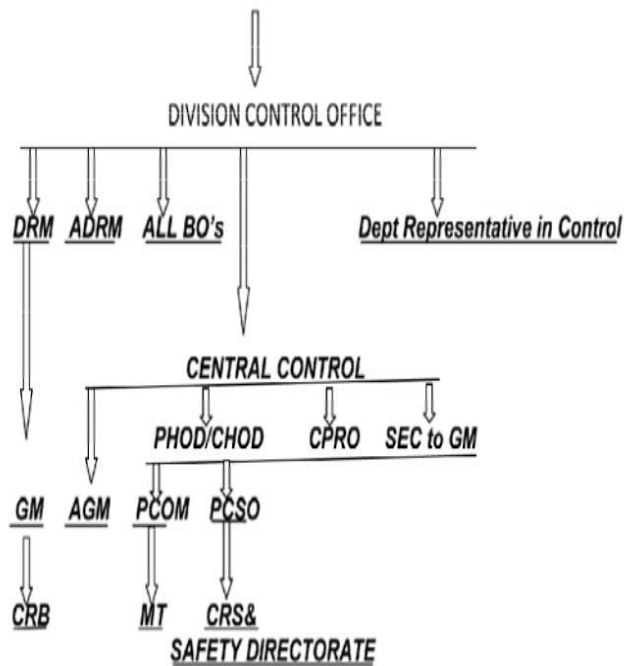
2.14 Accidents in Non-traffic sidings or premises

Accidents occurring in the premises or sidings exclusively under the control of departments other than Traffic shall be reported to the Officer In-charge of such premises or sidings, and the official shall observe the rules for reporting accidents laid down for Station Masters.

2.15

A.FLOW CHART OF INFORMATION FOR MAJOR ACCIDENTS

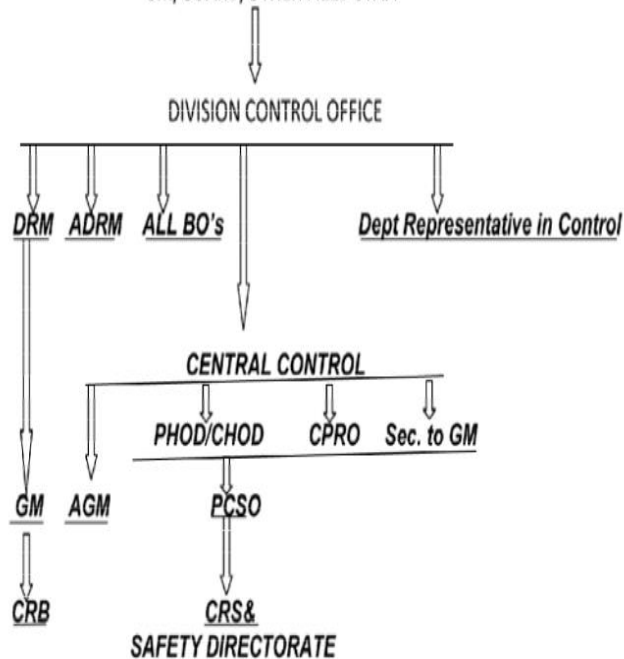
INFORMATION FLOW CHART

SM/GUARD/OTHER FIELD STAFF

B.FLOW CHART of information other than major accidents

INFORMATION FLOW CHART

SM/GUARD/OTHER FIELD STAFF



2.16 Procedure to be followed during serious accidents declared as Disaster

- On occurrence of an accident, the controller on duty in Central Control /Headquarters shall record the information received from Divisional Control in the accident register and convey the information with the least possible delay to PCSO, PCOM, PCE, PCME, PCSTE, PCEE, PCCM, CPTM, CFTM, Dy.CSO, and other HODs as may be necessary depending on the nature of accident. GM should be immediately advised by CSO or in his absence by Dy.CSO, if they consider the accident to be of sufficiently serious nature. During office hours while the information of the accident should be given to all the officers concerned by the Central Control as detailed above. GM should be personally advised by the CSO or in his absence by Dy.CSO.
- Depending on the seriousness of the accident PCOM, PCME, PCE, PCSTE, PCEE, PCCM shall depute one SAG Officer each to proceed to the site of accident by the first available means as per the requirement at site. The Officers to proceed to site will be conveyed by PCSO in consultation with the GM. In addition, Officers of the rank of at least Sr. Scale shall also be nominated by the respective departments for quick restoration and for dissemination of instructions to the concerned Officers. Similar action should be taken at divisional level also.
- In case of serious accidents involving passenger casualties, Officers Special should leave within 30 to 45 minutes from the time of ordering. Officers Special for accident site should consist of carriage of GM, plus 2 to 3 other carriages (non-pooled or pooled) available at BHUBANESWAR station. It should not be delayed for bringing the carriages from other station or for watering the carriages. The Officers Special should start as soon as GM arrives at the station.
- Whenever total interruption of traffic is likely to be more than 4 hours on account of accidents DRM/ADRM should invariably proceed to the accident site to supervise relief arrangement and restore through communication.
- In case of serious accident or accident where passenger trains are involved, DRM/ADRM concerned should talk to the General Manager directly.

- DRM/ADRM or the first senior most Officer reaching the site of accident should invariably give a detailed message about the nature of accident, number of casualties/ injuries if any, number of wagons/ coaches involved, extent of damage to track, OHE etc. probable cause of accident, probable time of restoration, assistance required etc. to the Headquarters and all other concerned at the earliest and with the least possible delay.
- A command post should be set up at accident spot and should preferably be manned by Traffic Inspector or in his absence by Safety Counsellor, who shall record all messages and instructions of DRM/ADRM and other Senior Officers at site in a log register and repeat the progress of restoration every half an hour to the divisional control, who in turn shall repeat to Headquarters Central Control/Bhubaneswar, so that GM and other concerned PHODs/HODs are appropriately briefed on the subject.
- The command post should have DOT phone with STD besides mobile phones and railway phone in case of serious accidents where running lines are blocked, to ensure reliable and adequate communication links.
- Use of portable Fax machines may be resorted to at accident spots, for quick relaying of messages to Divisional Control and Headquarters.
- Dy.CSO / (Engg , Elect., Mech, Traffic) and SSO (S&T) shall prepare a bulletin on the progress of restoration every 4 hours for information of GM.
- a. Only DRM or the senior most Officer at site with concurrence of DRM should speak to the press or give interviews regarding the brief particulars of the accident such as time, date, location, nature of accident, whether traffic will be interrupted or communication will be maintained by transshipment, when through running is likely to be resumed etc. It is for the same Officer who may if necessary change the version given earlier if any new evidence is found and all other Officers should be bound by that decision. Nobody should give any other version either to the press or to their heads of the respective departments or to anybody else. Strict discipline must be maintained in this regard.
- b. In accidents involving obstruction of both up and down lines, cranes should be ordered from both directions without any delay, if required from adjacent divisions or from adjacent

railway also. In case it is learnt subsequently that second crane is not required, it can be cancelled and returned back.

- c. In order to provide accurate information about train services to the public, the centralised enquiry in the Bhubaneswar Central Control Office should be manned by a Commercial Officer and special booths manned by Officers / Supervisors should be set up at Divisional Head quarters and other major stations.
- d. Detailed instructions with regard to, opening of special enquiry booths, preparation of list of dead and injured along with address, deputation of railway doctors to non-railway hospitals to render assistance, arrangements for supply of meals, drinking water, STD equipped telephones for the use of passengers, provision of security to the belongings of dead or injured etc, to be made available.

2.17 Accidents reportable to CRS

Any accident falling under section 113 of the Railway Act and those which are attended with loss of human life or with grievous injury or with damage to Railway property of the value exceeding Rs. 2(TWO) Crores or accident to passenger carrying trains or the cases of landslides or of breaches by rain or flood, which cause the interruption of any important through line of communication or at least 24 hrs., should immediately be reported to the Commissioner of Railway Safety, concerned.

2.18 Information to the police and Civil authorities

- That usually attended with loss of human life or with grievous hurt as defined in the Indian Penal Code.
- That involves a passenger carrying train.
- Train wrecking or attempted train Wrecking.
- Cases of run over or passenger falling out of train.
- Fire or Explosion on train.
- Case of suspected Sabotage.

Officials to be informed in the above cases:

- Chief Secretary of the State.

- Home Secretary of the State.
- The District Magistrate/Additional District Magistrate.
- Sub The District Superintendent of Police of the concerned District.
- The Superintendent of Railway Police.
- The Officer- in- charge of the police station within local limits.
- The Officer- in- charge of the Government Railway Police.
- The Officer- in- charge of the Railway Protection Force.

Note: Reporting of the accidents to the Railway Board and the CRS, shall be the responsibility of the Head Quarters Safety Organization, whereas the responsibility of transmitting necessary information to the Head Quarters and to the Civil and Police authorities shall devolve with the division.

2.19 Clearance by State Police

- Clearance by the State Police in case of Railway Accidents where Sabotage is suspected is necessary for commencing restoration works at the site of accidents.
- Such clearance by the state Police or permission of the State Government is not required for launching "Rescue Operations" for the purpose of saving Human lives which inter-alia may also involve handling /shifting the rolling stocks (wagons, locomotives & coaches) for extricating the trapped passengers.
- Ministry of Home affairs/Govt. of India vide their letter No. VI-24022/11/2002-pm-1 dt. 24.12.2002 have directed the Home Secretaries of all states to issue suitable instructions to all concerned authorities for taking prompt action and to expedite clearance certificate in the event of a rail accident, when sabotage is suspected. (Board's letter No. 2002 / Sec. (CR) / 45/47, March 27.03).

2.20 OFFICER AUTHORISED TO DECLARE AN ACCIDENT AS A DISASTER

"GM", "AGM" or "PCSO" are authorized for declaring an untoward incident as Railway Disaster. Such declaration will be issued to all concerned with the approval of competent authority. If the accident is

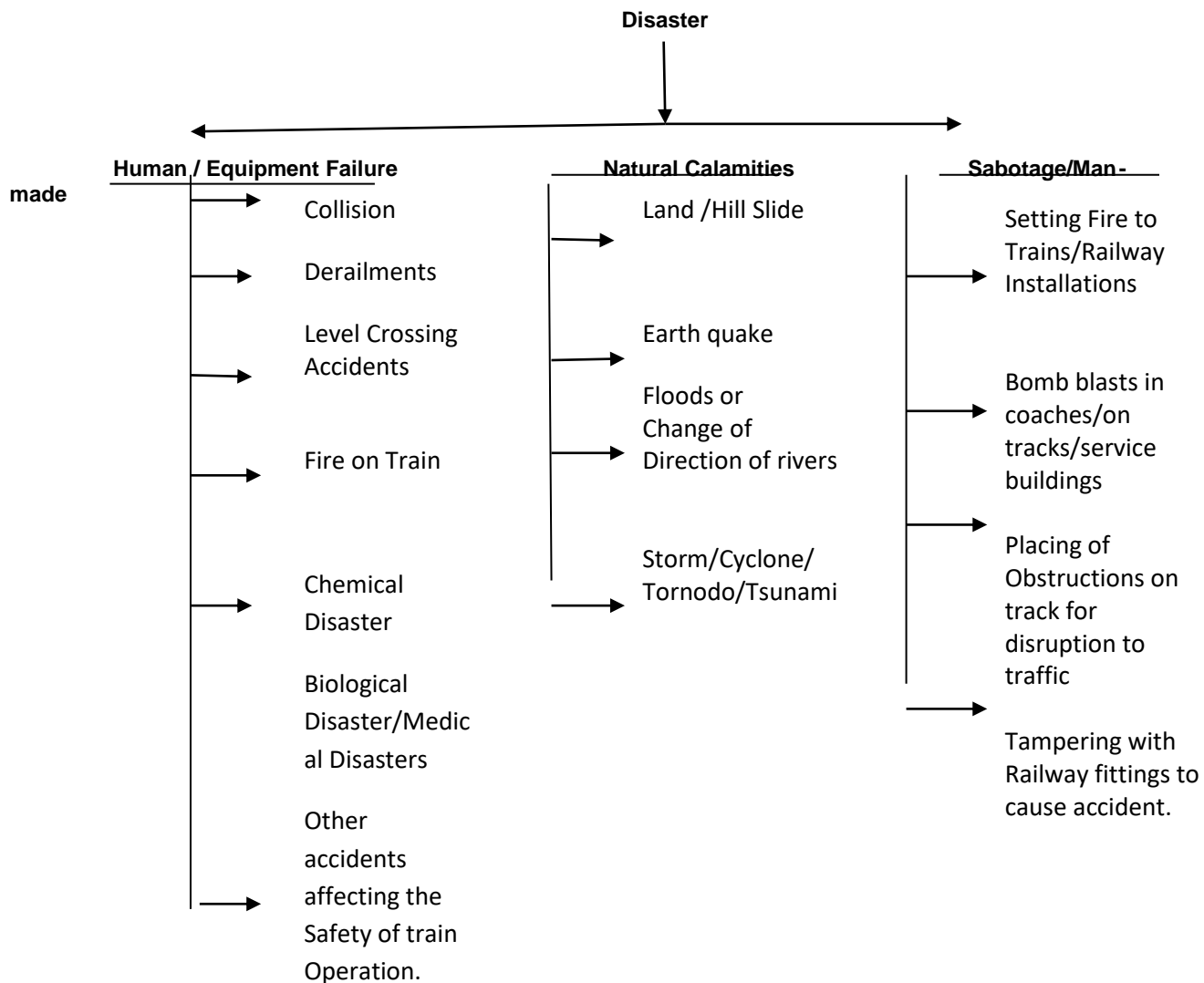
declared as Disaster, all instructions as contained herein this Disaster management Plan would automatically come into force, and officers and staffs of all departments would take action as laid down in this book.

Action as prescribed in Accident Manual will inter-alia come into force. All officers and Supervisors concerned should be fully conversant with various duties listed therein and carry them out without fail.

2.21. Planning of controlling of trains from 06 hrs before cyclone .

In the wake of cyclone, contingency plan is issued by PCOM containing general instructions to tackle the emergency situations arise due to cyclone. A core team comprising of PCE, PCOM, PCCM, PCSTE, CSE, PCEE, PCSO & PCMD meet regularly to take stock of the situation. As decided in the core team meeting, notification is issued by CPTM regarding cancellation, regulation, diversion & termination of trains from time to time depending on the situation.

CHAPTER-3

DISASTER & TRAIN ACCIDENT**3.01 Types of disaster causing interruption to train services:-****Human/Equipment failure:**

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

Collisions

Derailments

Accidents at manned and ~~unmanned~~ level crossings.

Fire or explosion in trains

Other accidents affecting the safety of **rail** (train) operations.

B) NATURAL DISASTERS

Natural disaster in general like floods, cyclones can be forecasted where as others like earthquakes, land slides etc. are difficult to forecast. But preparedness for floods & cyclones will help in tackling situation for other natural disasters also.

1. Landslide:

Whenever landslide is expected / experienced due to heavy down pour, all train services need to be regulated/diverted.

Rescue team to be rushed for restoration work.

2. Floods:

Based on the weather forecast warnings by IMD regarding impending flood condition and futuristic rainfall predictions in catchment area, the following steps should be taken.

Stationary Bridge watchmen are to be provided at vulnerable points to inform level of flow of water.

Shifting of Track/OHE fittings and movable equipments around the bank.

If time permits sandbags dyke can be constructed to ensure safe passage of trains.

Regulate/Divert the train services till the flood waters recede

Evacuate people on train/at station and move them to safer places via alternative route.

Contact Local boat men , divers and boats, NDRF, ODARF, Fire brigade, Navy, Army, and Air force .

With the co-ordination of local/state authorities arrange temporary shelter in nearby schools, marriage halls, community centres etc.

If necessary arrange coaches to accommodate the affected temporarily at the locations identified by the state Govt.

Seek assistance from voluntary organizations and arrange drinking water, food, medicine etc. and run parcel specials to carry these essential supplies.

RPF and GRP in co-ordination with local police shall arrange protection.

Keep communication with Divisional Control Office and nodal officers of the state govt. for speedy coordination.

When people are marooned by flood, arrange air dropping of food packets, cloths etc., with the assistance of local civil administration.

Contact SJAB (St. John Ambulance Brigade), local doctors and provide medical care to the affected population.

3.0. Weather Warnings.

3.1 Conveying messages by Indian Meteorological Department:

The various IMD regional centres will issue heavy rainfall warnings/bulletins or cyclone warnings/bulletins to the Chief Controller, Central Control / Bhubaneswar by fax and email/Whatsapp. Further, the Indian Meteorological Department is updating the weather warning messages in their official web sites regularly, which can be watched in case of any doubt or their duty officer can be contacted over phone.

3.2 Dissemination of Messages within Railway:

On receipt of Weather / Cyclone warning messages/bulletins from the Indian Meteorological Department regional centre in the central control office, the following action should be taken:

3.3 Central Control, PCOM office:

The Chief Controller shall give the copy of message to all controls i.e. Engineering Control, Traction Power Control, Traction Loco Control, Diesel Power Control, Security Control, Commercial Control, Electrical Control, Test Room and Divisional Control concerned office. It is the responsibility of these controls in their turn, to inform the Principle Head of Department and other HQ officers, Supervisors and all concerned pertaining to their departments for taking necessary steps to be in readiness for meeting any eventualities. They should record the names and designation with the time and date to whom the message has been repeated.

3.4 Action by the Divisional Control Office:

- i) The Chief Controller of the Divisional Control Office shall give the copy of message to all sub controls and the section controllers of the division including Engineering control, Traction Power control, Traction Loco control, Power (Diesel) Control, Security Control, Commercial Control, Electrical Control and Test Room. It is the responsibility of these controls in their turn, to inform the Divisional officers, Supervisors and all concerned pertaining to their departments for taking necessary steps to be in readiness for meeting any eventualities. They should record the names and designation with the time and date to whom the message has been repeated.

The Section Controller shall repeat the message to SMs on section likely to be affected and record the names of SMs on duty to whom the weather warning has been repeated.

- (ii) When land line communication fail, the facility available on VHF sets at stations/CUG mobile phones including satellite phones as the case may be shall be made use of to disseminate the warning to all concerned. High priority should be given for disposal of cyclone messages.

Note:

- A. The preamble of the weather/cyclone warning message/bulletins and the text as received from the Meteorological Department should be reproduced verbatim in the text of the Control message. The text of the message should be worded as shown below:

- B. In case, the land line/control/CUG communication network fails, then the chief controller/HQ shall frame the weather warning message of IMD in a message format as suitable and issue to all concerned as mentioned in the above Para through email and other available means of communication.
- C. Additionally message should also be passed on through SMS on CUG mobile phones to all concerned.
- D. A register should be maintained in Control Offices of each department i.e. Operating, Engineering, Electrical etc. showing full particulars of the receipt and action taken on the weather/cyclone warning messages/bulletins, showing the date and time of receipt of warning message, the full text of the message and the date and time of dispatch or telephonic advices to the officials concerned and the initials of the SM on duty to whom the message has been repeated.

3.05 Action by the Station Master:

3.05.1 Intimation to staff:

On receipt of weather/cyclone warning advices from the Section Controller, the S.M. should take the following action:-

The SM on duty, at Station will inform ADENs/SSE (Works)/SSE (P.Way), ADEE(TRD), SSE (OHE/ PSI) who are Headquartered there and shall immediately arrange to handover to all concerned, a copy of the verbatim message received from the Section Controller and obtain his acknowledgement.

If the ADENs/SSE (Works)/SSE (P.Way)/SSE (OHE/PSI) is out of Headquarters, the SM should advise the controller on duty who will then be responsible for ensuring that the contents of the weather warning message are communicated verbatim to Engineering and TRD controls to ensure . He will also arrange to forward the SMS of warning message received from Divisional control, to all above, in case CUG mobile services are active.

- (i) The Station Master on duty should also send for the Gang Mate of the station yard gang and explain to him the contents of the weather warning message and obtain his acknowledgement.

- (ii) On receipt of cyclone/weather warning, the Station Master apart from alerting his staff will also take immediate action to advise the residents of the railway colony in the vicinity to take all necessary precautions and also to be in readiness to move to safer places wherever there is likelihood of inundation. He will also take immediate action to ensure that enough drinking water is stored in the overhead storage tanks. Station Master should alert all occupants of Railway colony to be in readiness for rendering any assistance in case of emergency.

- (iii) A register should be maintained at each station in the profarma given below:

Date and time of receipt		Text of Message in full	Name and Designation of the official to whom message was repeated	Signature of the Station Master	Actual weather condition
--------------------------	--	-------------------------	---	---------------------------------	--------------------------

The Office Copy of the message on which an acknowledgement has been taken should also be pasted in the register.

3.05.2 Precautions to be taken by Station Master, Loco Pilot/Assistant Loco Pilot & Guard regarding

Control of trains during storm and strong wind.

- i) When the warning message forecasting cyclone, storm or strong wind has been received from the Meteorological Department and/or there is a reasonable doubt that severe storm is going to break out endangering the safety of passengers, trains etc., the Station Master shall, in consultation with the Guard and the Loco Pilot/Assistant Loco pilot of the train, regulates the train and also refuse to grant line clear to a train coming to his station until storm abates and he considers safe for the movements of trains.
- ii) In spite of the action outlined above, should the Loco pilot and Guard be still caught on run in a storm and high winds of an intensity which in their opinion are likely to endanger the safety of passenger train, they should bring the train to halt with least delay, avoiding such stoppage at places like sharp curve, high embankments, cuttings and bridges, protect the train as per G & SR and try and contact the nearest Station

Master. Guard should advise the passengers to keep all the shutters of the train open to avoid the risk of overturning of the train. The train could be re-started in consultation with guard only after the storm and high winds abate and it is considered safe to proceed. In such cases, discretion of the loco pilots and Guards who know the section is of utmost importance giving paramount importance to safety of passengers. The loco Pilots and Asst. loco Pilots of all such stranded trains will clear the section at a restricted speed so as to stop short of any obstruction and will have a sharp lookout on the OHE and the embankments, approaches to bridges and also on the track.

- iii) During thick foggy or tempestuous weather or dust storm or mist which render it difficult or impossible for the loco pilots to see concerned signals and where there is doubt or suspicion of the condition of a run through passing train or observation made that the block section in the rear might have been affected or obstructed during the passage of the train, caution orders should be issued to the loco pilots.
- iv) The Station Master shall inform Revenue Officers, Sub-Collector of the area regarding the holding up trains in his station. The Station Master on duty shall seek the assistance of the local Revenue authorities in arranging adequate supply of food packets along with pure drinking water to the stranded passengers.
- v) AC/Diesel loco pilots shall stop the train if considered unsafe to run the train till such time he feels comfortable and safe to run (stopping of train on bridges, steep gradients and flood prone location may be avoided). In case of cyclone, windows of loco may be kept open to allow passage of air.
- vi) Station Masters shall also take readings of the anemometers installed at stations and record the same in the register at an interval of 6 hours as per the following profarma.

Date	Time	Reading of the Anemometer	Signature

3.5.03 Provision of Anemometers in nominated stations closed to bridges.

As per the Para 717 of Indian Railway Bridge Manual, Anemometers should be installed on nominated stations closed to bridges. When the wind velocity exceeds 72 kmph, the station Master should control / stop the traffic on the station.

Responsibility of fixing the Anemometers after receiving the message from concerned Meteorological Department and divisional control lies with concerned BRIs. The make and time of fixing Anemometer is to be maintained in Divisional Engineering Control Office.

The detail of nominated stations for provision of Anemometers in East Coast Railway is as under:

Sl. N O.	Division	Total Anemometers available	Identified station for Anemometers	Selected Bridge requiring Anemometer	Span details	Block Section
1	KUR	8	CAP*	950	10X45.7M TOWG	GAM-CAP
			BRAG*	557	20X45.7M TOWG	GBK-BRAG
			CTC*	554	64X30.5M P.G	CTC-KNPR
			JKPR*	449	29X45.7M TOWG	JEN-JKPR
2	WAT	5	CHE	1383	6X45.7+1X41.7 5M TOWG	PDU-DSI
			RGDA	611	9X30.5M TOWG	RGDA-LDX
			Other two locations to be nominated by division on real time basis according to forecast of Metrological Dept.			
3	SBP	4	HKG	76	25X30.5M P.G	SBP-HKG
			KSNG	343	20X30.5M	TIG-KSNG

3.5.4 Action by ADEN:

- i) On receipt of cyclone/weather warnings/bulletins, the ADEN will alert all his staff to be in readiness to meet any eventuality. He should also ensure that all the loose fastenings including sheets, tiles etc. of the station buildings as well as the residential quarters in the places likely to be affected are secured properly. He will also alert the residents

of Railway Colony to take all precautions and be in readiness to move to safer places in emergencies.

- ii) He will exercise discretionary /random checks as required to ensure action by SSE/P.Ways, SSE(Works) & SSE (Bridge) and that they are alert and active and be constantly in touch with Engineering control office as required.

3.5.5 Action by SSE/P.Way :

- i) SSE/P.Way, on receipt of weather /cyclone warning/bulletin should arrange to advise monsoon patrolmen/ watchman and gang mates to be extra vigilant. During non-monsoon periods as and when such warning messages are received, then
 - a) SSE/P.Way will introduce patrolling as soon as possible and also post stationary watchmen at all vulnerable locations and bridges by day as well as by night for a period extending up to 48 hours beyond the period specified in the weather/ cyclone warning messages.

The Permanent Way Inspector should be out in his section as far as possible by trolley during the period of warning and 48 hours beyond. When there is sudden cloud burst even during non-monsoon periods, emergency patrolling should be introduced duly informing the Station Masters on the section patrolled.

- ii) Permanent Way inspectors should contact the Engineering control frequently to keep the Section Controller informed/posted about the site conditions and have their trolleys always available with them for moving to sites of breaches etc.
- iii) Action by Gang Mate -On receipt of advice from Station Master, the Gang mate should take the following action:-
 - a) During the fair season, the Mate should depute two reliable gang men provided with Patrolmen's equipment for patrolling the block sections on either side and for alerting the intermediate gang-mates.
 - b) During the monsoon period, the mate of the station yard gang should send two gang-men in opposite directions to alert intermediate gang-mates, Patrolmen and Watchmen.
 - iv) For guidance of Loco Pilots and Guards, the sections which are vulnerable from safety point of view where the trains

should not be stabled such as curves, high embankments, cuttings etc. should be identified by Kilometre Numbers and to be communicated to Loco Pilots and Guards through working time table and from time to time crew lobbies through shed notices for their information and their guidance.

3.5.6 Action by SSE/Works:-

- i) SSE/Works will have complete list of machineries such as earth moving machineries and dumpers with their address of suppliers. He will also ensure the stipulated monsoon reserve materials at identified locations in wagons or loose. The examination of wagons should be ensured from time to time as per prescribed stipulations.
- ii) He will coordinate effectively with P.Way/ Bridge, Signalling and Electrical staff to work as a team.

3.5.7 Action by SSE/ Bridge:-

- i. He will ensure availabilities of CC cribs, relieving span on wheel/ ground at nominated locations and ensure them in good condition for use.
- ii. On receipt of intimation of the occurrence of an accident (including breaches) affecting any part of the bridge or approaches or restricting free passage of trains; the Bridge Inspector should proceed to site by quickest available means. On the way he should collect information regarding the damage, the men and material requirement at site for restoration and arrange for their movement and seek instructions regarding the restoration from the Assistant Engineer.
- iii. The Bridge Inspector should keep close coordination with the staff of P.Way, Signalling, Electrical, Traction and other departments, when they are required to work as a team.

3.06 Cyclone Warning

Action to be taken by various officials for dissemination of Cyclone warning has already been detailed in Para No. 3.0. However few additional assistances which may be further required, are detailed in this Para.

3.06.1. Issue of Cyclone warning by I.M.D.

The cyclone warning will be issued by IMD in two stages. The first stage warning is issued as soon as the cyclone storm is located at such a distance from the coast that is expected to cause bad weather over the coast during the next 48 hours. This is followed by second stage warning message wherein there is actual threat of cyclone over the area. Subsequently also, messages giving the latest cyclonic situation are issued by the cyclone warning centres, till the danger to the area is over.

- (i) Chief Controller/Coaching on duty in HQ central control should take immediate action as laid down in Para 3.3 above. He will also intimate the cyclone warnings and alert the Chief Controllers of the Divisions over which the cyclone is expected to hit/pass. The Central Control will also immediately inform all controls in the Headquarters Office regarding the cyclonic storm warnings.
- (ii) On receipt of cyclone warning message, the PCOM will set up an Emergency control in Multi Disaster Control Room in Headquarters, to be manned by Sr. Subordinates/ Officers round the clock till the restoration of normal service/earlier . The officials on duty in the emergency cell will observe the messages in the official web site of IMD till the De-warning message is received. On observing the cyclone bulletin, the contents of the bulletin should be relayed to all concerned as per **Para 3.3** and alert the concerned Divisional Controllers for taking action as per **Para 3.4(i)**
- (iii) A register should be maintained in the emergency cell showing the full particulars of the cyclone warnings received and cyclone bulletins broadcast/telecast by A.I.R. (All India Radio)/Doordarshan and various news channels on television and dissemination to various officials concerned in the field.
- (iv) In order to avoid any mishaps or danger to passenger trains and to avoid marooning to passengers, the PCOM/CPTM will issue instructions to all concerned for either cancellation/diversion or regulation of the trains which are likely to be affected by the cyclone in the time when cyclone warnings are received and reviewed.

3.07 Action by Divisional Control Office:

- (i) On receipt of the cyclone warning message, the Chief Controller or in his absence, the Deputy Chief Controller of the Division will, in turn, immediately, will inform Sr.DOM & DRM. Then he will send a copy of these warning messages

to all controls of the division, Test room and all SMs on duty of the concerned section through Whatsapp/SMS.

- (ii) On receipt of the cyclone warning message, the Sr. DOM/DOM will take similar action as in PCOM Office.
- (iii) The Section Controller will inform the Chief Controller /Punctuality about the passenger carrying trains running in the section and will seek advice to regulate the trains as the situation may demand.
- (iv) S&T control and Test room shall monitor damages to S&T gears in affected area and will keep communication links active with the coordination of Railtel and CUG operators .
- (v) A Whatsapp group may be created with all concerned nodal officers to relay the messages from time to time without delay.

3.8 Action by Traction power controller:

The Traction Power Controller of the division should immediately repeat the weather / cyclone warning message verbatim on Control telephone/Whatsapp/SMS to all concerned AEEs, OHE/ PSI Depot in charges of the section likely to be affected for taking adequate steps so as to be in readiness for meeting any eventualities, and then circulate the contents of the message to the Officers concerned in Divisional Headquarters office. The TPC shall always be in a state of readiness to take quick and prompt action to tackle the situation. He will keep continuous liaison with the field officials, Hqr. officers, apart from the neighbouring divisions, for seeking help as the circumstances warrant.

- i) The AEEs will be in their respective Headquarters. Their further movements depending upon the damages caused to OHE/PSI installations due to cyclone will be guided by Sr.DEE/TRD.
- ii) All Senior Supervisors and Officers of the TRD branch should also keep the TPC informed of their movements. These instructions also apply to other key personnel.
- iii)

3.9 Action by OHE / PSI Depot. in charge:

- i) The OHE/PSI depot in charge on receipt of Weather/cyclone warning shall be in a state of readiness to meet any emergency for arranging emergency staff to be vigilant and be available in Headquarters. They shall be in readiness to move at a short notice.
- (v) On receipt of cyclone warning message, the PCEE will nominate and send officers/ Sr. Subordinates in the emergency cell in Multi Disaster Control Room in Headquarters round the clock. The officials on duty in the emergency cell will observe the messages in the official web site of IMD till the De-warning message is received. On observing the cyclone bulletin, the contents of the bulletin should be relayed to all concerned as per **Para 3.3** and alert the concerned Divisional Controllers for taking action as per **Para 3.4(i)**
- (vi) A register should be maintained in the emergency cell showing the full particulars of the cyclone warnings received and cyclone bulletins broadcast/telecast by A.I.R. (All India Radio) /Doordashan and various news channels on television and dissemination to various officials in the field.
- viii) Ladder trolleys, Breakdown T & P items, axes, saws, ladders and emergency tools with full components to be kept ready.
- ix) Temporary masts to be identified and check for availability of complete assembly and ready to use. All the OHE breakdown material like temporary masts, conductors, insulators, fittings shall be loaded in to break down road vehicles and kept ready.
- x) In case of any RC communication/ SCADA failures, switching stations to be identified and manning to be arranged on need basis.
- xi) Generator sets, portable flood lights, lighting arrangements for tower cars, trucks to be kept in good fettle.
- xii) Walkie-talkie sets to be kept in good charging condition,
- xiii) emergency telephones to be kept ready.

3.10 Electrical general services wing of the division shall ensure the following to be in readiness:

- a) Sufficient stock of fuel available to run DG set for 24 hrs at the locations where DG sets are kept.

- b) At least 2 portable DG sets at each depot in good condition.
- c) 4 Nos. of portable weather proof tents including requirement of Electrical and S&T staff.
- d) List of Contractors capable of providing DG sets with operators at site and their telephone numbers and arrangements for deployment at short notice.

3.11 Action to be taken by the Station Master, Loco pilot & Guard and other officials:

- i) Action to be taken by Traffic Officers nominated by DRM in consultation with PCOM, in the case of trains held up en-route or at starting stations due to cyclone.-
- ii) After a cyclone warning is given, the Traffic Officer nominated by the Division will- station himself at an important station and takes decision with regard to diversion and cancellation of trains or organizes transfer of passengers in the event of breaches in the section, in consultation with the superior officers.
- iii) In the case of imminent cyclone threat, the nominated officer will also decide on cancellation of trains running through the cyclone zone and ensure regulation of trains at suitable places where catering arrangements are available for the benefit of the travelling public. Effort should be made to ensure that no passenger train is allowed to be marooned under any circumstances.

v) Action to be taken by Senior Traffic Officer nominated by DRM:

- a. DRM shall depute a commercial officer for opening an enquiry office with a public address system on the platform of the nearest station to be decided by the nominated officer to relay the information regarding the stranded trains, relief operations, transshipments, supply of food packets etc. Necessary care should be taken to avoid creating a scare among the waiting passengers or general public gathered in the area by making the carefully worded announcements .
- b. A commercial Officer of the Division will be available in control Office and he shall plan in consultation with

the S&T department for providing helpline numbers at required locations.

- c. He shall collect information from the site and in consultation with the DRM/ADRM & Sr.DOM / DOM arrange for quick transfer of stranded passengers by arranging buses from the State Road Transport Corporation/ Private Contract Transporters, in case restoration of through traffic is likely to take longer time.
- d. He shall advise about the diversion, cancellation & regulation of trains to central commercial controller and CPRO who will take necessary action for dissemination of the information through various media.
- e. DRM shall make arrangements to post a Medical Officer at Railway stations where trains are stranded and where facilities exist otherwise, he shall approach the District Collector or the local Special police Officer who will make necessary arrangements in any kind of emergency for medical relief and dispersal of passengers belonging to local areas.

3.12 Action to be taken by CPRO:

CPRO will coordinate with affected Divisions and other departments of the Railways in HQs and will organise periodical briefings through public announcements to be made through press and by All India Radio/ Doordarshan/TV channels .

3.13 Action to be taken by PCMD:

On receipt of request from the officers in charge at site, Medical Personnel may be posted/sent to the stations by road where trains are regulated to provide medical and sanitary facilities to the stranded passengers, as well as staff inoculation should be carried out to prevent outbreak of any epidemics.

PCMD will also co-ordinate with the emergency officers at site and take suitable steps as required to meet the situation.

3.14 Action to be taken by PCSTE - Sr. DSTE's of affected division will co-ordinate with other departments of the Railway by providing

telecommunication facilities at site linking Headquarters, Divisions, etc. as per the need. He will maintain co-ordination with HQ for maintenance of voice and Data traffic.

3.15.1 Earthquake:

RDSO has issued detailed guidelines on seismic design of Railway bridges in January 2015 Action to be taken by the field staff post-earthquake with regard to train operations and inspection of track/bridges.

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

Summary of NDMA guidelines on Earthquakes and Floods

Summary of NDMA Guidelines on Earthquakes and Floods Railway Infrastructure	Earthquake Proneness Review	Flood Proneness Review
Railway Track formation (incl. Station yards, bridges/culverts, ROBs/RUMs, etc. Buildings housing signalling gears like RRI, SSI etc. Buildings in open line maintenance work centers like loco sheds, Coaching depots etc. Station buildings Control room, other important office	<p>New construction:-</p> <p>Must be earthquake resistant.</p> <p>Existing Infrastructure</p> <p>-Identify existing railway infrastructure falling under various seismic zones.</p> <p>- Review for earthquake resistant adequacy</p>	<p>New construction:</p> <p>Railway Station building should be located in such a fashion that they are above the levels corresponding to a 100 year frequency or the maximum observed flood levels. Similarly they should also be above the levels corresponding to a 50 year rainfall and the likely subversion due to drainage congestion. Government offices buildings should be above a level</p>

<p>building, etc. High-rise residential buildings, other important residential buildings Railway hospitals.</p>	<p>based on age, foundation and other details. -Retrofit/rebuild to make it earthquake resistant. -Training of Engineers (at various levels). -Associated with design and construction of railway infrastructure.</p>	<p>corresponding to a 25 year flood or a 10 year rainfall with stipulation that all buildings in vulnerable zones should be constructed on columns or stilts. Railway track at levels well above the likely flood levels.</p> <p>Existing Infrastructure:- Co-ordination with flood/rain forecasting agencies to get early warning so as to introduce patrolling. Speed restriction etc. as per the provision in Railway's SR. Inspections of Railway Affecting Works- to be streamlined and timely ensured. Review of waterways for adequacy and alignment and measures to modify, if needed. Status Note on the lessons learnt from the previous flood situations in the past 5 years. Bye-laws for buildings in flood plains. Making existing and new buildings and infrastructure capable of withstanding fury of floods.</p>
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(C) Preparedness of Departments for Natural Disaster.

1. Engineering Department

- i. Shall identify Risk zones prone for natural disasters like floods, cyclones or earthquakes with the help of meteorological department.

- ii. Shall identify major infrastructure like tracks, bridges and buildings and such inventory analysed for its strength to withstand such disasters.
- iii. Shall keep sufficient stock of track materials.
- iv. Shall ensure arrangement of essential items like empty bags, sand, dust, cinders etc. ready to be moved to vulnerable locations in wagons and loose. The examination of wagons shall be ensured from time to time.
- v. Intensify patrolling at vulnerable locations and post stationary watchmen.
- vi. Shall intensify & ensure repair of RAT (Railway Affected Tank) / RAW (Railway Affected Works) with the cooperation of concerned state Govt.

2. Mechanical Department

- i. Shall ensure that ARTs, ARMEs/ SPARMEs are equipped with sufficient tools to handle cutting of trees etc. and availability of portable gen-sets, gas lamps etc.
- ii. Staff of proven calibre to be nominated to man ARTs/ARMEs.
- iii. All road vehicles irrespective of departments to which those belongs, shall be kept in readiness at nominated places with adequate fuel to move men/materials/equipments at a short notice.

3. Medical Department

- i. Shall ensure availability of adequate medicines, first aid materials, disinfectants etc. at health unit/hospitals near the vulnerable places.
- ii. Shall take enough measures to prevent epidemics, in coordination with engineering department for sanitation and disinfection of drainage and public places.

4. Electrical Department

- i. Shall ensure availability of stand-bye power (generators) at strategic locations.
- ii. In electrified area, sufficient stock of relief materials shall be kept.
- iii. Tower wagons with quick mast erection facilities and sufficient spares should be kept ready in road vehicles also (for electrified sections).

5. Telecommunication Department

Shall ensure proper communication with adequate facilities like wireless communication, satellite phones etc along with sufficient batteries to cater to the services for 72 hrs.

6. Operating Department

- i. Requirement of essential staff and their deployment shall be assessed by Sr.DOM of respective divisions.
- ii. SMs of the warned area stations, in co-ordination with assistance respective departments, shall ensure that all stations' equipments like Generators, Emergency lights, VHF sets, First Aid equipments etc. are in good condition.
- iii. SMs will also ensure proper securing of stabled coaches/wagons as per extant instructions.
- iv. PCOM of the Railway will issue instructions regarding regulation, diversion or cancellation of trains in the warned sections with information to CPRO.

7. Commercial Department

- i. Shall alert arrangements to open enquiry offices/helplines at areas likely to be affected.
- ii. Shall ensure arrangement for food, drinking water and other requirements at vulnerable places.
- iii. Arrangement shall be made in co-ordination with operating department for transfer of passengers, if necessary.

8. Security Department

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

9. General

- i. Apart from the above, each PHOD/DRM shall nominate an officer to monitor the warned locations and other arrangements.
- ii. A monitoring cell shall be formed by all departments concerned at Divisional/ Zonal level to ensure proper coordination and planning.

(D) Action Plan for different Exigencies e.g. Earthquake:

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

(E) Man Made Disaster & Post Disaster Management

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

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

Bomb threat/ blasts.

Setting fire to Train.

Tampering with Railway fittings to cause accidents.

Placing of obstructions on track to cause disruption to traffic

1. Bomb threat/Blast:

Person receiving call regarding bomb threat:

Should attempt to gain as much information as possible from the caller ID like devices, time set, location, reason/purpose of the act, dialect mannerism and identity the caller.

- i. The person receiving call should inform higher ups who in turn shall alert the disaster management team (Bomb detection squad).
 - ii. Also, alert police, fire brigade and explosive departments.
 - iii. Pass the information to concerned departments.
 - iv. Take initiative for evacuation from the premises.
 - v. Person noticing a bomb like object or any suspicious object, should bring it to the notice of the nearest available Police officer.
 - vi. Inform Railway Police, RPF, and Bomb detection squad.
 - vii. Ensure all persons are driven away from the spot and avoid unnecessary crowding near the suspected area.
 - viii. Inform control to take further steps of regulating the train services.
 - ix. Wait for clearance from the Police department to restore normal working.
2. Tampering of Railway fittings causing accidents & Placing of foreign particles on track to cause disruption to traffic
- i. A staunch vigil should be kept by introduction of special patrolling over the area as and when warranted with assistance of RPF personnel.
 - ii. Specially trained persons shall be drafted for duty over the area if required.
 - iii. Take immediate photographs in case a tampering is detected and services of forensic experts may be pressed in.
 - iv. Help of DOG squad to be taken for tracing.
3. Radiation Emergency/Personal Injury Involving Radioactive Material Contamination-
- i. Render first aid immediately for serious injuries, as trained.
 - ii. Monitor the injured and remove contaminated clothing and gross personal contamination as deemed fit.
 - iii. Remove and bag all contaminated clothing.
 - iv. Call fire station, bomb squad, and police.
 - v. Skin contamination should be cleaned using mild soap and warm water. Use portable survey meter to monitor for remaining contamination. If not free of contamination, re-wash and re-survey.

- vi. Arrange the disposal of contaminated clothing as per laid down protocols.
4. What to do upon suspected letter/package receipt
- i. Call Police/Fire service/ Bomb squad/Forensic Experts/DOG squad.
 - ii. Handle with care by using hand kerchiefs
 - iii. Don't shake or bump
 - iv. Isolate and look for indicators
 - v. Don't open, smell, or taste
 - vi. Treat it as suspect
 - vii. Remove other railway property nearby and vacate the area.

If Parcel is Open and /or Threat is identified for a Bomb-

- i. Evacuate immediately
- ii. Call police/fire service/ Bomb squad/ Forensic Experts/DOG squad.
Shield yourself from the object.

CHAPTER - 4

DISASTER PREPAREDNESS - AVAILABILITY OF RESOURCES

4.0 Resources Units:

Railways are generally self-reliant in carrying out rescue and relief operations as a result of having a well organized set up including ARMEs / ARTs /SPRMEs. 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 locations, 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 **Khurda, Waltair & Sambalpur** divisions. These have also been available in the website of East Coast Railway (www.eastcoastrailway.gov.in) for ready access and reference.

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 ARME / ART/ SPRME depots and elsewhere within the division.
3. **Resource Unit III** -Railway resources available at ARME/ ART / SPRMV 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 On trains carrying Passengers following resources are available

- i. First Aid Box available with the Guard.
- ii. First Aid Box available with Train Superintendent and in the Pantry Car.
- iii. Fire Extinguishers in Manned Brake Van, Power Cars, AC coaches, pantry cars and Locomotives.
- iv. Portable Telephones, available in Locomotives and with Guard.
- v. Walkie- Talkie and CUG mobile phones with Guard and Loco Pilot.
- vi. Cell Phones /Mobile communications with other Railway employees/escorting staff and passengers.
- vii. Emergency lighting box and stretcher available with the Guard.
- viii. Information collected by Train Superintendent/Travelling Ticket Examiner about Medical Practitioners travelling on the train from the charts.
- ix. Information collected by TS/TTE about Railway Officers travelling on the train from the charts.
- x. Railway Staff travelling on the train - either on duty or on leave as passengers.
- xi. Passengers travelling on the train who can volunteer their help for rescue and relief work.

4.1.2 Non - Railway resources available nearby

- i. Volunteers from nearby villages and towns including NGOs.
- ii. State/Local administrative machinery as available nearby.
- iii. Contractual agencies working/not working with Railway in nearby location.
- iv. State disaster management authority.
- v. Police line (barrack) & Army unit if any.
- vi. Transport facilities and vehicles available at site or passing through nearby manned LC Gates.
- vii. Tractors with trolleys from nearby villages both for transport purposes and for lighting up the accident site.

- viii. Generators from nearby villages for lighting up accident site.
- ix. Station Staff and Local Railway Administration should requisition help from non-Railway sources including NGOs, NCC/NSS volunteers from nearby schools/colleges and Social Organisations before Railways own rescue team arrives.
- x. Railway Board can be requested to requisition the nearest NDRF (National Disaster Response Force) for relief and rescue operation at the time of major Railway disaster through Zonal HQ. (Ref. Director Safety Railway Board letter No. 2003/Safety/DM/6/3, dtd. 09-11-2009).
- xi. Such local networks are most effective in rushing assistance immediately, especially with regard to-

I	Medical succour	V	Lighting arrangements	VIII	Drivers.
II	Additional manpower	VI	Transport services	IX	Boats with boat men
III	Rescue equipments	VII	Fire fighting tools etc	X	Earthmoving equipments
IV	Robotics camera				

4.1.3 Railway resources available nearby

- i. Engineering gangs, Contractual labourers.
- ii. OHE, Signal, Engineering Depot & Mechanical staff available.
- iii. Other resources such as medical facilities, communication facilities from health centres and depots.

4.1.4 Resources at adjoining Stations

- i. Staff available at adjoining or nearby stations.
- ii. Railway resources as given in respective Divisional DM Plans.
- iii. Non - Railway resources as given in respective Divisional DM Plans.
- iv. Resources should be mobilized to send medical team at short notice as given in the respective Divisional DM Plans by road /hiring vehicles.

4.2 RESOURCE UNIT - II

4.2.1 SPARMEs, ARMEs, ARTs with 140/120 T cranes are stabled at nominated stations. Their locations are given in this chapter.

4.3 RESOURCE UNIT - III

4.3.1 Location of ARMEs, ARTs /SPRMEs with 140/120 T cranes based on adjoining Zones/Divisions are given in this chapter.

4.3.2 As per Jurisdiction chart of which ARMEs/ARTs /SPRMEs the same to be requisitioned from adjoining Zones/Divisions is given in this chapter.

4.3.3 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.

4.3.4 Copies of DM Plans of adjoining divisions should be available with the Divisional Control Offices.

4.4 RESOURCE UNIT - IV

4.4.1 Non-Railway resources available within the division and included in the Divisional DM Plan (Local resources can be seen at Chapter -26 as Assisastace from NON- RAILWAY RESOURCES)

4.4.2 Non-Railway resources available outside the Division are included in the Divisional DM Plans of adjoining Zones/Divisions. Please see Annexures.

4.5 ACCIDENT RELIEF MEDICAL EQUIPMENT (ARME)

4.5.1 ARMV Scale-I - Equipment stored in Special Medical Relief Vans stabled in separate sidings;

- i. Location of ARMV Scale-I are at 4.6
- ii. One key of the Van is available with the SSE(C&W) or Station Master in a glass fronted case. One key of drive cab, in case of SPARME, is available with Crew controller of base station.
- iii. Other key is with the doctor in charge of the ARME.

- iv. Medicines and equipments are provided as per Rly. Board norms as contained in Indian Railway medical Manual-2000.
- v. Keys of all locks inside the ARME are also in duplicate. One set of keys is kept with the Medical Officer in charge of ARME and the other set of keys are kept in a glass-fronted case inside the ARME.

4.5.2 Working out of ARME/ SPRME & ART:

- i. The target time for turning out of ARME/SPARME is 20 minutes after sounding hooter where there is double exits and 30 minutes where there is single exit. (Now-a-days almost all double exit)
- ii. The Accident Relief Train (ART) must leave the based station to accident site within 30 minutes by day and 45 minutes by night after sounding hooter.

4.6 Accident Relief Medical Equipments over ECoR

Divn	Location	Scale	Facilities Available
KUR	KUR	Scale-I	3 Coach SPARME with higher capacity HRD equipment & Plasma cutting equipment.
	PSA	Scale-I	2 Coach Conventional ARME with HRD equipment & Plasma cutting equipment
	BHC	Scale-I	2 Coach Conventional ARME with higher capacity HRD equipment & Plasma cutting equipment.
	CTC	Scale-II	
	KDJR	Scale-II	
	BAM	Scale-II	
	TLHR	Scale-II	
SBP	SBP	Scale-I	3 Coach SPARME with higher capacity HRD equipment & Plasma cutting equipment.
	KBJ	Scale-II	
	BLGR	Scale-II	
	MSMD	Scale-II	
	TIG	Scale-I	2 Coach Conventional ARME with higher capacity HRD equipment & Plasma cutting equipment.
VSKP	VSKP	Scale-I	3 Coach SPARME with higher capacity HRD equipment & Plasma cutting equipment.
	KRPU	Scale-I	3 Coach SPARME with higher capacity HRD equipment & Plasma cutting equipment.

	RGDA	Scale-I	3 Coach SPARME with higher capacity HRD equipment & Plasma cutting equipment.
	NWP	Scale-II	
	ARK	Scale-II	
	KRDL	Scale-II	
	JDB	Scale-II	
	LKMR	Scale-II	
	VZM	Scale-II	

NOTE: POMKA -Available in all health units and Hospitals of ECoR.

4.6.2 ARMEs/SPARMEs of adjoining Railways

S.E. Railway		S.E.C.Railway		S.C. Railway	
Station/Div.	Class	Station/Div.	Class	Station/Div.	Class
BNDM/CKP	Scale-I	BIA/R	Scale-I	RJY/BZA	Scale-I
DPS/CKP	Scale-I	BSP/BSP	Scale-I	BZA/BZA	SPARMV
JSG/CKP	SPARME				
KGP/KGP	SPARME				

4.7.1 Location of Accident Relief Trains & BD Cranes over East Coast Railway:

Divn	Location	Class	Facilities Available
KUR	KUR	A	140 T Diesel BD Crane with HRE Equipment
	BHC	B	With Hydraulic Re-railing Equipment
	PSA	B	With Hydraulic Re-railing Equipment
	TLHR	B	With Hydraulic Re-railing Equipment
SBP	SBP	A	140 T Diesel BD Crane with HRE Equipment
	KBJ	A	140 T Diesel BD Crane with HRE Equipment
WAT	VSKP	A	140 T & 120 T Diesel BD Crane with HRE Equipment
	RGDA	B	With Hydraulic Re-railing Equipment (140 T BD Crane will be stationed at RGDA shortly)
	KRPU	A	140 T+120 T Diesel BD Crane with HRE Equipment
	KRDL	A	120 T Diesel BD Crane with HRE Equipment

4.7.2 Speed of ART : The rolling stock in the standard composition of ART as mentioned above are fit to run at a maximum speed of 100 kmph except that the maximum permissible speed of 120 T Diesel BD crane is **40** kmph.

4.7.3 Location of C-Class ART/ Road Mobile Tool Van (RMTV) :

Divn	Location	Class	Facilities Available
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KUR	PUI	RMTV	With Hydraulic Re-railing Equipment
	PRDP	C	With Hydraulic Re-railing Equipment
	TLHR	RMTV	With Hydraulic Re-railing Equipment
WAT	VSKP	RMTV	With Hydraulic Re-railing Equipment

4.7.4 Position of ARTs in neighbouring Division / Railways

S.E. RAILWAY

SEC RAILWAY

Sn.	Station/Div.	Class	Facilities	Sn.	Station/Div.	Class	Facilities
1.	BNDM/CKP	'A'	140 T Diesel Crane with Lukas Hydraulic Re-railing equipment.	1.	BIA/R	'A'	ART with MFD & 140 T Diesel Crane
2.	JSG/CKP	'B'	Self-Propelled ART with Lukas Hydraulic Re-railing Equipment.	2.	BSP /BSP	'A'	ART with Re-railing equipment & 140 T Diesel Crane
3.	KGP/KGP	'A'	140 T Diesel Crane with Re-railing equipment				

ARTs of S.C Railway

Sl. No	Station/Div.	Class	Facilities
1.	RJY	'B'	ART with HRE
2	KZJ	'A'	ART with MFD & 140 T Diesel Crane
3	SC	'A'	ART with HRE & 140 T Diesel Crane

4.7.2 NAME, CONTACT NUMBER & EMAIL ADDRESS OF BD IN-CHARGES OF ECoR

Sl. No	Div	Location of ART/ ARME	Name of ART In-charge	Name of ARME/SPARME In-charge	Name of ART+140T Crane In-charge
1	KUR	KUR	Sri.B.K Mohanta, Sr. DME/Frt. Mob: 8455887403 Sri. B.Pandey, SSE (C&W) Mob-8455887418 Email Id:	Sri.B.K Mohanta, Sr. DME /Frt. Mob: 8455887403 Sri M S Guhiya, JE Mob-7328806350 Email Id: Nil	Sri.B.K Mohanta, Sr. DME/Frt. Mob: 8455887403 Sri S.S Sahoo, SSE Mob-8249944207 Email Id: Nil

			bhupendra 1972@gmail		
2	KUR	PSA	Sri.B.K Mohanta, Sr. DME/Frt. Mob: 8455887403 Sri. Amit Kujur ,SSE Mob: 8114388305 Email Id: ssecwecorpsa@gmail. com	Sri.B.K Mohanta, Sr. DME/Frt. Mob: 8455887403 Sri Amit Kujur, SSE Mob: 8114388305 Email Id: ssecwecorpsa@gmail. com	-
3	KUR	BHC	Sri.B.K Mohanta, Sr. DME/Frt. Mob: 8455887403 SSE (C&W) Mob:8455887456 Email Id: sseartbhc@gmail.com	Sri.B.K Mohanta, Sr. DME /Frt. Mob: 8455887403 SSE (C&W) Mob:8455887456 Email Id: sseartbhc@gmail.com	-
4	KUR	TLHR	Sri.B.K Mohanta, Sr. DME /Frt Mob: 8455887403 Sri U.C. Gope, SSE Mob: 8455889447	-	-
5	SBP	SBP	Sri K. Sudarsan, CDO/SBP Mob: 8455886401 Sri J. Ghosh, SSE (C&W) Mob:8455886419 Email Id: jagannathghosh100gm ail.com	Sri K. Sudarsan, CDO/SBP Mob: 8455886401 Sri A.Mishra, SSE(C&W) Mob: 8455886420 Email Id: sukumarsbp65@gmail .com	Sri K. Sudarsan, CDO/SBP Mob:8455886401 Sri S.Mishra, SSE (C&W) Mob:8455886417 Email Id:
6	SBP	TIG	-	Sri A UeKy,ADME/OP Mob:8455886403 Sri B.S Naik,JE/C&W Mob:8455886477 Email Id:Nil	
7	SBP	KBJ	Sri A UeKy, ADME/OP Mob:8455886403 Sri D Bhoi, SSE (C&W) Mob:8455892322 Email Id:debananda98@gmi al.com	-	Sri A UeKy, ADME/OP Mob:8455886403 Sri K.A. Reddy,SSE/C&W/ KBJ Mob:8455892321 Email Id:
8	WAT	VSKP	S.Das, DME/WAT Mob:8978080401 Sri P J J Raju Mob:8978080475	S.Das,DME/WAT Mob:8978080401 Sri T Ravi Teja, SSE/C&W	S.Das, DME/WAT Mob:8978080401 Sri R. Ravi Sanker,

			Email Id:ssebdwatecor@gmail.com	Mob:8978080475 Email Id: Nil	SSE/C&W Mob:8978080470 Email Id: ssebdwatecor@gmail.com
9	WAT	RGDA	N.N Meena, ADME/WAT Mob:8978080405 Sri G. Srinivas Rao, SSE Mob: 8455893561	N.N Meena, ADME/WAT Mob:8978080405 Sri A. Srinivas Rao,SSE Mob:8455893562	-
10	WAT	KRPU	N.N Meena, ADME/WAT Mob:8978080405 Sri Debabrata Sahu, SSE Mob:8455890109 Email Id: Nil	N.N Meena, ADME/WAT Mob:8978080405 Sri Varun Kumar, SSE Mob:8455890119 Email Id:Nil	N.N Meena, ADME/WAT Mob:8978080405 Sri Debabrata Sahu, SSE Mob:8455890109 Email Id:Nil
11	WAT	KRDL	N.N Meena, ADME/WAT Mob:8978080405 Ch. Nani Babu, JE Mob:9493798999 Email Id: Nil	-	N.N Meena, ADME/WAT Mob:8978080405 Sri Srinivas Rao, SSE Mob:9752447145 Email Id:Nil

GOLDEN HOUR MOVEMENT OF SPARME/ARME

(A) LEFT OVER SECTIONS COVERED THROUGH ARME Scale-II (POMKA)

Division	Scale-II Base	Section	KM
KUR	TLHR	MHDB-ANGL	56
	CTC	GRKN-PRDP	39
	BAM	RBA-CAP	26
WAT	KRDL	KRDL-KWGN	71
	JDB	JDB-KWGN	79
		JDB-DIR	57
	ARK	DPC-TXD	75
KUR	TLHR	SRGP-ANGL	59
SBP	MSMD	KRAR-ARN	44

(B) Following sections will be covered through local and nearby hospitals/clinics/private ambulance service

Division	Place	Section	KM
WAT	PLH	PLH-GNPR	51
SBP	BWIP	DPUR-JNRD	37

D) SECTIONS COVERED BY SPARME/ARME

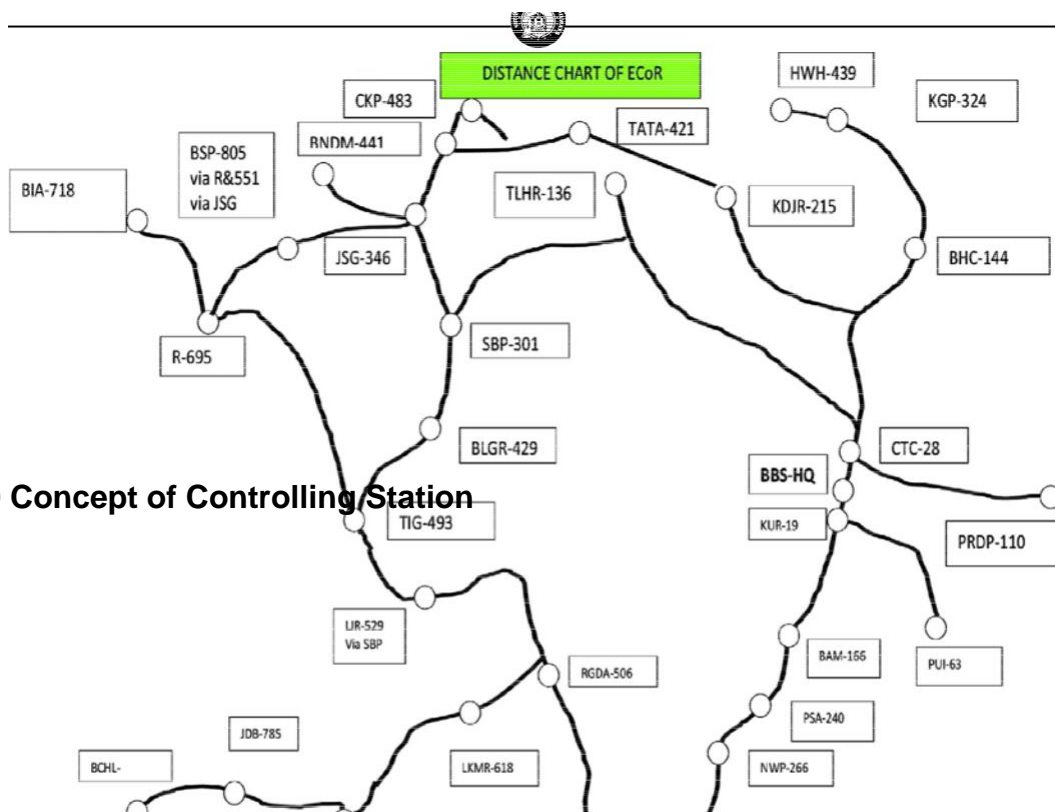
Division	Base	Type of Equipment	Scale	Beat/Jurisdiction	KM
WAT	WAT	SPARMV	Scale-I	VSKP-SGDM (Incl)	104
				VSKP-KMX (Incl)	93
				VSKP-TXD (Incl)	78
	RGDA	SPARMV	Scale-I	RGDA-KMX (Excl)	93
				RGDA-LLGM (Incl)	61
				RGDA-LJR (Incl)	92
	KRPU	SPARMV	Scale-I	KRPU-LKMR (Incl)	62
				KRPU-DIR (Incl)	48
				KRPU-DPC (Incl)	62
KUR	KUR	SPARMV	Scale-I	KUR-PUI (Incl)	44
				KUR-RBA (Incl)	99
				KUR-NGMP (Incl)	97
				KUR-MHDP (Incl)	95
				KUR-GRKN (Incl)	91
				KUR-NYGT (Incl)	65
	BHC	ARME	Scale-I	BHC-KIS (Incl)	100
				BHC-TMKA (Incl)	75
	PSA	ARME	Scale-I	PSA-CAP (Incl)	95
				PSA-PLH (Incl)	64
				PSA-SRDM (Incl)	98
SBP	SBP	SPARMV	Scale-I	SBP-SRGP (Incl)	96
				SBP-JSG (Excl)	47
				SBP-LSX (Incl)	99
	TIG	ARME	Scale-I	TIG-KHPL (Excl)	9365
				TIG-DPUR (Incl)	98
				TIG-KRAR (Incl)	100
				TIG-BMCK (Incl)	

Beat Chart of ARTs over ECOR

Division	Station	Type of Equipment	Class of ART	Type Capacity /	Beat / Jurisdiction	Distance in Km
KUR	KUR	ART	A	140 T Crane	KUR-PSA (Incl)	220
					KUR-NYGT (Incl)	65
					KUR-PUI (Incl)	44
					KUR-PRDP (Incl)	130
					KUR-TLHR-ANGL (Incl)	152
					KUR-BHC (Incl)	162
					KUR-RJGR-KIS	89

					KUR-JRLI (Incl)	281
	BHC	ART	B	BD Van with HRE	BHC-JRLI	222
					BHC-KIS-RJGR (Incl)	129
	TLHR	ART	B	BD Van with HRE	TLHR-ANGL (Incl)	30
					TLHR-RJGR (Excl)	93
	PSA	ART	B	BD Van with HRE	PSA-KUR (Excl)	220
SBP	SBP	ART	A	140 T Crane	SBP-ANGL (Excl)	156
					SBP-JSG (Excl)	47
					SBP-BLGR-BHPI (Incl)	138
	KBJ	ART	A	140 T Crane	KBJ-LAE (Incl)	141
					KBJ-SPRD (Excl)	154
					KBJ-LJR-JNRD (Incl)	133
					KBJ-TIG-BLGR (Excl)	94
WAT	VSKP	ART	A	140 T Crane	VSKP-PSA (Excl)	225
					VSKP-PSA-GNPR (Incl)	268
					VSKP-RGDA (Incl)	186
				120 T Crane	VSKP-SMLG (Incl)	119
	RGDA	ART	B	BD Van with HRE	RGDA-VZM (Excl)	124
					RGDA-TKRI (Excl)	89
	KRPU	ART	A	140 T Crane	KRPU-RGDA (Excl)	173
					KRPU-SMLG (Excl)	97
					KRPU -JDB (Incl)	106
	KRDL	ART	A	120 T Crane	KRDL-JDB (Excl)	150

4.9 Concept of Controlling Station



The Station Manager of nominated Controlling Station should immediately, on receiving information of an accident, reach the site with sufficient staff drawn from all departments at his station, and take all the necessary steps for Rescue & Relief.

It should be made clear to everybody that staff of all departments must follow the directions of the Station Manager of the controlling station and render all help and assistance necessary for tackling the disaster. Following is the list of controlling stations in ECoR.

TELEPHONE NUMBERS OF HELP LINE BOOTHS AT IMPORTANT STATIONS OF ECoR

Div	Station	STD	Tele.No.	CUG of station
K U R	BHC	06784	230827	8455889900
	JJKR	06726	221301	8455889906
	CTC	0671	2527865	8455889917
	BBS	0674		8455889922
	KUR	0674		8455889925
	BALU	06756	220412	8455889934
	BAM	0680	2201431	8455889942
	PSA	08945	241039	0897881006
	PURI	06752	225922	8455891891
	DNKL	06762	228529	8455889952
	TLHR	06760	240231-	8455889958
	ANGL	06764	232731-	8455889960
	PRDP	06722	229434	8455891866
	SKND		-	8455891870
	KDJR	06766	251812	8455891882

D i v	Station	STD Code	Tele. No.	CUG of station
S B P	RGL	0663	2560699	8455892814
	SBP	0663	252122	8455892816
	HKG	0663	2113095	8455892817
	BRGA	06646	230122	8455892820
	BLGR	06652	232620	8455892825
	RAIR	06644	253167	8455892845
	BONA	06763	255078	8455892849
	TIG	06655	220524	8455892831
	KSNG	06670	222241	8455892832
	AMB	06863	244800	8455892837
	MNGD	06863	245118	8455892839
	KBJ	06657	220484	8455892830
	KRAR	06678	221236	8455892865
	MSMD	07723	222068	9752416045

D I V	Station	STD Code	Tele. No.	CUG of station
W A T	NWP	08945	249728	8978081948
	CHE	08942	287222	8978081951
	VZM	08922	224240	8978081958
	SCMN	0891	2010662	8978280918
	VSKP	0891	2746268	8978280920
	PLH	-	-	-
	PVP	08963	221038	8978081976
	RGDA	06856	222023	8455893700
	GNPR	-	-	-
	KRPU	06852	251442-	8455893911
	SUP	08966	265221	8978081981
	ARK	08963	249632	8978081984
	JYP	06854	231395	8455893916
	JDB	07782	222408	9752413950
	VBL	08944	254851	8978081974
	BCHL	07857	230013	-
	(ARM)VSPS	08912	885060	-

The Station Managers of these stations shall prepare a list containing particulars of all departments with respective resources available at their disposal. Nominated SMRs shall on receipt of the information of accident or disaster shall immediately proceed to the spot with resources available at his disposal. He shall maintain a log book duly containing all the particulars of all the activities at the accident/disaster spot.

4.10 Sounding of Hooter:-

	Total No. of blasts	Duration of each blast	Gap between 2 consecutive blasts
(i) Relief Train with ARME/SPARME	5	60 seconds	10 seconds
(II) Ordering of Break Down	4	60 seconds	10 seconds
(iii) Relief Train without ARME	3	60 seconds	10 seconds
(iv) Ordering of Tower Wagon	1	120 seconds Continuously.	Continuously.

Hooter may be tested at regular intervals at base stations daily.

The SSE(G)/Electrical or any other official in-charge of the 'Hooter' is responsible for proper maintenance of it and to keep a trained staff ready round the clock for sounding the hooter at once on receipt of orders from train ordering officials.

CHAPTER-5

DISASTER RESPONSE - INSTANT ACTION TEAM

5.1 INSTANT ACTION GROUP

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 action to be taken.

The assigned role of members of the Instant Action Group is enlisted under activity unit I. 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.

The Instant Action Group comprises of:

The Guard, Crew, TS, TTE, AC coach attendant, RPF and other staff on duty by the train. Railway servants ON/OFF duty / as passenger by the train.

Doctors and other volunteer travelling by train. Railway staff working at site.

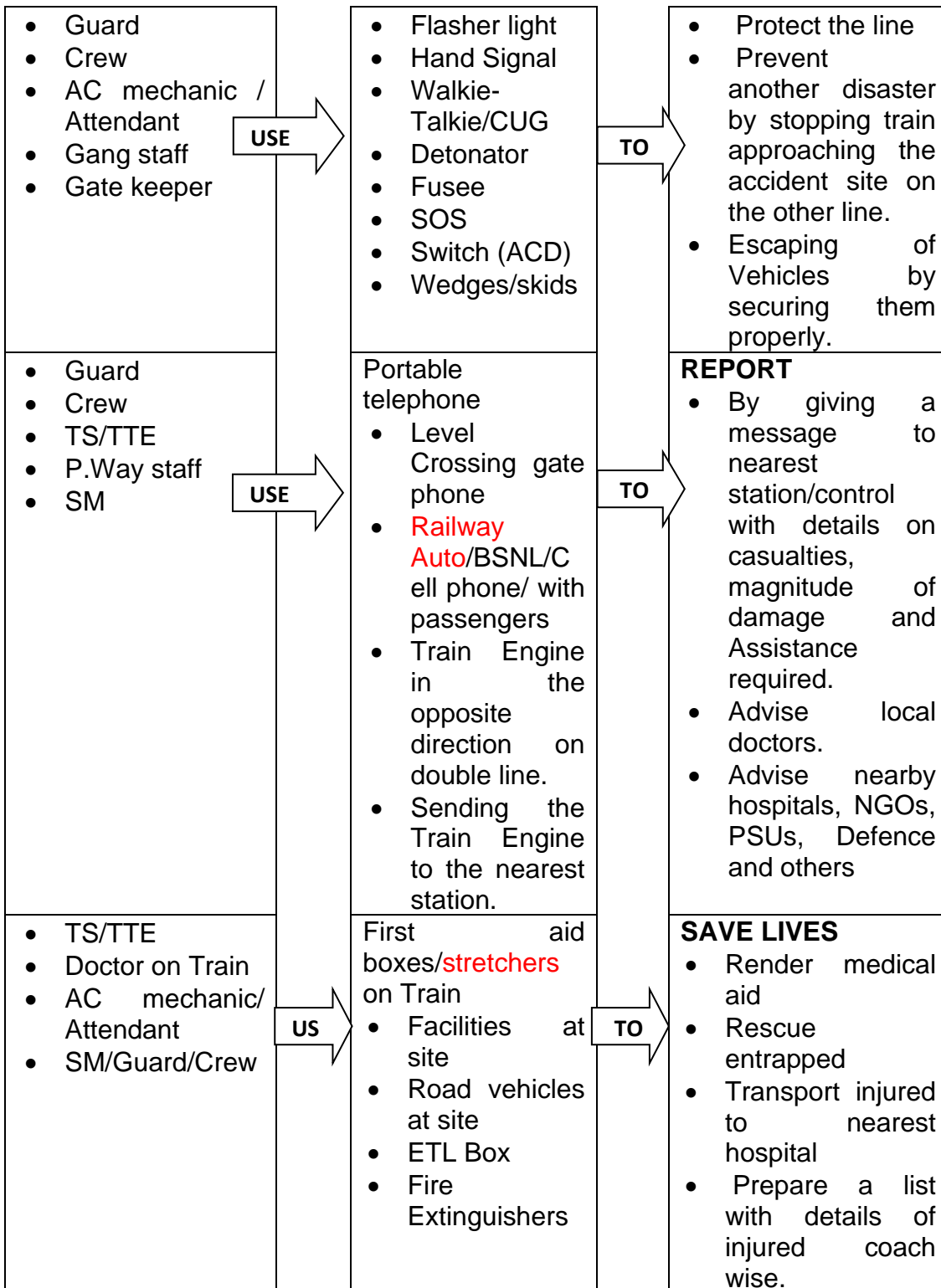
Non-Railway resources available at site.

GRP staff travelling on the affected train on duty.

Passenger travelling on the train who volunteer for rescue and relief work. 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.

5.2 SIMULTANEOUS ACTION PLAN



5.3 The concept of Golden Hour and duties of INSTANT ACTION GROUP:

"If a critical trauma patient is not given definite medical care within one hour from the time of accident, 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"

Render definite medical care within Golden Hour.

Stop Bleeding and restore blood pressure.

Persons under shock shall be immediately treated for relief from shock.

Transport the casualties to the nearest hospital and further to specialist hospitals.

5.4.DUTIES OF INSTANT ACTION TEAM

5.4.1 Guard

- i. Note down the time of the accident and the location.
- ii. Switch on the Amber Light, if provided, in Flashing Tail Lamp, in the rear of brake van.
- iii. Inform Loco Pilot through walkie-talkie set / CUG mobile phone about the extent of accident from the rear side.
- iv. Inform Station Master on walkie-talkie set / CUG mobile phone if possible.
- v. Protect adjacent line/lines first if required and then the line on which the accident has taken place as per G&SR 6.03.
- vi. Apply hand brakes in the brake van and wagons (if goods train) to secure the train and prevent escaping of vehicles.
- vii. Make a quick survey of magnitude of accident and roughly assess casualty, damage and assistance required.
- viii. Send information through quickest means (C U G mobile phone/portable phone) to Control Office and SMs on either side of the block section for this purpose.

- i. Walkie-talkie communication provided with stations should immediately be used.
 - ii. Otherwise field portable telephone should be used.
 - iii. If a train comes on the other line, which is not blocked, the same should be stopped and information sent through the Loco Pilot.
 - iv. Assistant Loco Pilot may be sent to the next station to convey information of the accident. In case of no communication is established with nearby station and control.
 - v. If all of the above fail, one of the Railway staff on duty on the train should be sent on foot to the nearest station.
- ix. Utilize Emergency Train Lighting box to facilitate medical aid.
 - x. Render First Aid & send patients to nearby hospitals with the help of TTEs & RPF/GRP.
 - xi. Coordinate to call for Doctors and seek their assistance.
 - xii. Seek assistance of Railway staff and other volunteers from train to rescue injured or entrapped passengers.
 - xiii. Direct Railway staff and other volunteers from train for attending to injured.
 - xiv. Ensure that field telephone is constantly manned by a Railway staff, if available or put some volunteer to man the telephone.
 - xv. Arrange protection of passengers' belongings and Railway property with the help of Railway staff, volunteers on train, RPF and GRP.
 - xvi. Stop running trains on adjacent line and utilize resources on that train.
 - xvii. In electrified section if OHE is affected, take steps to switch off OHE supply by informing station, control and TPC.
 - xviii. Record evidence or statements, if any given by passengers.
 - xix. Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.

xx. Log all activities.

xxi. Do not leave the spot unless relieved by a competent authority.

5.4.2 Loco Pilot

- i. Note down the time of the accident and location.
- ii. Switch ON the 'Flasher light' of the locomotive and give 4 short whistles.
- iii. Inform Guard on walkie-talkies set / CUG mobile phone about the extent of accident from front and any damage in OHE on the same line and adjacent lines.
- iv. Inform Station Master on walkie-talkie set / CUG mobile phone and give above details.
- v. Protect the adjacent line, immediately, and the train in front as per G&SR 6.03.
- vi. Take necessary action to keep the loco safe by applying SA-9,A-9 and hand brake.
- vii. Take necessary action to prevent Loco/Vehicles/Wagons from rolling down by providing skids/wedges.
- viii. Make a quick survey of magnitude of accident and roughly assess casualty, damage and assistance required by sending ALP.
- ix. Send information through quickest means (C U G phone) to TLC TPC Control Office with the details and get OHE dead, if required.
- x. Walkie-talkie communication provided should be used with stations immediately.
- xi. Otherwise field telephone should be used.
- xii. If a train comes on the other line, which is not blocked, the same should be stopped and information should be sent through the Loco Pilot & putting flasher light on.
- xiii. Assistant Loco Pilot may be sent to the next station to convey information of the accident, if no communication is established with nearest station or control.
- xiv. Render all possible assistance to the Guard.
- xv. Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.

xvi. Log your activities.

xvii. Do not leave the spot unless you are relieved by a competent authority.

5.4.3 Train Superintendent/Travelling Ticket Examiners

- i. Preserve reservation charts of each coach containing names of passengers who actually travelled and in which berth number.
- ii. Avail services of Doctors travelling by the train and render Medical Aid to injured passengers.
- iii. Open and man help line.
- iv. List the 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 or Doctors reach at site by road.
- v. Prepare a separate list of dead passengers with address and ticket particulars, if available.
- vi. Take assistance of volunteers from passengers and local public at site.
- vii. Transport injured passengers by road vehicles, if available, to the nearest hospital.
- viii. Inform stranded passengers about alternative transport arrangements being made.
- ix. Record evidences or statements volunteered by passengers/public/others at site.

5.4.4 AC Mechanic/Attendant

- i. Switch off the power supply in AC coaches, Power cars & Pantry cars to avoid short-circuiting.
- ii. Assist the TS/TTEs in their duties in rendering first aid and other assigned duties at the accident site.

5.4.5 RPF and GRP Staff

- i. Rush to the accident involved coaches and try to rescue as many passengers as possible and help the TTEs.
- ii. Render First Aid to the injured.

- iii. Arrange to shift injured persons to the nearest hospital by arranging local transport.
- iv. Protect luggage of passengers and Railway property.
- v. Preserve all clues and evidences regarding probable cause of the accident and ensure that those do not get disturbed/destroyed.
- vi. Also inspect the site of accident from point of view of external interference or sabotage and protect the clues accordingly without disturbing the clues.

5.4.6 Duties of Railway Staff travelling on the accident affected train

- i. Whenever a train is involved in a serious accident with casualties/injuries to passengers, all Railway staff travelling on the train either on duty or on leave are deemed to be on duty with immediate effect.
- ii. Under no circumstance should any of them leave the accident site unless and until Divisional Officers arrive, take over charge of rescue and relief operations, and permit them to leave.
- iii. Railway staff on train/at site shall volunteer themselves to render assistance and report to Conductor/TTEs/Guard of the Train.
- iv. The Senior Most Officer travelling on the train will assume charge as Officer-in-charge Site (OIC Site).
- v. Conductor of the train should check the chart and inform the railway officers travelling on the train about the nature of accident and the extent of damage and repercussion including suspected causalities.
- vi. Railway Officers/ staff will be travelling in AC coaches; and most probably in the HQ(EQ) quota section of the coach.
- vii. In the absence of any officer, the TS or senior most TTE or the Guard will discharge duties listed out for Officer In-Charge at Site.
- vi. Similarly, some other railway staff may be travelling in Sleeper coaches and probably in the Hqr quota section of the coach. The HQ section of a Sleeper coach is located in the center of the coach (berth nos. **33-42**)

5.4.7 Duties of Officer In-Charge at Site (Immediately after the accident)

The senior most staff/officials travelling in the train is termed as OIC at Site. He may be Train Superintendent or senior most TTE, if, no officer travelling in that train. He should

- i. Note down the time of accident.
- ii. Ensure protection of lines with the help of Guard and Loco Pilots.
- iii. Ensure reporting of accident to nearest Station/Control.
- iv. Roughly assess the extent of damage and likely number of casualties.
- v. Collect Railway staff and volunteers from amongst the passengers and form different groups. Each of these groups should be assigned work as detailed at Chapter - 6.
- vi. Maintain a log of events.
- vii. Continue to discharge duties of OIC at Site, till Divisional Officers arrive and take over charge of the situation.
- viii. After Divisional Officers arrive, fully brief the DRM/ADRM and hand over charge to them.
- ix. The on board OIC Site should ensure issue of a detailed message with following information before leaving the site of the accident.
 - a. Time & Date of accident.
 - b. Extent of damage of rolling stock.
 - c. Location Km. & between stations.
 - d. Assistance required.
 - e. Train number and description.
 - f. Condition of the adjacent line, if any.
 - g. Nature of accident.
 - h. Whether OHE is involved.
 - i. Approximate number of killed/injured.
 - j. Damage to track , signaling & OHE

On arrival at accident site, Divisional Railway Manager/Additional Divisional Railway Manager will discuss with OIC Site and will issue suitable instructions to the rescue groups & their leaders regarding use of available resources in rescue operation till arrival of the accident relief train and also take a decision regarding the requirement of additional ARTs/ BD cranes and JCBs/Bulldozers.

5.4.7(a) DUTIES OF MEMBERS OF INSTANT ACTION TEAM (IAT) - TILL ARRIVAL OF DIVISIONAL OFFICERS

- i. If a person is bleeding and losing blood, or if he is unconscious, then in that case quick action is required keeping "Golden Hour" in mind.
- ii. Action should be taken as mentioned in Chapter - 4.
- iii. Persons trained in First Aid may be identified to take specialized action like 'Cardio Pulmonary Respiration'.
- iv. If the door is open and is accessible, then uninjured passengers should be helped to come out through the door.
- v. In AC coaches the window panes/glasses should be broken open in order to let in fresh air for the occupants, and thereafter to evacuate them.
- vi. Non-AC coaches have one emergency exit window on each side. The position of this emergency window is 5th from the left when facing the line of windows from inside the coach. They are opposite berth nos. 23 and 57. In case the door is locked and jammed, try and open these windows so that some of the uninjured passengers can come out through the emergency exit.
- vii. Special care should be taken while evacuating the old, infirm/ill and children in order to ensure that they are not separated from their family members as far as possible.
- viii. Extrication of critically injured should be done under medical supervision as far as possible as they become available.
- ix. In case medical supervision is not available, the critically injured passengers should be made to lie down on a bed sheet and thereafter taken out by 4 persons holding the four corners in open air. (Bed sheets will be available in AC coaches).
- x. Passengers who are bleeding from open cuts should be provided first aid immediately, then tied up with strips of clothes so as to reduce bleeding as far as possible if cannot be stopped completely.
- xi. It is better not to take out the luggage from inside the coaches at the first instance, for two reasons. Firstly, passengers both injured and uninjured should get preference in this evacuation process. Secondly, it may be safer for the luggage to be left inside where there are fewer chances of being stolen or pilfered.
- xii. After passengers have been evacuated from coach, cross check with the reservation chart and against the name of each passenger note down as to whether the passenger is injured or not.

- xiii. After all passengers have been evacuated, water and eatables can be taken out gradually.
- xiv. Building up confidence of injured passengers by talking and taking care at regular intervals.
- xv. After helping to evacuate all passengers from the reserved coaches, take care of the unreserved coaches and provide similar help to those passengers also.
- xvi. Railway officials from Divisional Head Quarter generally arrive at the site of the accident as early as possible, depending on the distance of the accident site from the Divisional Head Quarter. On arrival, the site may be handed over to Senior most officer accordingly with the log of events.
- xvii. Grievously injured passengers who are bleeding or those who are unconscious require immediate hospitalization. All efforts should be made by contacting local people to arrange vehicles so that they can be shifted to the nearest hospitals.

b) DUTIES OF THE INSTANT ACTION TEAM (IAT) - IN CASE OF A FIRE

- i. In case of fire, pull the Alarm Chain and stop the train immediately.
- ii. Conductor/TTEs/AC Mechanis and attendants try to put out the fire before it becomes a big blaze by using either ater/blankets/fire extinguishers available with Guard's lobby, AC coaches, pantry car and Locomotive.
- iii. AC mechanics/Attendants/Power Car staff should switch –off Power supply in AC coaches immediately to avoid short circuiting.
- iv. Isolate the coach/coaches caught fire and separate them from rest of the coaches by hand shunting with the help of railway staff and volunteers from the travelling public so that the fire does not engulf other coaches and damage can be minimized and localized.
- v. RPF & GRP will rush to the fire affected coaches and instruct passengers to go to the other end of the coach, which is away from the fire, and if possible cross over to the next coach through the vestibule and will assist conductor and Ticket checking staff and discharge assigned duties and help in getting the affected coaches vacated.

- vi. Insist that passengers should save themselves first and not to bother about their luggage which can be retrieved later on.
- vii. RPF and GRP may ensure that no passenger lies down on the floor. After train has stopped, passengers should come down from the coach immediately.
- viii. Building up confidence of injured passengers by talking and taking care at regular intervals.
- ix. More people expire due to suffocation from smoke rather than due to actual burning. Advise passengers to take a cloth, wet it by using their drinking water and cover their nostrils and also try to make areas less populated.
- x. Guard will lodge the FIR with the help of RPF & GRP.

5.4.8 DUTIES OF OFFICER-IN-CHARGE(OIC) at SITE - TILL ARRIVAL OF DIVISIONAL OFFICERS

Having formed different groups consisting of available Railway staff on the train and volunteers from amongst passengers, the rescue and relief work should be started in right earnest. Once the rescue and relief work by the Instant Action Team has got underway, the OIC site should then enlist the help of First Responders i.e. the local volunteers of the nearby villages.

a) Locating nearby villages;

- i. Locate nearby villages through internet on mobile if network is available.
- ii. In most cases, villagers turn up on their own on hearing the unusual loud sound .
- iii. Otherwise, try and see if any light or any other signs from the village are visible.
- iv. In case none of the above is possible, then speak to either the control office or the nearest station and find out the location of nearby villages as also their general direction.
- v. Location of nearby villages as also their general direction will be available in the Divisional DM Plans.
- vi. Having ascertained the general location of nearby villages, send messengers (preferably Railway staff) to inform villagers and seek their assistance.

5.4.8(b) Locating the nearest manned level crossing gate;

- i. The train Loco Pilot is the best and fastest source of information regarding location of the nearest manned level crossing gate in either direction.

- ii. Send a messenger (preferably a Railway staff) to the gate for contacting the gateman.
- iii. In most cases, the gateman will be able to give location of nearby villages.
- iv. The messenger should then try and stop any passing vehicle and go to the nearby village, inform villagers and seek their assistance.

5.4.8(c) Organizing assistance from local people available in nearby villages;

- i. Villagers should be asked to make an announcement from their loud speaker (generally available in the local Temple, Mosque, Gurudwara, Church etc). Informing others regarding the accident including NGOs.
- ii. Everybody should be asked to rush to the accident site with following:
 - a. Tractor trolleys (both for transportation as also for general lighting).
 - b. As many cutting appliances/equipments, hammers, chisels etc. as are available.
 - c. Ropes , Ladders and local cots.
 - d. If doctors of Para-medical staff are available in the village they should also be requested to attend the accident site.
 - e. The messenger should stay back and try and organize opening of a big building (preferably a school) and its cleaning for sheltering of injured passengers and / or preservation of dead bodies.

5.4.8(d) Duties of Gang staff

- i. On double/multiple lines stop the train approaching obstructed line if any by showing hand danger signal.
- ii. Ensure that the track alignments or lines are not disturbed.
- iii. Report to Site Manager and assist in rescue/restoration.
- iv. Assist in extricating the injured/dead from coaches and transport them to hospitals.

5.4.8(e) Duties of Gatekeeper

- i. Inform nearest Station Master about the accident immediately and stop train movement on double/ multiple lines.
- ii. Affix banner flags on adjacent and multiple lines in case of obstruction on lines.
- iii. Keep gate closed if the train has not cleared the gate.
- iv. Collect men and material available nearby and direct them to site.
- v. Avail the services of road vehicles if any, waiting/passing through LC Gate.

5.5 DUTIES OF DISASTER RESCUE TEAM

5.5.1 Station Manager

- i. Inform Controlling SM to rush to site along with nominated team of staff of various departments.
- ii. Arrange for protection of affected line/adjacent lines/multiple lines.
- iii. Report the accident to Controller/Station Master at the other end.
- iv. Control to be advised regarding -
 - a. Time and nature of accident
 - b. Brief description of accident
 - c. Medical van required or not
 - d. Requirement of Break Down Special with or without crane.
 - e. Whether adjacent line/Multiple lines are obstructed.
 - f. Damage to rolling stock
 - g. Damage to track in terms of O.H.E masts.
 - h. Numbers of dead and injured (simple, grievous) to be obtained from the TTE/Train Superintendent.
- i. Arrange to move SPARME/ ARME / ART as ordered by Control.
- j. Advise officials of other departments at station including station authorities.
- k. Station Manager in charge and DTI shall proceed to the accident spot as directed.

5.5.2 Medical Assistance

- i. Call for assistance from nearest local Doctors, SJAB, Civil and Army Hospitals .

- ii. Arrange to transport injured passengers to nearest hospitals.
- iii. Arrange adequate number of First Aid boxes and stretchers.
- iv. Quickly transport ARME Scale II equipment to the site of the accident.
- v. Adequate Doctors/Para medical staff should be arranged for site after assessing the reported casualties.

5.5.3 Refreshments to the affected passengers

- i. Get sanction from Sr.DCM/ DCM and arrange drinking water, beverages and food from Refreshment Room and/or local sources free of cost to the affected passengers and stranded passengers and as per guide lines of Railway Board.

5.5.4 Transportation of the injured and others

- i. Arrangements shall be made to transport the injured on top priority by road or by a light engine or by a special train to hospitals.
- ii. Stranded passengers to be transported from the accident spot by arranging transfer either by train or by hiring Govt /Private Road Transport vehicles.
- iii. Arrange for refund of fares as per the extant rules at suitable locations.

5.5.5 Security of Personnel/Passengers and materials

Advise RPF/GRP/State Police to provide security to stranded passengers, affected train and personal belongings while assisting rescue work.

5.5.6 Communication facilities

- i. Open special information counters.
- ii. Collect information on dead/injured and convey it to the near and dear ones.
- iii. Make arrangements /availability of STD phone/SMS services/Fax/mobile phones to the relatives of dead/ injured for making free calls.
- iv. Obtain reservation charts and display it at nominated places.

5.5.7 Duties of Div.Traffic Inspector/SSE (P.Way)/SSE (Signal)/SSE (C&W) / Loco Inspector

On receipt of information about the accident;

- i. Reach the site of accident by quickest available means.
- ii. Ensure that the obstructed line(s) are protected.
- iii. Assess the casualties and arrange to render First Aid immediately.
- iv. Assess the situation/assistance needed and issue message to Controller.
- v. Shift injured to the nearest hospitals.
- vi. Collect, record and secure all clues relating to the accident such as;
 - a. The condition of the track, any rail fracture, weld fracture, fresh breakage, old flaw in rails with special reference to the alignment, gauge, cross levels, super elevation, point of mount and drop and any sign of sabotage etc.
 - b. The condition of Rolling stock with reference to Brake Power, braking gear with axle box conditions.
 - c. Marks on sleepers, rails, Locomotives and vehicles and preservation of clues.
 - d. Position of derailed vehicles.
 - e. Prima facie cause of accident.
- vii. Seize the Train Signal Register, Log book, Private Number Book, Line Admission Book, Speed Recorder Chart and other relevant records.
- viii. Conduct breath analyzer test , arrange blood samples of staff involved and obtain the statement of staff involved in the accident.
- ix. SSE (C&W) shall prepare a sketch showing position of Rolling stock.
- x. SSE (P.Way) shall prepare a final sketch indicating the position of OHE mast, point number etc.
- xi. Take charge of the situation and remain till a higher official arrives at the site.
- xii. Submit the joint note in 24 hours.

5.5.8 Additional Duties of SSE/Signal

- i. Note down the position of panel switches, indication, block instrument, condition of relay room, status of data logger, etc.
- ii. It shall be the responsibility to keep the status position signed by the Inspector of other Departments at site

- iii. To facilitate preservation of clues, the condition of switches, ground connections, point locking, occupation of track circuit, details of damage to outdoor signal/point gears may also be recorded on video or digital camera subject to availability.
- iv. Arrange to provide equipment and staff for emergency communication facility till the arrival of the telecommunication team.

5.5.9 Duties of Divisional Chief Controller/Deputy Chief Controller

- i. On getting information about accident from site inform Station Masters at the either end.
- ii. Check whether the adjacent line is clear or not.
- iii. Collect all necessary details about the accident.
- iv. Regulate trains and give top priority to movement of ARME/ART.
- v. Order ARME/ART as instructed.
- vi. Advise Casualty /Divisional officers/Area officers.
- vii. Inform Central Control.
- viii. Send Medical teams by road and inform Civil, Military, Voluntary organization and.
- ix. After assessment of the site, convey full details to central control and get orders in time to divert/regulate/cancel trains before it crosses the diversion points.
- x. Regulate the trains at Stations where food and beverages/drinking water can be arranged.
- xi. Avoid blocking of all running lines at Stations on either side of the accident site for through passage of ARME/ART.
- xii. Inform emergency helplines / enquiry booths with necessary details of dead/injured.
- xiii. For accident involving passenger carrying trains or road vehicles at level crossing, ARME shall be ordered immediately. Subsequently if it is not required it may be Cancelled with the permission of Divisional Railway Manager.
- xiv. Advise senior subordinates like Div.Traffic Inspector, Commercial Inspector, Ch. Loco Inspectors, Sr. Section Engineers (P.Way), SSE(C&W),SSE(Signal), etc. to proceed to the site of accidents by first means.
- xv. When a train carrying mail is involved ,advise the RMS authorities.
- xvi. Open a register and log the events with time with details like

- a. Time of accident.
- b. Location, gauge, single/double/quadruple line, system of working, mid section or station, gradient, kilometer, traction etc.
- c. Type and description of train/trains involved.
- d. Types of coaches/wagons involved.
- e. Load of the train.
- f. Nature of the accident (collisions, derailments etc.)
- g. Casualty/injuries.

xvii. Ensure a clear path for running ARME & ART.

xviii) Arrange to dispatch Crane with break down trains if required.

xix) If crane is not available in the Division order from adjoining Division/ Railway.

xx. Record the timings of ordering, actual departure and arrival at the accident site for the ARME, BD special and Crane special.

5.5.10 Duties of Divisional Railway Manager

On being informed about the accident,

- i. Collect details of accident and assess the situation.
- ii. If necessary proceed to the site along with branch officers.
- iii. Give clear directions to Branch Officers in connection with rescue and relief work.
- iv. Depute ADRM as in charge in Control office.
- v. Order to keep a vehicle ready for immediate use at Control Office.
- vi. Arrange to advise the Home Secretary/ Chief Secretary or other officers of the state in case of sabotage/ passenger carrying trains for prompt attendance of the Dist. Magistrate and Superintendent of Police.
- vii. Monitor that each department renders prompt assistance.
- viii. Arrange to secure and collect the clues/ evidences.
- ix. Nominate a Commercial officer to liaison with Press and Media in case of serious accident.
- x. Ensure taking joint observation / readings by Supervisors by nominating a separate team of Sr.Supervisors.

5.5.11 Senior most 'Official' at Site

- i. Collect information from Officer in charge of Instant Action Team.
- ii. Take stock of the situation and plan for efficient rescue operation as Site Manager.
- iii. Arrange transport facility for shifting the injured
- iv. Ensure immediate Medical Aid to critical injured passengers and shifting to medical college/specialist hospitals .
- v. Keep record of injured persons and the hospital to which they have been admitted with contact details. The information may also be relayed to Divisional Control Office for dissemination through media.
- vi. Identify and rescue the entrapped passengers.
- vii. Ensure co-ordination among all departments for efficient rescue/relief operation.
- viii Channelize the local resources to supplement Railway Relief/Rescue operations.
- ix. Ensure free supply of food, beverages and drinking water to all affected passengers as per extant guide lines of Railway Board.
- xi. Arrange on the spot Ex-gratia payment to the eligible.
- xii. Ensure timely information to Divisional Railway Manager/General Manager on the progress of rescue/relief/restoration work with following details.
 - a. Number of Casualties/Number of injured/nature of injuries to passengers.
 - b. Supplemental assistance if required.
 - c. Prima facie cause of accident.
 - d. Probable time of restoration.
- xiii. Ensure the preservation of Clues/Evidences as per the proforma.

- xiv. In case of sabotage direct RPF for quick clearance from state Police.
- xiv In case of serious explosions or fire, clearance from Controller explosives to be obtained.
- xv. Get the written evidence of as many witnesses as possible from general public and get their names and addresses.
- xvi . Ensure the preparation of a list of dead and injured and convey information to kith and kin at once through helplines/ STD calls/SMS/Fax/Mobile Phones free of charge.
- xvii. Ensure Information to the Supdt. of Police and District Magistrate
- xviii Give prima facie cause of the accident with the probable time of restoration.
- Xix Convey the progress of restoration work to the DRM / GM on hourly basis.

5.5.12 Duties of Medical Department Official/Officer

On getting emergency call;

- i. Note down time of receiving message.
- ii. Collect necessary Medical team.
- iii. Inform CMS, other Doctors and staff.
- iv. Alert blood donors and activate St.John Ambulance.
- v. At least one Doctor to remain in the Casualty Department of hospital.
- vi. Move Emergency boxes from ARME-Scale II/Health Unit/Hospital to site.
- vii. Ensure arrival of ARME staff and report its readiness to traffic official.
- viii. Reach the site by road if it is quicker.
- ix. Check all the equipment in ARME while on run.
- x. Get the operation theatre ready.
- xi. Arrange to inform PCMD about the movement of ARME.
- xii. Keep ARME ready to treat the injured without delay.

On reaching the site Medical Officer in charge;

- i. Collect the list of injured passengers prepared by TTE/TS and assess the situation.

- ii. Plan for efficient Medical Management of Critical Passengers.
- iii. Ensure rapid access to all injured passengers.
- iv. Take assistance of Mechanical/Engineering/RPF staff and extricate the trapped passengers.
- v. Conduct a thorough search of coaches including lavatories/vestibules for injured/dead.
- vi. Open the First Aid Post/Clinic and depute a team exclusively to man it.
- vii. Form different groups if required to handle more number of casualties at a time.
- viii. Ensure collecting blood and urine samples of Crew of the train/trains in time.
- ix. Ensure the stabilization of condition of injured passengers.
- x. Ensure expeditious transportation of injured to the ARME/nearby hospitals and Specialist Hospitals.
- xi. Prepare a list of Dead/injured(Severe, Simple, Trivial) and communicate with the following details.
 - a. If found Conscious: Name, sex, age, identification marks, address, ticket number, originating and destination Station.
 - b. If found Unconscious: Approximate age, sex, identification marks, ticket number and the particulars if relatives and friends are available.
- xii. Ensure covering of bodies with shrouds.
- xiii. Arrange to move bodies to Govt. hospital with the assistance of RPF/ Commercial Department.
- xiv. Take necessary steps to handle unhygienic condition that may arise due to decomposed/ mutilated bodies by organizing ice from near by places/markets.
- xv. Certify the injured/dead and inform Site Manager.
- xvi. The Medical Officer at Division/Head Quarters shall have constant touch with site; if necessary arrange supplemental Medical assistance.

5.5.13 Duties of Mechanical Official/Officer On getting emergency call;

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

On reaching the site;

- i. For efficient extrication of entrapped passengers take the assistance of Engineering Department/Electrical Department.
- ii. Be cautious in using the rescue tools like cutter, spreader etc and plan the removal of obstruction on the adjacent line.
- iii. If suspected spillage of inflammable substances use only Cold cutting equipment.

- iv. In case of suspected sabotage, to save lives extricate passengers after taking photograph / video graph and ensure minimum interference to clues.
- v. If necessary ask for supplementary assistance in the form of extra BD specials/Cranes with BD staff.
- vi. Ensure that Speedo graph, engine repair book etc. are seized and sealed.
- vii. Record details of Brake Power and other aspects of Rolling Stock as per the Proforma.
- viii. Take joint measurements of the rolling stock
- ix. Note down the observations and measurements of Loco etc. at site if it is not possible arrange for taking the reading at the nearest shed.
- x. Monitor the efficient working of Cranes/Re-railing equipment to clear or rerail the affected Rolling stock.
- xi. Examine the unaffected/re-railed Rolling stock and certify for further movement.
- xii. Take precautions in electrified section that the power supply is switched off before commencing the rescue/relief work.
- xiii. Use necessary safety equipment like Hand gloves, Helmet etc.
- xiv. Arrange the trained manpower in shifts for continuous rescue/relief operations.
- xv. Plan for quick restoration of traffic.
- xvi. Sr.DME on getting information assess the situation and proceed to the site if warranted.
- xvii. A responsible Mechanical Officer shall be available in the Control Office and co-ordinate with the site/other department.
- xviii. Always ensure the safety of the staff working at the site/Cardoning of the affected portion with the help of RPF. .
- xix. Assess the extant of damage to the Rolling stock.

5.5.14 Duties of Engineering Official/Officer

On getting emergency call;

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

On reaching the site;

- i. Assist Medical/Mechanical Department in rescue work.

- ii. Arrange to provide a temporary shelter at site with tents for Medical Clinic, Catering, Stores and for the Site Manager with basic facilities.
- iii. Ensure availability of water supply.
- iv. Ensure preservation of clues as per procedure.
- v. Provide necessary dummy track for Restoration work/Crane working.
- vi. Plan for quick restoration of traffic.
- vii. If necessary move Gang staff from adjacent unit/Division and request Sr.DOM to run Labour / staff specials and material specials.
- viii. If necessary under the direction of DRM Contact Army/Navy/Air Base and collect the required personnel like Divers for rescue operation.
- ix. If necessary hire Private Crane, Bulldozers, Earth movers etc.
- x. One Engineering Officer shall be available in Control office for monitoring and arranging reinforcement/movement of men and material. Coordinate for stoppages of Labour/Staff and Material specials.
- xi. Plan for coordinated working and movement of track machines for quick restoration with TRD official and transportation official.
- xii. Assess the cost of damage to the Engineering Department.

5.5.15 Duties of Signal & Telecommunication Official / Officer

a. On getting emergency call;

- i. Collect details of accident and assess the requirement.
- ii. Arrange to move Satellite phone by available means including road transport to the site.
- iii. Depute one officer to control office to coordinate with accident site, emergency control and other officers.
- iv. Adequate number of mobile phones available with the Divisional staff should also be rushed to site for emergency use.
- v. Send required number of telecom staff by Accident Relief Train for installation and operation of telecom equipment.
- vi. Plan to extend the nearest available auto railway telephone/DOT telephone to the site of accident and man it.

b. On reaching site;

- i. Provide portable Telephone / Emergency Telephones/Mobile Telephones at site and man it.
- ii. Install at least two BSNL phones with STD facilities and communicate the contact numbers to all concerned.
- iii. Ensure availability of adequate copies of Disaster Management telephone directory containing important telephone numbers. This directory should be updated once in 3 months by the fault control staff of the Divisional office duly verifying each of the numbers
- iv. Provide Walkie-talkie set and chargers.
- v. Provide Railway phone connectivity Emergency Control/ Zonal Headquarters.

- vi. Provide satellite/mobile communication facility
- vii. Wherever feasible provide wireless sets/use services of HAM.
- viii. Provide adequate number of Public Address system/Hand sets

5.5.16 Duties of Commercial Official/Officer

a. On getting the emergency call;

- i. Collect details of accident and assess requirement for arranging relief to the injured/dead and the stranded passengers as under.
 - Drinking/water/Beverages/Food packets etc.
 - Sufficient Labor for transshipment.
 - Sufficient Rail Sahayak & Parcel Boy..
 - Ticket Collectors.
 - Govt. / Private buses/Ambulances.
- ii. The Commercial inspector / Station Master shall withdraw sufficient amount of money from Station collection under the authorization of Sr.DCM.

b. On reaching the site;

- i. Provide immediate transport facility to shift the injured to hospitals;
- ii. Collect details of injured/dead and convey them to Emergency Counters; Supply the following free of cost;
 - Free Calls/SMS/Fax facilities/Mobile telephones to the relatives of dead and injured;
 - Complimentary passes with the assistance of Personnel Inspector;
- iii. Arrange ex-gratia payment on the spot to the injured and next of kin of dead;
- iv. Collect the list of casualties/injuries and assist Medical Department in all respects;
- v. Protect the luggage/belongings of injured/dead with the assistance of RPF;
- vi. Protect luggage, parcels and goods;
- vii. Arrange transportation of the stranded passengers, record the details of passengers dispatched and relay the particulars to Control through special trains and State/Private vehicles.

- viii. For information to general public;
 - Open information counters/helplines for giving information to public regarding the names of injured, dead etc.,
 - List of dead and injured to be displayed at a prominent place at station / important stations;
 - Make announcement through PA system on diversion of trains, regulations, and probable time of arrival of relief train;
- ix. Arrange refund of fare through special counters;
- x. One Commercial Officer in Control Office shall coordinate with site and arrange supplemental assistance;
- xi. Brief the media periodically and take care of the Media personnel;
- xii. Arrangement of trains / Coaches to be tied up with operating department for clearance of Stranded Passengers.

5.5.17 Duties of Electrical(General) Officials/Officers

- i. Provide lighting arrangements at site.
- ii. Provide sufficient number of portable generators.
- iii. Arrange supply from nearby sources if possible.
- iv. Attend AC and other coaches in case of fire and ascertain the cause of fire.
- v. Provide the lighting arrangements to ensure full coverage of the affected train and to cover the damaged track so that the maintenance/attention to track can be started simultaneously.

5.5.18 TRD Official

- i. Switch off OHE supply to enable safe rescue work to start.
- ii. Move OHE staff to site by Tower Cars/by road.
- iii. Clear OHE obstruction by slewing the wires for restoration.
- iv. Segregate the affected section.
- v. Ensure the section is earthed before the staff working near OHE.
- vi. Ensure the preservation of clues as per procedure.
- vii. Ensure early restoration.
- viii. Ensure erection of temporary masts without delay.

5.5.19 TLC

- i. Where an EMU or Electrical Loco is involved arrange for relief Loco/Train if required.
- ii. Send Sr. Supervisor to the site immediately with adequate shed/break down staff.
- iii. Ensure that speedometer graph is to be taken out and records of maintenance of Loco/EMU and repair books are seized and sealed.
- iv. Ensure and note all the brakes are working or not in the locomotive(s).

- v. One Electrical Officer of respective branch in Control Office shall co-ordinate with site and arrange for supplemental assistance.

5.5.20 Duties of Security Staff

a. On getting emergency call;

- i. Collect details of accident and assess the requirement.
- ii. Collect required manpower and proceed to site.
- iii. Inform nearby outpost for additional manpower if required.
- iv. Security department while sending men to the spot necessary equipment as listed below shall be carried:-

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

b. On arrival at site

- i. Rescue passengers and assist Medical/Mechanical/Commercial Department.
- ii. Cordon the site and prevent unauthorized entry for early restoration.
- iii. Protect the luggage and belongings of stranded/injured/dead.
- iv. Provide barricade and arrange for crowd control during VIP visits.
- v. Obtain assistance of GRP/Local Police.
- vi. Protect the Railway consignments/goods till it is properly handed over to the authorized representative of passengers/party.
- vii. In case of sabotage coordinate with the officers of various departments, GRP, Local Police and officials of civil administration and get early clearance after securing of the clues.
- viii. Inform the development at the site to higher officials every hour.
- ix. An RPF assistance booth to be opened if the operation continues for longer period.
- x. Preserve clues and evidences, take photograph/videograph etc.
- xi. Care shall be taken to post staff at stations to avoid agitations from passengers due to delay/ regulation/cancellation of trains.

- xii. Ensure proper documentation about the number of persons dead/ injured giving their identity and address if available.
- xiii. Arrange to guide friends and relatives of injured/deceased.
- xiv. Maintain the log of events.

5.5.21 Duties of PRO

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

5.5.22 Duties of Personnel Inspectors / Officers

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

5.5.23 Duties of Sr.Divisional Accounts Officer

- i) Sr.DFM shall direct an Officer and Sr.SO to proceed to site in case of serious accident to assist commercial department.
- ii) to assistant officer shall be available in the control office and coordinate with the commercial officers in respect of payment of ex-gratia/other expenditures in the accident spot.

5.5.24 Duties of Sr.Divisional Safety Officer (as per RB letter No- 2017/Safety (DM)/Misc dated 30.01.2017).

Check list for the Divisional Safety Officers Subsequent to an Accident

- i. Immediately rush to the accident site by the first available means along with safety counselors.
- ii. Speak to Guard / Loco Pilot to understand the sequence of events and assess the extent of damages, the exact number of vehicles affected with their stenciled numbers. Also Guard may be asked to take pictures with their mobiles and sent them through whats-app.
- iii. Arrange to rush the relief teams available with the Railways.
- iv. Check whether Station masters on adjacent stations, Control and Medical staff have requisitioned for local medical help and ambulances.
- v. Seek assistance of NDRF and other Government/Non-government organizations if required.
- vi. Assess the site conditions and if needed order for additional rescue teams.

- vii. Establish a Unified Command Centre (UCC) and arrange to man it by a safety counsellor.
- viii. Arrange to establish telephonic communication at the site.
- ix. Preserve all clues and evidences regarding probable cause of accident.
- x. Arrange to record joint observations/measurements at the site by the senior subordinates.
- xi. Should check for any speed restriction at the location and any abnormality reported by previous trains crew.
- xii. Arrange to maintain log of events at the site and relay to divisional emergency cell at regular intervals.
- xiii. Relay Prima Facie cause in consultation with officer in-charge within a reasonable time.
- xiv. Ensure that in Unified Central Control(UCC) has maintained the details of passengers admitted Hospital wise.
- xv. Relay probable restoration time in consultation with officer in-charge within a reasonable time.
- xvi. Arrange to create Accident ID in SIMS and update all the relevant fields at regular intervals.
- xvii. Arrange for live feed through VSAT, collect Arial pictures of the accident and upload the photos/video in SIMS.

5.5.25 Duties of Sr.Divisional Operations Manager

Immediately after getting the information,

- i. Ensure that the medical relief van, Breakdown Specials are ordered, moved and reach the site without any detention.
- ii. Ensure the marshalling of the crane if needed before proceeding to the accident site.
- iii. Inform Collector and other civil Police/authorities with details.
- iv. Open Emergency Disaster Co-ordination Unit in the Control Office.
- v. Plan for regulation of Passenger/Express trains, cancellation, diversion, and termination short of destination in consultation with the Headquarters in time.
- vi. Ensure efficient movement of relief train, engine, tower wagon etc., between the site and the station for quick restoration in consultation with the Site Manager.
- vii. Send one field operating officer with DTIs to organize smooth shunting operations at site.
- viii. Ensure prompt transport of stranded passengers at the site and clearance of passengers held up at other stations in coordination with the commercial department.
- ix. Assist commercial department in arranging relief to the victims.
- x. Collect the information of passengers died and injured and convey to helplines.

- xi. Organize labour/staff and material specials in consultation with engineering officers.
- xii. Keep liaison with adjacent divisions, Headquarters and the site.
- xiii. Ensure proper logging of all the events by control office by talking to site in-charge from time to time.



CHAPTER - 6

RESPONSE & ACTION BY DIVISION / ZONE.

Response Action by Division.

6.0.1 Intimation of Accident - Divisional Control Office

- i. In the Divisional Control Office, information regarding an accident is generally received either by the Section Controller or the TPC/DPC/TLC.
- ii. In most cases, the First Information Report also intimates the approximate number of coaches involved and a rough estimate of the likely number of casualties (such as "heavy casualties expected").
- iii. Accidents involving a passenger carrying train where the first information says that heavy casualties are expected, should prima-facie be treated as a Disaster.
- iv. The moment information regarding an accident involving a passenger carrying train is received in the divisional control office, the accident bell in the control room should be sounded for alerting all on-duty functionaries.
- v. After all on-duty functionaries gather around the section control board they will be briefly informed about the accident.
- vi. Each functionary will thereafter resume his position and take steps to set in motion activities required from him.
- vii. TPC will switch off OHE in case it has not tripped. OHE will not be restored even on adjacent line unless confirmation has been received from site that adjacent line is not obstructed and OHE is all right.
- viii. Controller/DPC/TPC will undertake the following action in the given order of priority:
 - Give orders to on duty Crew Controller/ Dy. Chief controller/Section Engineer/ SM for sounding the Hooter for ARMEs / ARTs with crane if required.

- DPC will also order movement of ARME and ART (with 140T crane if required) from adjacent divisions for approaching the accident site from the other end after getting approval from competent authority.
 - Thereafter he will inform his other Departmental Officers and Supervisors.
- ix. Dy.CHC(Chg.) will first inform to Hospital regarding Casualty . Thereafter he will inform officers and supervisors of the division with the help of other departmental agencies in control office.

6.0.2 Intimation of Accident - Railway Doctors

Dy.CHC(Chg.) will first inform the Emergency unit of Railway Hospital regarding details of the accident. Railway Doctor on emergency duty shall undertake the following:

- i. Note down time of receiving message.
- ii. Inform CMS, MS, Doctors & Para medical staff and instruct them to reach the ARME immediately.
- iii. Arrange necessary Medical team in the hospital.
- iv. Inform CMD about movement of ARME.
- v. Alert blood donors and activate St.John Ambulance .
- vi. Bare minimum medical team should remain in the hospital; rest of the doctors should be rushed to the accident site.
- vii. Arrange to move Emergency First Aid boxes from ARME Scale-II locations to the accident site. Twenty thousand rupees of imprest has been sanctioned on Scale-II ARME/ Health Units head for movement to accident site.

6.0.3 Intimation of Accident - HQ & Central Control Office

- i. After they gather around the Dy.CHC/Punctuality they will be briefly informed about the accident.
- ii. Each functionary will thereafter resume his position and take steps to set motion activities required of him.
- iii. Each departmental functionary will inform HQ Officers about the accident in the following manner-

Dy.CHC(Chg)	-	GM, AGM,PCMD,
DyCHC(Freight)	-	Operating & Safety.
TPC/TLC/ DPC	-	Electrical Officers.
C&W Control	-	Mechanical Officers.
Engg. Control	-	Engg., Accounts, Personnel Officers.
S&T Control	-	S&T, Stores Officers.
Commercial Control	-	Commercial, Public Relations.
Security Control	-	RPF Officers.

- v. For this purpose, all functionaries working in the Central control office will have a ready list of telephone numbers (Railway, BSNL and Mobile /CUG) of all officers and supervisors of their departments concerned.
- vi. GM will inform CRB regarding the accident.
- vii. PHODs will inform their respective Board Members. In case PHOD is not available in HQ, then the next Senior Most Officer of that department will inform his Board Member.
- viii. PCSO/Dy.CSO(Traffic)/SSO(S&T) will inform CRS and nodal Officer of Safety Directorate of Rly. Board.
- ix. Dy.CHC(Chg.) will thereafter order Divisional Control Office regarding running out of Special train to the accident site carrying GM and other HQ Officers.
- x. Functionaries of different departments will also inform their respective departmental officers regarding timing of Special train carrying GM and other HQ Officers to the accident site.
- xi. In case the accident site is far off and going by air would be faster, then either helicopters or special Air Force planes may be organized from the nearby IAF Base by Secy. to GM.

6.0.4 Informing Non - Railway Officials

- i. CHC/Punctuality shall inform District Magistrate, Supdt. of Police and CDMOs of the District within which the accident site falls regarding the accident along with NDRF & SDRAF etc.

- ii. DGM/ADRM shall inform the following regarding the accident :
 IG/GRP.
 ADG/GRP.

District Commissioner/ District
 Magistrate. Home Secretary
 of the state.

- iii. In case POL rake is involved, then IOC/BPCL/HPCL officials should also be informed.
- iv. In case Mail bags of RMS are involved, then Postal officials should also be informed.
- v. Telephone numbers of all DMs, SPs, CDMOs and District Commissioners are available in Zonal / Divisional DM Plans.
- vi. Telephone numbers of IOC, BPCL and HPCL officials are also available in the Zonal / Divisional DM Plans.
- vii. Telephone numbers of ADG/GRP, IG/GRP, Home Secretary etc. of Orissa, AP and Chattisgarh are given in Annexure.

6.0.5 (a) Divisional Officers required to go to site

- i. DRMs/ADRM, MS with his team of doctors and paramedical staffs, Branch Officers - Sr.DME/ DME, Sr.DSO/DSO, Sr.DCM/DCM, Sr.DSC/DSC, Sr.DEE(G), Sr.DEN(Co-ord), Sr.DEE(TRD) - should move with SPARME/ARME while AME and other sectional officers of concerned department will move with ART.
- ii. Road vehicles should be sent to accident site separately. Maximum number of road vehicles should be sent to accident site from Divisional HQ.
- iii. ARME /SPARME shall be dispatched within 15 minutes where there is double exit siding and within 25 minutes in case of single exit siding with the first available locomotive (Power/ Engine) after sounding of Hooter. Train ordering officials will order the movement of ARME without delay.
- iv. DRM will proceed to the accident site. ADRM shall stay back at Divisional HQ for co-ordination work.
- v. The Second Senior Most Officer of each branch should stay back at Divisional HQ.

- vi. Once it has become clear that the accident is a Disaster, DRM / ADRM will decide the no. of officers required to proceed to the accident site. Similarly, individual branch officer will decide the no. of supervisors and staff required at the accident site.
- vii. The Complement of Officers available in each department varies from division to division. Hence, Divisional DM Plans should specifically spell out, department wise, designations of officers who will be required to go to site, and those who will be required to stay back in HQ.
- viii. Divisional DM plans should also spell out the same thing for Supervisors of each department.
- ix. Arrangements of Road Vehicles to proceed to accident site, indicating alternative vehicles as well, shall be indicated in Divisional DM Plans. Arrangements of vehicle, Loco Pilots including spare Loco Pilots shall also be notified.

6.0.5 (b) Supervisors required to go to Accident Site:-

- (i) At the Divisional level sufficient number of supervisors available in divisional HQ should proceed to the accident site as decided by branch officers.
- (ii) All other supervisors available in the field at other stations should also proceed to the accident site.
- (iii) Divisional Control Office should issue a recorded control message from DRM to the nominated Supervisors for proceeding to the accident site immediately by fastest possible means.

6.0.6 II) ACTION BY Head Quarters

- i. The following HQ Officers as detailed at (iv) below will proceed to accident site by the first special train, which will be carrying GM.
- ii. This special train shall be arranged by KUR Divisional Control Office, in consultation with HQ Central Control. Scheduled departure time will be informed to HQ Officers by their departmental functionaries in HQ Central Control.
- iii. GM will proceed to the accident site along with PHODs required as per assesment. PCOM shall stay back at zonal HQ for co-ordination work.

- iv. Department wise, designation of officers who are required to go to site, and those who will require to stay back in HQ shall be decided by PHOD / CHOD.

III) ROLE OF DEPARTMENTS

OPERATING DEPARTMENT-Duties of the Operating Department in

6.1 HQ are given in **Site**

management plan-II of Chapter-7.

6.2 **SAFETY DEPARTMENT**

PCSO/ ECoR will proceed to accident site along with all other officers and supervisors of the

Safety Organization. Duties of Safety Organization at accident site has been listed out in "**Site**

Management Plan-I Chapter-7 ".

6.3 **PUBLIC RELATIONS**

Duties of the Public Relations Department are given in Chapter -8 under the head of "Media

Management Plan ".

6.4 **MEDICAL DEPARTMENT**

6.4.1 **Formation of two teams**

- i. On receipt of information regarding the accident where casualties are expected, the doctor on emergency duty in the hospital casualty would inform all other doctors and Para-medical staff concerned.
- ii. Two teams of Doctors and Para Medical Staff nominated by CMS/MS would be formed, Team 'A' and Team 'B'.
- iii. Team 'A' - Headed by CMS / MS in-charge will rush to the accident site immediately by ARME along with nominated doctors and nominated paramedics.
- iv. Team 'B' - Headed by the senior most doctors amongst them will stay back at the divisional hospital and perform duties as given below.

- v. In case the accident site is far away from divisional HQ, then injured passengers are unlikely to be brought back to the divisional hospital for treatment. In that case, only bare minimum number of doctors should be left behind for manning Team 'B' and most of the available doctors should be rushed to accident site as part of Team 'A'.

6.4.2 Duties of Team 'A'

These are listed in detail in Chapter -7, under the heading "Site Management Plan-II".

6.4.3 Duties of Team 'B'

- i. Team 'B' will establish an Emergency Cell in the Casualty Unit of Railway Hospital.
- ii. Contact adjoining divisions and organize movement of 2 more ARMEs to accident site, one from each end, if required.
- iii. Contact local hospitals (Railway/Govt./Private) near the accident site and ask them to rush their road ambulances along with necessary medical teams to the accident site immediately.
- iv. Contact local hospitals (Railway/Govt./Private) near the accident site to keep themselves in readiness to receive and provide medical treatment to injured passengers.
- v. Data Bank of medical facilities along the track is available section wise for each division in Divisional DM Plans. Copy of Divisional DM Plans should be available in the Hospital Emergency of Railway Hospital.
- vi. The above Data Bank is also available in the ECoR Web site on Railnet at www.ecor.railnet.gov.in. Details of name, address, telephone no., facilities available etc. can be collected from this.
- vii. Arrange to send the following in the 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end:

As many more medical teams as possible.

Adequate number of Safaiwalas and other health workers,

Members of St. John Ambulance, Scouts and Civil Defence personnel.

- viii. Co-ordinate with CMS/PCMD of adjoining Divisions/Zones and ask them to send their medical teams to the accident site.
- ix. These medical teams should be sent to the accident site by train/road or combination of train-cum-road, as feasible. In case suitable Railway vehicles are not available, taxis should be hired for this purpose.
- x. Adequate number of following items should be arranged and sent to accident site for the purpose of handling dead bodies :
 - a. Shrouds
 - b. Polythene covers for dead bodies
 - b. Wooden Coffins
 - d. Dry ice
- xi. One doctor will be available in Divisional Emergency Cell for maintaining liaison with UCC and the medical team at the accident site. Requirement of medicines required either at the accident site or in various hospitals where patients have been admitted should be noted, procured and sent as required.
- xii. Prepare Railway Hospital to receive and provide treatment to injured passengers, as and when they are brought back from accident site.

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

6.5 DUTIES OF COMMERCIAL DEPARTMENT

PCCM along with such officers as decided by him from HQ will proceed to accident site.

- i. Sr.DCM should proceed to site of accident along with other Commercial Officers except DCM. DCM will be available in Divisional Control Office for providing backup support.
- ii. A nominated supervisor should be authorized for withdrawing sufficient money from station earnings before proceeding to site.

6.5.1 Transportation of men and material to accident site

- i. Wherever required sufficient numbers of TTEs/TCs with traffic assistants should be sent from the nearest available locations for assisting in transportation of passenger's luggage and rendering other assistance. The commercial officer available at the

Divisional HQ (DCM / ACM) should ensure this apart from ensuring the attendance of Commercial Inspector at site.

- ii. Commercial Dept should inform the IRCTC for arranging food packets, drinking water etc to stranded passengers wherever required and monitor the supply of the same.
- iii. Commercial Supervisor at site should arrange for food packets and drinking water etc., till supply of IRCTC reaches site.

6.5.2 Help line Enquiry Booths at Stations

a. General

- i. The emergency telephone no. 138 & 183 will be manned round-the-clock by commercial department. All Help line Enquiry Booths shall have a separate DOT telephones with STD, mobile phones, Railway telephones with STD, fax machine, photocopier and a PC with internet connection and the necessary infrastructure will be arranged by S&T Dept.
- ii. Help line Enquiry Booths within ECoR would be opened as below:
 - Originating and destination stations of the accident involved train.
 - All junction stations within the jurisdiction of ECoR falling on the route of the train.
 - Divisional HQ.
 - Zonal HQ.
 - Any other station as may be decided.
- iii. On ECoR, Help line Enquiry Booths would normally be required to be opened at following stations, depending on the route of the accident involved train :

Bhubaneswar Angul	Khurda Road Talcher Road	Puri, KDJR	Cuttack	Brahmapur
Visakhapatnam	Sambalpur	Rayagada	Koraput	Mahasamund
Bhadrak	Jajpur Keonjhar Rd	Balugaon	Palasa	Srikakulam Rd
Vizianagaram	Titilagarh	Kantabangji		

iv. Help line Enquiry Booths on other Zonal Railways would also be opened as follows:

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

v. Help line Enquiry Booths would be manned by computer literate Sr. Supervisors on round the clock basis.

vi. Help line Enquiry Booths within the accident affected division, should keep in touch with the Divisional Emergency Cell.

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

All Help line Enquiry Booths within the Division. Emergency Cells of other Divisions of ECoR.

HQ Emergency Cell.

viii. Such information should be received from UCC by E-Mail and transmitted by E-Mail to all concerned. For this purpose all Help line Enquiry Booths should be provided with PCs with Internet connection. E-Mail addresses of Help line Enquiry Booths will be intimated.

ix. Similarly, Help line Enquiry Booths outside the accident affected division, but within ECoR jurisdiction should keep in touch with Divisional Emergency Cell of their respective divisions.

b. Accident details to include

- (i) Number of dead and injured.
- (ii) Break up of type of injuries, such as grievous, simple , trivial, etc.
- (iii) Disposal of injured passengers in various hospitals.

- (iv) Names of injured passengers.
- (v) Officials in charge of Help line Enquiry Booths would display the list of injured passengers on the notice board. For this purpose Computer printout of E-Mail received should be taken out and displayed at number of places at the station.
- (vi) Identification of dead bodies. Reasons for delay should be explained to the public.
- (vii) Number of dead bodies identified and their names should be available.

This information would continue to be updated once in every 3 hours and would continue to be accessed for the next 4 to 5 days.

6.5.3 Liability of the Railway for compensation

i. Refunds

- a. Booking counters at stations should be augmented for granting of refund to large number of passengers who have been unable to either complete or commence their journey as a result of the accident.
- b. Refund of money should be granted for trains as per extant rule :

Delayed	Rescheduled
Regulated	Short terminated
Diverted	Cancelled

- c. Staff manning Refund counters should be thoroughly familiar with rules for granting of refunds under such circumstances.
- d. Sufficient amount of cash should be available at these Refund counters for this purpose.

ii. Compensation

The Railways are liable to pay compensation for death/injury of a passenger in train accident as defined under Section 124 of the Railway Act, 1989. Similarly the Railways are also liable to pay compensation for death/injury to a passenger and platform ticket holder in untoward incidents as defined under section 124-A of the Act, such as terrorist attack, violent attack, robbery, dacoity, rioting,

shoot out or arson by any person in train or within the precincts of a Railway station or accidental falling of a passenger from train.

The procedure for getting ex-gratia, interim relief and compensation for death/injury of a passenger in train accident/untoward incident is as under -

a. Ex-gratia

Ex-gratia relief is given by the Railway administration soon after an accident normally at the rate of:

- **Rs. 50,000/- in the case of death;**
- **Rs. 25,000/- in the case of grievous injury; and**
- **Rs. 5000/- for simply injury.**

Payment is sanctioned and arranged after such enquiries as can be reasonably made on the spot by a Senior Scale or Higher Officer nominated by GM. If the ex-gratia has not been paid to the victim at accident site, the claimant should approach the Chief Claims Officers of concerned Railway.

The ex-gratia is intended to meet the immediate expenses of the victims/and is not taken into account at the time of final settlement of compensation claims.

b. Death/Injury Compensation

Claims for compensation for death/injury of a passenger in train accident or untoward incident are decided by Railway Claims Tribunal having jurisdiction over the site of accident.

The Tribunals having jurisdiction over East Coast Railway with their addresses are as follows -

Sn	Tribunal	Address	Jurisdiction
1	RCT Bhubaneswar	Orrisa Forest Development, Corporation Bldg. (2nd Floor), A-84, Kharvela Nagar, Bhubaneswar - 751 001. Fax No.0674 - 2530140 , office- 2534835 Asstt.Register- 801801190	State of Orissa

2	RCT Secunderabad	South Lallaguda, Secunderabad – 500017 Fax - 040 - 7830355 / 7004355 Asstt.Register- 8008404904	State of Andhra Pradesh
3	RCT / Bhopal	Old Rly. Hospital Bldg., E. Rly Colony Sikandry Sarai, Bhopal. Fax No.0755-2574615. Member Tech-2574725. Asstt Register- 9752417804	State of Chattisgarh

c. Who can claim:

An application for compensation under section 124 or 124-A may be made to the Claims Tribunal-

- (i) By the person who has sustained the injury or suffered any loss, or
- (ii) By any representative duly authorized by such person on his behalf, or
- (iii) Where such person is a minor, by his guardian, or
- (iv) Where death has resulted from the accident/untoward incident, by any dependant of the deceased or where such a dependent is a minor, by his guardian.

Every application by a dependant for compensation under this section shall be for the benefit of every other dependant.

d. Procedure for filing application

- (i) The claimant or his agent or his duly authorized legal practitioner should present the application in "Form II " in triplicate to the Registrar of the Tribunal having jurisdiction over the place of accident/untoward incident. The application can also be sent by registered post to the Registrar of the Bench concerned.
- (ii) Where the number of respondents is more than one, as many extra copies of the application as there respondents, together with unused file size envelopes, bearing the full address of such respondents, shall be furnished by the applicant.
- (iii) The applicant may attach to and present with his application a receipt slip in Form IV which shall be signed by the office of the Registrar, RCT receiving the application on behalf of the Registrar in acknowledgement.

- (iv) Every application including any miscellaneous application shall be typed legibly in double space on one side on thick paper of good quality.

e. Particulars required for filing claims in Railway Claims Tribunal (RCT)

- (i) Name and father's name of the person injured/dead (husband's name in the case of married woman or widow).
- (ii) Full address of the injured/dead.
- (iii) Age of the person injured/dead.
- (iv) Occupation of the person injured/dead.
- (v) Name and address of the employer of the deceased, if any.
- (vi) Brief particulars of the accident indicating the date and place of accident and the name of the train involved.
- (vii) Class of travel, and ticket/pass number, to the extent known.
- (viii) Nature of injuries sustained along with medical certificate.
- (ix) Name and address of the Medical Officer/Practitioner, if any, who attended on the injured/ dead and period of treatment.
- (x) Disability for work if any caused.
- (xi) Details of the loss of any luggage on account of the accident.
- (xii) Has any claim been lodged with any other authority? if so, particulars thereof.
- (xiii) Name and permanent address of the applicant.
- (xiv) Local address of the applicant, if any.
- (xv) Relationship with the deceased injured.
- (xvi) Amount of compensation claimed.
- (xvii) Where the application is not made within one year of the occurrence of the accident, the grounds thereof.
- (xviii) Any other information or documentary evidence that may be necessary or helpful in the disposal of the claim.
- (xix) One helpline for compensation may be opened.

HQ Emergency Cell will collect updated information regarding all aspects of the accident from the

UCC and pass on the same to:

- (xx) Emergency Cells opened on other divisions of ECoR.
- (xxi) Emergency Cells opened on originating and terminating Zonal Railways.
- (xxii) Safety Directorate's Emergency Cell in Railway Board.
- (xxiii) Help line Enquiry Booths should not contact the accident site or the UCC directly.

6.6 DUTIES OF MECHANICAL DEPARTMENT

- I. PCME and such other officers as decided by PCME from HQ will proceed to accident site.
- II. Similarly, Sr.DME as well as AME should proceed to site of accident. DME will be available in Divisional Control Office for providing backup support.
- III. Break Down Spl. Without Crane should be requisitioned from adjoining divisions also so that additional rescue equipment such as cutters, spreaders, hydraulic jacks, generators, lighting equipment etc. could be available for rescue operation.
- IV. The aim should be to ensure one ART with 140T crane along with one Break Down Spl at each end of the accident site.
- V. Provision should be made for availability of standby crane, Loco Pilot on each ART working at site, so that ARTs can work round the clock.
- VI. Road cranes of sufficient capacity should be arranged in coordination with Engineering Department so that these cranes can start working from the center while the 140T cranes can continue working from either end.
- VII. Trucks should be arranged for carrying Break Down equipment near to accident involved coaches, so that the site of accident can be approached from the middle, and more work centers can be opened up simultaneously.

VIII. Sr.DME shall order for Crane and additional cranes in consultation with PCME/CMPE.

6.8 DUTIES OF SECURITY DEPARTMENT

- I. PCSC/RPF will proceed to accident site on receiving information from security control. PCSC/ RPF will assume control and take necessary steps for discharging duties allotted to Security department.
- II. Similarly, Sr.DSC will proceed to the site by SPARME/ ARME along with a maximum number of RPF personnel. Only one officer will stay back at Divisional HQ.

6.8.1 Rushing of men and material to site

- (i) On receipt of first information, the nearest RPF Post should marshal maximum available manpower within the shortest possible time and dispatch them to the scene of accident, by fastest available means including **OFF DUTY** staff.
- (ii) Simultaneously, the Post / Outpost in charge would requisition additional manpower from adjoining RPF Posts including **OFF DUTY** staff.
- (iii) He should also pass on the information to Local Police and Police Control Room, Local Fire Brigade, hospitals, Local voluntary organizations and the like organizations at the earliest.
- (iv) Divisional Security Control shall get reinforcement from neighboring posts/outposts, reserve line, divisional HQ or Zonal reserve and send them by the ,SPARME/ARME/ ART. If they could not be sent by the SPARME/ARME/ ART then they should definitely be sent by the 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end.
- (v) In case any RPSF Battalion or Company is located in the vicinity, men can be requisitioned from there for dealing with such emergent situations till additional force is available from other sources.
- (vi) Additional RPF personnel from Zonal HQ should be sent to accident site.
- (vii) Additional RPF personnel available throughout the Division should be alerted and sent to the accident site by the 2nd and 3rd special trains carrying backup logistic support of men and material, from each end.

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

- a. Torches (1 per person) and other lighting arrangements.
- b. Nylon ropes (1 kms) and poles for segregating the affected area.
- c. 4 nos. of loud speakers for making announcements.
- d. 10 stretchers and 10 first aid equipment.
- e. 10 wireless sets of 5 watt one VHF set of 25 watt for inter-communication.
- f. Luminous Jackets (for all the staff involved in the rescue operation).
- g. Digital Camera for photographing the scene (both on negative and slide films) Video recording of rescue and Salvage operations and connected administrative arrangements.

6.8.2 Co-ordination with Local Police

- (i) Maintain constant liaison with IG/GRP and ADG/GRP for following :
- (ii) Rushing all available GRP personnel to the accident site.
- (iii) Obtaining additional manpower from the local police for purpose of crowd control.
- (iv) Co-ordination with local police/ GRP for giving expeditious clearance for starting restoration work.
- (v) Co-ordinate with local police / GRP for early disposal of dead bodies.

6.9 DUTIES OF ELECTRICAL DEPARTMENT

- I. PCEE or such officers as decided by PCEE from HQ will proceed to accident site.
- II. Similarly, Sr.DEE(G) / DEE(G)/ AEE(G) should proceed to accident site and AEE(G) / Sr.DEE(G) should man the Divisional Control Office for providing backup support. In absence of AEE(G) Senior Most Section Engineer(G) should man the Control Office.
- III. Sr.DEE/TRD or AEE/TRD proceed to site of accident. DEE/TRD or AEE/TRD will be available in Divisional Control Office for providing backup support.

- IV. Similarly, Sr.DEE(OP) / AEE (OP) should proceed to site of accident and Sr.DEE(OP) / AEE(OP) will be available in Divisional Control office for providing back up support.
- V. Main responsibility of Electrical Department will be regarding site illumination with portable generator sets, portable inflatable tower lights, disconnection and slewing of OHE. In case of scarcity of generator sets the same may be hired from nearby village or town.
- VI. Maximum number of electrical staff should be sent by 2nd and 3rd Special trains for installation and operation of electrical equipment.
- VII. Officers staying back in divisional HQ Shall maintain constant liaison with site and find out quantum of assistance required by way of men and material.
- VIII. These should be rushed to accident site either from:
 - a. Railway sources within the division, or
 - b. Railway sources from adjoining divisions and zones, or
 - c. Non-Railway sources within the division and adjacent to Divisions.
- IX. Site illumination through Generator sets of ART / ARME / SPARME by Halogen lamps.
- X. In case of scarcity of Generator sets, Generator sets to be hired from nearby village/Town and fuels to be arranged from outside.
- XI. Illumination through inflated tower lights.
- XII. Temporary illumination through availing LT Power Supply from nearby licensee if practically possible.

6.10 DUTIES OF SIGNAL & TELECOMMUNICATION DEPARTMENT

- I. PCSTE and such officers as decided by PCSTE from HQ will proceed to accident site.

in PHOD's special.

- II. Similarly, Sr. DSTE as well as ASTEs should proceed to site of accident. DSTE will be available in Divisional Control Office for providing backup support.
- III. Main responsibility of S&T Department will be for providing effective and adequate means of communication.
- IV. Provision of portable telephone to be connected directly to Sectional Control through emergency socket.
- V. Provision of auto telephone of nearest Rly exchange through DM pairs at emergency socket.
- VI. Provision of communication through satellite telephone.
- VII. BSNL telephones to be provided. Setting of V- SAT for video conference.

Rushing of men and material to site

- I. Sr.DSTE along with ASTE will carry the following to the accident site:
- II. Satellite phone,
- III. FAX cum printer,
- IV. Two 25W VHF sets along with antenna and battery,
- V. 10 numbers 5W walkie-talkie sets.
- VI. He will be accompanied with at least one SSE(Tele)/ JE(Tele)and two TCM/WTM.
- VII. 2 more SSE/JE-Tele /TCM, SSE/JE-Signal of the section and maximum number of telecom staff should be sent for installation and operation of telecom equipment. They should go to the site of accident either by ART or latest by 2nd and 3rd Special trains carrying backup logistic support to the accident site, from each end.
- VIII.Satellite phones of HQ and nearest division and one FAX machine will be carried in GM special by at least one SSE(Tele)/ JE(Tele) and one TCM / WTM.
- IX. All mobile phones available with the Division should also be rushed to site for emergency use.

- X. Sufficient number of spare batteries to last upto 72 hrs and battery charges for these mobiles should also be taken to accident site.

Arranging communication at site

- (i) DSTE in the division will immediately come to divisional control office and ensure setting up of all communication arrangements as required.
- (ii) DSTE will keep a record of the numbers of Railway telephones, BSNL telephones, IMMERSAT phones provided at site and telephones provided at Help line Enquiry Booths. This information shall be passed on to the Divisional Emergency Cell.
- (iii) He should liaison with BSNL officials in the area for immediate provision of additional BSNL telephone/hot lines at the accident spot, nearest station and at Help line Enquiry Booths duly utilizing assets under his disposal where required.
- (iv) Map of the division showing areas where cell phone connectivity is operative is available in Divisional DM Plans.
- (v) Should procure along with connecting a minimum of 06 nos cell phones for each division and send them to accident site.
- (vi) Obtain E-Mail addresses of Emergency Cells set up on other Divisional and Zonal HQ

Communication at HQ And Divisional Emergency Cells

- (i) Communication arrangements are required to be provided at ECoR HQ Emergency Cell immediately .
- (ii) 02 BSNL Telephones having ISD/STD facility are already available in the HQ Central Control. Dynamic locking code of the telephone is available with CHC/Emergency. FAX machine is also provided on 01 BSNL telephone in the Emergency control.
- (iii) Apart from this telephone, 04 other BSNL telephone numbers (02 with STD facilities) should be made available in HQ Emergency Cell for use by Chief Emergency Officer.
- (iv) One FAX machine shall be provided on one BSNL telephone.
- (v) 02 Railway telephone numbers with STD facilities should also be made available.

- (vi) 02 Mobile telephones should also be made available in HQ Emergency Cell.
- (vii) Similar Communication arrangements should also be provided in the Divisional Emergency Cell.
- (viii) 03 (three) Laptops or Tablets with dongle may be kept in operation for communication & interaction.

Communication at Help line Enquiry Booths

- (i) Help line Enquiry Booths are to be opened at all important stations en-route of the affected train as mentioned at Section (6.6.2- iii) above.
- (ii) Location of these Help line Enquiry Booths will be on Platform No.1 of their respective stations.
- (iii) 02 BSNL phones should be identified and kept pre-wired to the Help line Enquiry Booths so that these can be energized at short notice.
- (iv) Similarly, 02 Railway phones should be identified and kept pre-wired to the Help line Enquiry Booths so that these can be energized at short notice.
- (v) One FAX machine, Photocopier and PC with Internet connection and printer should also be provided at Help line Enquiry Booths. These should also be kept pre-wired so that these can be energized at short notice.
- (vi) E-Mail address of PCs to be provided should be intimated to all concerned. PCs should be configured with these E-Mail addresses as given at Annexure.
- (vii) Stations at which such arrangements are to be made and telephones which are to be utilized should be identified by Sr. DSTE with approval of DRM.

6.11 DUTIES OF ENGINEERING DEPARTMENT

Rushing men and material to accident site

- (i) PCE or any such officer as decided by PCE with PHOD will proceed to accident site by the special train.

- (ii) Sr.DEN(Co-Ord) and Sr.DEN/DEN concerned will proceed to the site of accident by self propelled ARME/ART. In the absence of Sr.DEN(Co-Ord), the next senior most Sr.DEN of the Division will proceed along with the concerned Sr.DEN/DEN. In the absence of Sr.DEN/ DEN of the Section, Sr.DEN/DEN of the adjoining Section will proceed by ARME or self propelled ARME.
- (iii) It is expected that AEN and SE(P.Way) of the Section would have already reached the accident site before arrival of ARME/ART. In cases, where the SE(P.Way) and AEN are based at Divisional HQ, they should move along with staff by ART. At least, two SSE/Works and one SSE/Bridge should move along with their staff by the SPARMV / ART.

Mobilization of work force

- (i) Sr.DEN(Co-ord) in consultation with Sectional Sr.DEN / DEN will mobilize required no of workmen and supervisors as per information received from the site of accident regarding extent of damage to track and other P.Way and Bridge. Earth moving equipments should also be requisitioned as per requirement.
- (ii) ½ km of rails, sleepers and fittings and one set of 1 in 12 and 1 in 8 ½ turnouts are available in the ART. The Mechanical and Operating Departments will ensure that part 'C' of ART (consisting of additional Engineering Material Wagons) shall follow the ART. The additional half km of matching materials and one set of 1 in 8 ½ and 1 in 12 turnouts shall be kept in the Track Depot of the Division. For loading of this material, 2 BFRs and 2 BCN wagons should be immediately placed in the nominated siding / Track Depot. Of Division. These materials should be loaded within 3 hours and dispatched to the site of accident. This will be ensured by the SSE (P.Way) Track Depot and Divisional Engineering Control.
- (iii) At least two nos. of JCBs available with the ballast depot contractor shall be immediately moved.
- (iv) Sr.DEN / DEN in Divisional Emergency Control will request concerned authority (Army/State Govt. Deptt.) for Bulldozer/Earthmoving machinery in the area. Also the Earthmoving machinery can be taken from locality as the may be on serous basis / other mode

6.12 DUTIES OF IT DEPARTMENT

- (i) One separate room in HQ, named " Multi-Disaster Control Room", which will be used as Emergency Cell and should be provided with minimum 02 PCs.
- (ii) Both PCs should be connected to Rail net and the E-Mail addresses already configured into them should be activated.
- (iii) Similarly 2 PCs in divisional control office nominated for being used in Divisional Emergency Cell should also be shifted there.
- (iv) Both these PCs should be connected to Rail net and the E-Mail addresses already configured into them should be activated.
- (v) PCs in various Help line Enquiry Booths at different stations should all be made functional connected to rail net and made ready for receiving and sending E-Mails.
- (vi) Following information should be uploaded on to ECoR's Website as quickly as possible:

a. List of injured and deceased passengers

- (i) Names of stations where Help line Enquiry Booths have been opened along with their telephone numbers.
- (ii) Accident details would include, number of injured passengers rescued.
- (iii) Break up of type of injuries, such as grievous, simple etc.
- (iv) Disposal of injured passengers in various hospitals.
- (v) Names of injured passengers - coach wise & possible destination.
- (vi) Number of dead bodies recovered- coach wise & possible destination.
- (vii) Number of dead bodies identified- coach wise & possible destination.
- (viii) Names of deceased passengers- coach wise & possible destination.

- b. Details of trains which have been diverted, regulated, short terminated, cancelled or re-scheduled.**

IV) PAYMENT OF EX-GRATIA

6.13.01 Classification of injuries

- (1) Injuries are classified as under: -
 - (i) 'Serious' (include 'grievous' injuries as defined below)

- (ii) 'Minor' or 'Simple', but excluding 'trivial' injuries such as abrasions or bruises.
- (2) Injuries other than those of defined above are considered to be minor or simple injuries.
- (3) Apart from the 'injured' cases as above, there may be cases where a passenger or trespasser receives only petty abrasions or bruises. These are of trivial nature and technically speaking should not be taken as 'injured' persons.

6.13.02 Amount of ex-gratia

- I. The amount of ex-gratia relief to be paid to the dependants of dead or injured:
 - (a) Passengers involved in Train Accidents as defined under Section 124 of the Railways Act, 1989
 - (b) Road users who meet with an accident at Manned Level Crossing Gate Accidents due to Railway's prima facie liability and
 - (c) Passengers involved in Untoward Incident, as defined under Section 124-A of the Railways Act, 1989 are as under:-

Sl. No	In case of	For Train Accidents / accidents at Manned LC Gate*	Untoward Incidents
1	In case of death	Rs. 50,000/-	Rs. 15,000/-
2	In case of grievous injury	Rs. 25,000/-	Rs. 5,000/-
3	In case of simple injuries	Rs. 5,000/-	Rs. 500/-

*to the road users in Case of Accident at Manned Level Crossing Gate due to Railway's prima facie liability.

Note:

- (i) No ex-gratia payment would be admissible to the trespassers, persons electrocuted by OHE and road users at unmanned level crossings.
- (ii) The amount of ex-gratia relief admissible to road users who meet with an accident due to Railway's prima-facie liability at Manned Level Crossing/Gate 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.

- (iii) Ex-gratia payment should also be made to railway servants killed or injured by a moving train while performing their duty for example, gagman working on track run over accidentally by a moving train.
- (iv) Payment should be sanctioned / arranged preferably on the spot by a senior scale or higher 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.
- (v) The 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 Railways Act, 1989.
- (vi) In case of enhanced ex-gratia announced by the Minister of Railways as a special case under his/her discretionary powers, the amount equivalent to the normal rate of ex-gratia for death/injury of passenger in train accidents/untoward incidents and to the road users who meet with an accident due to Railway's prima facie liability at Manned Level Crossing Gate Accident be paid in cash and the remaining portion of the enhanced ex-gratia be paid by account payee cheque. The position is tabulated as under:

Sl. No.	In case of	Normal rate of ex-gratia (as per extant instructions)	Amount of Ex-gratia to be paid by cash / cheque in case of enhanced ex-gratia by the Hon'ble Minister of Railways	
			By CASH	By CHEQUE
1.	In case of Train Accident (Section 124 of the Act)			
i)	In case of death	Rs. 50000/-	Rs. 50000/-	Announced amount of ex-gratia minus Rs. 50000/-
ii)	In case of grievous injury	Rs. 25000/-	Rs. 25000/-	Announced amount of ex-gratia minus Rs. 25000/-
iii)	In case of simple injury	Rs.5000/-	Rs.5000/-	Announced amount of ex-gratia minus Rs. 5000/-
2.	In case of Untoward Incident	(Sec. 124-A of the Act 1989)		
i)	In case of death	Rs. 15000/-	Rs. 15000/-	Announced amount of ex-gratia minus Rs. 15000/-

ii)	In case of grievous injury	Rs. 5000/-	Rs. 5000/-	Announced amount of ex-gratia minus Rs. 5000/-
iii)	In case of simple injury	Rs.500/-	Rs.500/-	Announced amount of ex-gratia minus Rs. 500/-
3.	In case of Accident at Manned Level Crossing (due to Railway's Prima facie liability)			
i)	In case of death	Rs. 50000/-	Rs. 50000/-	Announced amount of ex-gratia minus Rs. 50000/-
ii)	In case of grievous injury	Rs. 25000/-	Rs. 25000/-	Announced amount of ex-gratia minus Rs. 25000/-
iii)	In case of simple injury	Rs.5000/-	Rs.5000/-	Announced amount of ex-gratia minus Rs. 5000/-

- II. The revised rate and condition for payment for ex-gratia relief in case of grievously injured passengers who are hospitalized in case of Train Accidents and Untoward Incidents, as defined under Section 123, read with Section 124/124-A, of the Railways Act, 1989 is as follows:

In case of Train Accident	In case of Untoward Incident
Rs. 25,000/- <i>lump sum for hospitalization</i> upto 30 days to take care of initial expenses.	Rs. 5,000/- upto 30 days of hospitalization.
Thereafter Rs. 300/- per day be released at the end of every 10 day period or discharge, whichever is earlier.	Rs. 1,000/- per week or part thereof the period for indoor treatment upto further six months of hospitalization. Rs. 500/- per week or part thereof the period for indoor treatment upto further five months of hospitalization.

The maximum period for which ex-gratia is payable to the grievously injured passenger will be 12 months.

Note: (i) 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 Railways Act, 1989.

- (ii) 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 up to 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.

- (iii) Sr.DMO shall also keep track of such injured person taking treatment in other than Railway Hospitals. Sr.DCM/DCM shall keep co-ordination with Sr.DMO for the purpose and arrange payment of ex-gratia as per above chart, at the doorstep of injured person. Every care shall be taken by Sr.DCM/DCM to avoid any inconvenience to injured person in such cases.

(The amount of ex- gratia relief payable shall be as per the rate prevailing at the time of the occurrence of accident / untoward incident. The ex-gratia payment to a moving train in course of performance of duty shall be governed by Railway Board's circulars issued for this purpose.)

6.13.03 Withdrawal from station collections.

In order to meet accident related expenditure, the officers can withdraw money from the station collections duly following the procedure incorporated in Commercial Manual Vol. II Rule No. 2425.

- (a) (8) Departmental expenditure necessitated by floods, accidents or earthquakes, etc.
- (b) (22) Ex-gratia payments to persons involved in train accidents.

The following procedure shall be followed for withdrawal from station earnings.

- (a) The nominated supervisor in-charge of the department concerned may alone withdraw from station collections through a requisition in respect of the above items specified in rule 2425 of the IRCM.
- (b) This requisition should be made in the form appended below indicating the official making such withdrawal, the departmental officer concerned and also the purpose of withdrawal.

From

Name of the Supervisory
Official

Designation

Station

To

Station Master

Station

Please arrange to pay from the Station Collections an amount of Rs..... (Amount to be shown in words and figures) towards (Purpose to be indicated).

This is one of the authorized items of withdrawal from Station Collections. The expenditure is chargeable to the head

Accounting Authority

Controlling Officer

Designation

Station

Signature

Payment made from Station

Collections

Received an amount of Rs.....from
Station collections

Amount:

Signature of

Station Manager

Signature:

Designation:

Station

- (c) The requisition is required to be prepared in quadruplicate, and the SMR is to retain 2 copies out of which one copy will be retained as record copy and the other will be sent to Traffic Accounts Office as Voucher in lieu of Cash.
- (d) Any failure by the supervisory official withdrawing the cash to observe the above instructions or any other irregularity will render him personally responsible and liable for action under Discipline & Appeal Rules.
- (e) The Branch Officer concerned shall forward the requisition received from the stations to the Divisional Accounts Office indicating the circumstances under which the withdrawal was necessitated.
- (f) The countersigned requisition shall be accompanied by relevant supporting paid vouchers. The timely submission shall be monitored by the Branch Officer so that they reach Accounts Office within 15 days from the date of withdrawal.
- (g) The Executive Officer concerned shall be furnish full particulars of the amount withdrawn, details of the payment made, the reason for the payment, the rate and period for which payment is made and the total amount paid with the acquaintance of the payee with necessary revenue stamp wherever due to DAO.
- (h) Also the Monthly Statement of withdrawal from Station Earnings pertaining to the Division prepared by DCM is to be sent to PCCM and FA& CAO (Traffic)
- (i) A monthly return of requisitions issued during the period should be submitted to the Accounts Office by the executives.

(Jt. Commercial & Accounts Procedural Order No.1 of 1990)

CHAPTER-7

SITE MANAGEMENT

(Plan-I,II & III)

PLAN - I

There are 2 aspects of Disaster Management work at an accident site.

Rescue, relief and restoration operation, which are carried out by one set of functionaries.

Aspect pertains rehabilitation of accident involved passengers, taking care of dead bodies, dealing with their relatives etc. for which a different set of functionaries are required. For managing these 3 distinct aspects of DM work that are required to be discharged by Railways, three separate establishments should be set up at an accident site. The outline schematic plan of accident site is given at the end of this Chapter).

Transportation of stranded Passengers.

7.1 UNIFIED COMMAND CENTRE (UCC)

- i. Unified Command Centre (**UCC**) should be set up at the accident site under the overall coordination of **Mechanical** Department.
- ii. This will be some kind of a control office to be located near the centre of the accident site.
- iii. This is basically meant for catering to operational needs of Railway in rescue, relief and restoration work.
- iv. Detailed schematic plan of UCC is given at the end of this chapter.
- v. **UCC** is to be manned by staff of relevant departments such as :
Medical, Commercial, Personnel, Operating, Safety, Security, Public Relations, Mechanical, Electrical, S&T and Engineering.
- vi. UCC will be provided with all facilities similar to a **Control Office**.
- vii. Adequate lighting with generator backup should be provided in the UCC.
- viii. Adequate number of telephonic links to Divisional Emergency Cell and HQ Emergency Cell should be provided. Preferably each department in the UCC should be given as independent telephone including fax, photo copier, PCs and loud speaker.

- ix. PC/Laptop should be connected to Internet for E-Mailing of detail update to all concerned, including Divisional Emergency Cell, HQ Emergency Cell and Help line Enquiry Booths.
- x. A big banner displaying '**UNIFIED COMMAND CENTRE**' should be put up at a prominent place at the entry to the shamiana, with sufficient signage's indicating its direction and approach road.
- xi. UCC at the site will be manned by Sr. Supervisors on round the clock basis in 12 hrs. shift duty and they will monitor & co-ordinate working of their departments.
- xii. Various functionaries in the UCC will monitor and co-ordinate the working of their departments, and assistance required by them, if any.
- xiii. Each functionary at the UCC will maintain a log book. Flow of information both incoming and outgoing would be recorded along with the time and names of officers/staff who will give/receive the messages.
- xiv. UCC will basically supervise the working of 2 LCCs (Local Command Centre) and coordinate with Divisional and HQ Emergency Cells.
- xv. Functionaries of different departments in LCCs (Local Command Centre) should provide updated information regarding progress of work to their counterparts in UCC.

7.2 LOCAL COMMAND CENTRES (LCC)

- i. Depending on the spread of the accident site, Local Command Centres (LCC) on the same pattern as the UCC should be set up.
- ii. If the site is spread out over 300 - 400 mts. 2 LCCs should be set up.
- iii. Detailed schematic plan of LCCs would be similar to that of UCCs as given at the of this Chapter.
- iv. Representatives of same departments as in UCC should be present in LCCs also.
However, they should be one man per department. It will co-ordinate various teams spread out over the site of accident.
- v. Each LCC will oversee the working of DM teams at one end of the accident site.
- vi. Jurisdiction of each LCC will extend to all men and materials belonging to 2 ARMEs, BD special and 1 ART at that end of the accident site.
- vii. One SAG officer of Mechanical department will be overall in charge of each LCC with loud speaker for making announcements and direct telephone link with UCC.

7.3 NEED FOR SETTING UP OF CENTRAL PASSENGER ASSISTANCE CENTRE

For taking care of relatives of passengers, providing them with succour in their hour of agony and for guiding them sympathetically, some kind of an assistance centre is required at site, under overall coordination of Commercial Dept. taking help from different Departments as mentioned. A banner displaying "**CENTRAL PASSENGER ASSISTANCE CENTRE**" should be displayed prominently.

7.4 ASSISTANCE TO BE RENDERED TO THE RELATIVES OF PASSENGERS

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

- i. Locating the name of the passenger on reservation charts, in case passenger was traveling in reserved accommodation.
- ii. Going through the list of injured and dead passengers to find out whether the name appears.
- iii. In case the name is not available in the list, then taking a round of different hospitals to find out whether their relative has been admitted in one of them in an unconscious state.
- iv. Hospitals are generally at separate locations, sometimes even in different towns; and commuting becomes a problem.
- v. In case the passenger can be located in one of the hospitals, they have to find out the severity of injuries, likely period of hospitalization etc.
- vi. Disburse the ex-gratia as per railway extant rules.
- vii. Try and locate missing luggage of the injured passengers. For this they have to take a round of the building where all unclaimed luggage have been kept.
- viii. Next they have to arrange for a place for themselves/relatives to stay.
- ix. Arrange for medicines/diet etc. and payment of hospital bills, if required.
- x. Thereafter, they have to keep in touch with the hospital and get their relatives released.

7.5 ASSISTANCE TO BE RENDERED TO THE RELATIVES/NEXT OF KIN OF DEAD PASSENGERS

They are to be given the following assistance :-

- i. In case the passenger could not be located in any of the hospitals, then they have to go to the building where unidentified dead bodies have been kept.
- ii. Take a round of various rooms where bodies have been kept, examine each body and try and locate.
- iii. Identify the dead body, if the same has been extracted by then.
- iv. Otherwise wait for all bodies to be extracted and try and identify their relative(s).
- v. In case they fail to identify the same then they have to go through photographs of unidentified bodies taken at site.
- vi. After the body is finally identified, they have to produce proof of relationship for Railways to entertain their claim.
- vii. Obtain medical death certificate from the Railway doctor.
- viii. Obtain post mortem report, from the Govt. doctor who has performed post-mortem on the body.
- ix. Obtain official death certificate from the local body/municipality.
- x. Acknowledgement of ex-gratia payment from Railways.
- xi. Collect forms for lodging claim for compensation from Railway Claims Tribunal.
- xii. Take over custody of dead body from the local Police.
- xiii. Perform last rites at the same place or make arrangements to take back the body to their native place, depending on circumstances.
- xiv. Make arrangements for their return journey back to their native place.

7.6(a) COMBINED ASSISTANCE CENTRE (CAC) :

- i. The UCC should have a Central Passenger Assistance Centre (**CPAC**) located towards the rear side, away from the track for rendering help to passengers and their relatives. Outline schematic plan of UCC/CAC is given at the end of this chapter.
- ii. This is basically meant for catering to requirements of passengers and their relatives/next of kin, and for providing a single window clearance for all types of formalities.
- iii. CAC should be separate from the UCC so that it does not interfere with normal rescue and relief work.
- iv. Detailed schematic plan of CAC is given at the end of this chapter.
- v. CAC will be manned by staff of relevant departments such as:
- vi. There should be only one such CAC, and all Railway resources should be pooled into it.

CAC will be manned by staff of relevant department such as :

1. Operating
2. Medical
3. Commercial
4. Security

5. Personnel

- vii A big banner displaying '**COMBINED ASSISTANCE CENTER**' should be put up at a prominent place at the entry to the shamiana.
- viii Different counters should be provided in sequence for each of these formalities, so that the entire exercise can be completed in about an hour.
- ix Functionaries concerned from the local Municipality who issue Official Death Certificates should be advised to come and sit in the CAC so that these certificates can be issued immediately without any delay after completing formalities.

7.6.(b) CAC should have different counters for various purposes in following sequence:-

- i. Reservation chart, for locating the name.
- ii. List of dead and injured along with name of hospital. The name of passenger involved should be checked up from the list of dead or injured, if available, and their current status informed.
- iii. Counter for providing commercial supervisor or Welfare Inspector as escort along with vehicle(s), for accompanying the relative and going to hospitals or mortuary,
- iv. Railway doctor for issue of Medical Death Certificate.
- v. Govt. doctor for issue of Post mortem Certificate, in case the same is necessary.
- vi. Officer - in - Charge of CAC to supervise the CAC.
- vii. Municipality official for issue of Official Death Certificate with Seal.
- viii. Local police for issue of authority for handing over of dead body.
- ix. Claims counter - Payment of ex-gratia and issue of Claims Compensation form.
- x. Counter for helping performance of last rites in case relatives decide.
- xi. Pass counter for issue of return journey pass.
- xii. Return journey facilitation counter for making arrangements for return journey.

7.7 FIRST AID POSTS

- i. Medical Posts should be provided in both UCC and CAC.
- ii. Medical Post in UCC will provide first aid to injured passengers after extrication, assess their injuries and make arrangements for sending them to nearby hospitals.

- iii. Medical Post in CAC will keep all records of injured and dead passengers, names of hospitals where they have been admitted etc.
- iv. First Aid boxes should be provided in LCCs.
- v. This will mean for treating passengers and classifying their injuries before they are sent for admission to various hospitals.

7.8 SETTING UP OF UCC, LCC AND CAC

- i. One SSE/Works shall be exclusively responsible for setting up of these facilities. He shall undertake the following:
 - Move along with sufficient staff for setting up of these facilities.
 - Immediately start setting up of the tentage accommodation after taking out tents and shamiana as provided in ARTs.
 - In addition, he should also requisition agencies which provide tentage accommodation on contract. Details of such agencies have been given in Divisional DM Plans.
- ii. *Bridge Line staff will assist in setting up tentage and above mentioned facilities. Dy.CE/ Bridge will also move to the site and in case, bridge is not involved, he will take full charge of tentage arrangements.*
- iii. Bridge Unit will take with them sufficient Manila ropes, wire ropes, survey instruments, binoculars, helmets, life jackets, ladders and other equipment. Nylon ropes should be sufficient in length to ensure barricading at site and camping areas.
- iv. Sufficient facilities for erecting temporary stage/scaffolding etc. should also be organized, if required at site.
- v. Few temporary toilets should be provided at one location in addition to number of urinals at 3 or 4 places with adequate disinfectant.
- vi. Water tankers will be ordered for supplying water at site and arrangements shall also be made for drinking water.
- vii. Temporary kitchen in tents/shamianas is to be set up so that catering unit or IRCTC can provide cooked food to staff working at accident site.
- viii. Adequate no of chairs should also be arranged.
- ix. Bridge Line staff will have list of divers who in case of emergency can be hired for rescue or restoration operations wherever site is surrounded by deep water and the situation requires.
- x. Signages for both UCC and CAC should be provided at prominent locations.

7.9 NUMBER OF DEAD AND INJURED - MEDICAL DEPARTMENT

- i. Medical department at site should confirm the number of dead.

- ii. Doctors in charge of various teams working on different coaches should give 03 hourly(periodic) report to Medical counter in LCC who in turn will inform UCC, CPAC and others.
- iii. Number of injured passengers.
- iv. Type of injuries, whether grievous, minor or trivial.
- v. Names of injured, and names of various hospitals where injured have been sent.

7.10 IDENTIFICATION OF DEAD BODIES - COMMERCIAL DEPARTMENT

- i. Number of dead bodies identified.
- ii. Ex-gratia paid to injured and next of kin of the dead.
- iii. No. of dead bodies handed over to relatives.

7.11 NUMBER OF COACHES DEALT WITH - MECHANICAL DEPARTMENT

- i. No. of coaches thoroughly searched.
- ii. No. of coaches made off track.
- iii. No. of coaches yet to be dealt with.
- iv. Electrical or Diesel Locomotive(s) dealt with.

Collection and Dissemination of Information - Channel of Communication:-

The following would be the responsibility and medium /channel both for collection as also dissemination of information. Before each shift goes off duty, details of work done should be updated in the LCC.

The LCC's should in turn update the UCC regarding the latest progress. This updated information would be conveyed to Divisional Emergency Cell every 3 hrs(periodically).

4. a. Number of dead and injured - Medical Department:-

- Medical Department at site should confirm the number of dead.
- Doctors in charge of various teams working on different coaches should give 3 hrs (periodic) report to Medical counter in LCC who in turn will inform UCC.
- Number of injured passengers.

- Type of injuries, whether grievous, minor or trivial.
- Names of injured, and names of various hospitals where injured have been sent.

5. b. Identification of dead bodies - Commercial Department:-

- Ex-gratia paid to injured.
- Number of dead bodies identified.
- Ex-gratia paid to relatives of dead.
- No. of dead bodies handed over to relatives.

6. c. Number of coaches dealt with - Mechanical department.

- No. of coaches thoroughly searched.
- No. of coaches made off track.
- No. of coaches yet to be dealt with.
- Electrical or Diesel Locomotive(s) dealt with

PLAN - II

Nominated officials from various departments arriving at site by ARMEs and ARTs form part of the Disaster Management Team. Officials representing each department are responsible to ensure that assigned duties of their respective departments are efficiently carried out. Senior officers of each department will also ensure that their work is synchronized with that of functionaries of other departments for quick rescue, relief and restoration operation.

7.12 MEMBERS OF THE DISASTER MANAGEMENT TEAM

7.12.1 Disaster Management Team normally comprises members of following departments

- i. Trained Railway men from Medical, Commercial, Safety, Electrical, S&T, Mechanical, Engineering, Security, Personnel and other departments.
- ii. In case of fire accidents, trained fire service personnel shall form part of this unit.

- iii. In case of an accident on water body, divers and naval cadets will also be part of the team.
(List of trained staff is available in annexure)
- iv. In case of sabotage or bomb explosion, bomb disposal squads and GRP/Local Police will also be involved.
- v. Various rescue units shall accompany ARMEs, ARTs or move by road as quickly as possible.

7.12.2 Officer-in-charge of Site (OIC Site)

On arrival of ARME/SPARME at accident site DRM shall take over as OIC Site from the senior-most officer of the accident involved train. On arrival of 1st Special train carrying GM and other HQ Officers, GM shall be OIC Site. In the absence of GM, the senior most Officer shall be OIC Site. He will be responsible for forming Core Groups as required and direct them to carryout efficient rescue, relief and restoration operations.

7.12.3 Rescue, Relief and Restoration Operation

DM Team on arrival by ARME/ SPRAME and ARTs shall undertake following actions:

- i. Video coverage of accident site and Crowd Control for Law and Order.
- ii. Rescue operation.
- iii. Clearance from State police for restoration where required.
- iv. Relief operations.
- v. Installation of Communication Network.
- vi. Preservation of Clues and Evidences.
- vii. Media Management at site.
- viii. Salvage operation.
- ix. Restoration operation.
- x. Lighting arrangements of accident site .

7.12.4 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.

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 equipments.
- iii. Separate set of photographs to be taken to preserve clues and evidence of sabotage if suspected.
- iv. *Victims and unidentified bodies should also be extensively photographed.*

7.13 DUTIES AT SITE

For efficient Disaster management, responsibilities of various departments are to be executed by deputing responsible officers and supervisors. Important duties of such Officers / Supervisors are enlisted in this Chapter:

7.13.1 OIC Site

- i. Ensure setting up of UCC, CAC and LCCs at the earliest.
- ii. Collect information from OIC Site of IAT(Instant Action Team).
- iii. Take stock of the situation and plan for efficient rescue operation.
- iv. Estimate quantum of assistance required for each department from:

Within the division,	Adjoining zones
Adjoining divisions of ECoR	Non-Railway agencies.

- v. Channelize local resources to supplement available Railway resources.
- vi. Ensure that duties of various functionaries of different departments as laid down in ECoR's Zonal DM Plan are carried out.
- vii. Ensure co-ordination among all departments for efficient rescue, relief and restoration operation.

- viii. Ensure information to Superintendent of Police and District Magistrate.
- ix. In case of sabotage, direct RPF to obtain quick clearance from State Police.
- x. In case of serious explosions or fire, clearance from Controller of Explosives is to be obtained. It is to be mandatory that Group / Team to reach at site at first information.
- xi. Give prima facie cause of the accident along with forecast of expected date and time of restoration.
- xii. Ensure timely information on the progress of rescue, relief, and restoration work(periodically) with following details:

Number of coaches searched.		Number of bodies identified.	
Number of injured passengers recovered.		Number of coaches dealt with.	
Nature of injuries to passengers.		Supplementary assistance required, if any.	
Number of bodies recovered.			

ii. Forecast for completion of each activity mentioned below should also be firmed up. These target dates and times should be communicated to all officers and supervisors at accident site

1.	Re-railment	4.	OHE fitness.
2.	Track fitness	5.	Clearance of section and imposition of any speed restriction on account of track and OHE.
3.	Points and inter-locking	6.	Movement of first train.

7.13.2 Duties of Divisional Railway Manager

- i. Ensure that functionaries of different branches at the accident site carry out duties assigned to them as per Zonal and Divisional DM Plan
- ii. Co-ordinate with Divisional Emergency Cell regarding assistance required.
- iii. Co-ordinate with Civil Authorities especially with regard to :
 - a) Requisition of buses from State transport authorities, with Loco Pilots for round the clock duty.

- b) Arrange waiver of Post Mortem formalities.
- c) Arrange positioning of Municipal Official in the CAC for issuing of Official Death Certificate with seal.

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

- i. At the accident site, departmental officers available from both HQ and division shall be formed into two teams for round the clock working in 2 shifts, preferably 8 hrs. to 20 hrs. and from 20 hrs. to 8 hrs.
- ii. PHODs/CHODs shall be available on duty during the day time.
- iii. PHODs/CHODs shall take on the spot decision regarding composition of the team for night site shift for their respective department. This composition should not normally be changed during the 3-4 day stay at the accident site.
- iv. Branch Officers shall be available on duty during the day time.
- v. Branch Officers shall take on the spot decision regarding composition of the team for night shift for their respective department. This composition should not normally be changed during the 3-4 day stay at the accident site.
- vi. Similarly, supervisors available from both HQ and divisions shall also be put in two teams.

7.13.4 Duties of Operating Department

Immediately after getting the information.

- i. All sectional DTIs and Supervisory SS of Controlling Stations should be directed to reach the accident site by first available means.
- ii. Similarly additional RG/LR staff from the section should be sent to adjacent stations on either side so that additional shunting work can be done.
- iii. Since considerable amount of shunting is required to be performed at adjoining stations, 2 traffic supervisors in 2 shifts should be posted at adjoining stations on each side.
- iv. Ensure that special trains are sent into the accident affected block section according to the sequence detailed in Chapter 8.

- v. Ensure proper marshalling of crane while proceeding to the accident site in the block section.
- vi. Ensure that Engineering vans of the ART are placed nearest to the accident site for this purpose; Engineering van/wagon should be placed closest to site of accident by sending it in pushing condition.
- vii. Ensure prompt clearance of stranded passengers at the site in coordination with the Divisional Emergency Cell.
- viii. Regarding running of special trains, keep in touch with Divisional Emergency Cell and give requirement from site.

7.13.5 Duties of Safety Department

- i. Preserve and secure all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed till police clearance is received.
- ii. Ensure that video/still photographs by digital cameras are taken as required.
- iii. Ensure that joint measurements, observations by nominating a separate team of Sr.supevisors are recorded in the prescribed proforma before restoration work begins.
- iv. Ensure that unaffected rolling stock is moved away from the site and thereafter stabled at convenient location for further examination by accident inquiry committee.
- v. Ensure that evidence of train staff, station staff and public are recorded on the spot.
- vi. Addresses of passengers willing to give statements later should also be obtained.
- vii. Ensure that special trains are sent into the accident affected block section according to the sequence detailed in Chapter 8.

7.13.6 Duties of Medical Department

i. Main functions

- a. Main functions of the Medical department can be broadly classified as:
- b. Taking an initial round of hospitals and assessment of situation by forming teams.
- c. Taking out injured passengers from accident-involved coaches.

- d. Attending to injured passengers and giving them First Aid.
- e. Preparing list of injured passengers.
- f. Classification of their injuries.
- g. Transporting them to hospitals and getting them admitted.
- h. Post admittance hospital care of the injured.
- i. Dealing with Govt. Hospitals regarding dead bodies.
- j. Preservation of dead bodies.

10. ii. General function

- a. Ensure collecting blood and urine samples of train crew in case the same is necessary.
- b. Organize as many road ambulances as possible at the accident site.
- c. Data Bank of Divisional DM Plans has names, telephone numbers and other details of hospitals near the accident site. They should be contacted on phone for sending road ambulances along with team of doctors.
- d. Set up Medical Counter in UCC and CAC for passenger assistance.
- e. Provide First Aid boxes in LCCs.

11. iii. Site Management

Leader of Team 'A' (Normally CMS/MS In-charge of the Division) would take control of the site, co-ordinate relief measures and distribute duties amongst doctors available as detailed below;

- a. Different teams and groups will be formed for discharging various duties of the Medical department as detailed in Section (7.5) above. Each should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.
- b. One group of doctors will take a round of various hospitals where injured passengers have already been admitted. (Para 'iv' below).
- c. One group consisting of 4-5 teams of doctors and para-medics & other staff available will take out injured passengers and dead bodies from accident involved coaches. (Para 'v' below).
- d. One team will attend to injured passengers and give them First Aid and other medical treatment. (Para 'vi' below).

- e. One team will prepare list of injured passengers, note down details of their injuries and classify them. (Para vii & viii below).
- f. One team would be in-charge of transporting injured passengers to hospitals and getting them admitted. (Para 'ix' below).
- g. One team would be in-charge of post admittance hospital care of the injured. (Para 'x' below).
- h. One team will deal with dead bodies after these have been extracted from coaches. They will prepare a list and arrange for their preservation. (Para 'xi' & 'xii' below).
- i. In case sufficient doctors are available then more groups should be formed for rescue operations. (Para 'v' below).

b iv Taking an initial round of hospitals

- a. Separate doctors will be deputed to visit each hospital where injured passengers have already been shifted.
- b. One commercial officer will also accompany doctors and make a general assessment.
- c. At the hospital, they should collect information about dead/injured persons, their name, age, sex, address, telephone no., name and telephone no. of relatives / friends, nature of the injury, etc.
- d. These information should be immediately communicated to CMS / MS at accident site by using local PCO / Cell phone etc.
- e. Prepare a list of persons dead/injured already in hospitals in three copies by using carbon paper.
- f. The list thus prepared is to be signed by Railway doctor on duty in the hospital. One copy is to be handed over to the Commercial Department.
- g. 2nd copy to be kept with the doctor in charge as office copy and the 3rd copy to be given to paramedical staff to get multiple photocopies for further distribution.
- h. One copy should also be sent to CAC for being fed into the Personal Computer provided in the CAC.

- i. The initial list prepared should be updated at regular intervals, as and when any change occurs and communicated to the emergency control.

c v. Taking out injured passengers

- a. Maximum number of doctors should be deputed for this activity.
- b. This group should consist of at least 4-5 teams. If numbers permit, more such teams should be formed.
- c. Teams involved in rescue operation should ensure rapid access to all injured passengers.
- d. They should take assistance of Mechanical/Engineering/RPF staff to extricate injured passengers.
- e. Each team will join up with teams of Mechanical staff who would also be involved in extracting dead and injured from coaches.
- f. Maximum number of coaches should be tackled simultaneously, except those that have climbed on top or have telescoped into one another.
- g. Coaches should be thoroughly searched including lavatory and vestibule portions before abandoning further search and moving on to the next coach.

ix. vi. Attending to injured passengers

- a. One team will be asked to provide medical treatment to injured passengers immediately after their evacuation from coaches.
- b. Ensure stabilization of condition of injured passengers already taken out from coaches, before they are dispatched to hospitals by road.
- c. In case of patients in critical condition where stabilization of condition at site is not possible, they should be moved immediately by road ambulance or shifted to ARMV.

x. vii. Preparing list of passengers

- a. Collect list of injured passengers prepared by TS/TTEs and assess the situation.
- b. Separate lists to be prepared coach wise.
- c. The list should contain following details;

- i. If found Conscious: Name, sex, age, identification marks, address, telephone number, ticket number, originating and destination station.
- ii. If found Unconscious: Approximate age, sex, identification marks, ticket number and other particulars if relatives and friends are available.
- d. Once the preliminary list of injured passengers has been prepared, the list should be signed by the CMS/MS in-charge and a copy handed over to commercial department.
- e. The list of injured passengers will thereafter be updated periodically, as rescue and relief work continues and fed into the Personal Computer provided in the UCC / LCC.

viii. Classification of Injuries

A. Injuries are classified as under:

'Grievous' injuries as defined below.

'Simple', but excluding 'trivial' injuries such as abrasions or bruises.

a. Following are considered to be 'grievous' injuries (as per Section 320 of the Indian Penal Code):

- i. Permanent privation of sight of either eye.
- ii. Permanent privation of hearing of either ear.
- iii. Privation of any member or joint.
- iv. Destruction or permanent impairment of powers of any members or joint.
- v. Permanent disfigurement of head or face.
- vi. Fracture or dislocation of a bone or tooth.
- vii. Emasculation.
- viii. Any hurt which endangers life, or which cause the sufferer to be, during the space of twenty days, in severe bodily pain or unable to follow his ordinary pursuits.

J. b. Injuries other than those defined above are considered to be "simple" injuries

JJ. B. Apart from injuries defined above, there may be cases where a passenger or trespasser receives only petty abrasions or bruises. These are of trivial nature and technically speaking should not be taken as injuries.

KK. C. "A Railway employee or a passenger or a trespasser shall be considered to be " injured " only when he/she is incapacitated following customary vocation for more than 48 hrs. Such injuries are classified as under"

- i. Serious (including grievous injuries).
- ii. "Minor" or "Simple".

LL. D. Classify injured passengers into separate categories as grievous or simple.

Inform Commercial department for arranging ex-gratia payment.

Classification of injuries may be changed in the light of X-rays and other detailed findings after admission and should be intimated to UCC and LCC.

JJJ. ix. Transporting injured passengers to hospitals

- a. One team will be asked to arrange transport of injured passengers to nearby hospitals.
- b. Ensure expeditious transportation of injured either to AMRVs or to nearby hospitals.
- c. Critically injured passengers should be transported by means of road ambulances and other by means of ordinary road vehicles.
- d. Commercial staff should also be associated with transfer of injured passengers to hospitals.
- e. Before doctors and supervisors leave the accident site for hospital duty, they should note down the DOT and mobile Telephone nos of the accident site, CMS, MS and other doctors at the site for quick communication.
- f. Doctors going to different hospitals should have separate vehicles.
- g. In case sufficient numbers of Railway vehicles are not available, they should hire taxis for their movement by withdrawing from station earnings.

KKK. x. Post admittance hospital care

- a. One Railway doctor, one commercial supervisor and one welfare inspector should be deputed round the clock at each hospital.

- b. If large number of hospitals are involved 2/3 hospitals may be given to one doctor. In that case, the doctor, in consultation with CMS/MS, should station himself at the hospital where maximum no. of patients are admitted.
- c. Make an assessment about capabilities of the hospital to handle injured persons especially with reference to types of injuries they have suffered. Decide whether the patient needs to be shifted to other hospital with better facilities and then arrange to shift the patient.
- d. In case any injured passenger succumbs to his injuries in the hospital, then the doctor in-charge of that hospital should update this fact to the medical counter at CAC.

LLL. ix. Care for the Dead

- a. 20 nos of collapsible coffins which is available at each Divnl. Hospital will be transported to the site by ARMV, road vehicles or train services as per need.
- b. Air-conditioned mortuaries available with Divnl. Hospital to be utilized to store at least six bodies.
- c. There is provision of Embalming Gun and Chemicals to ensure that bodies are preserved for reasonable time and if necessary the bodies can be transported to Divnl. Hospital till claimed by relatives.
- d. 20 nos of body bags which are available with Divnl. Hospital is to be utilized.
- e. In case of a major disaster the usual complement of medical staff in any ARMV is grossly inadequate for undertaking work of this magnitude. This should be augmented from nearby divisions/zones depending on the requirement
- f. Adequate number of Safaiwalas (House Keeping Assts.) and other health workers who have come to the accident site should be mobilized for this purpose.
- g. Dismembered bodies begin emitting foul odour after two days. Carrying out this task under such circumstances become a real problem. Therefore, target should be to extricate all dead bodies within 24 hrs.
- h. Dead bodies should be dealt with coach wise, otherwise bodies taken out from different coaches get mixed up.

- i. Bodies taken out from coaches should be stacked at quite some distance from the track in front of respective coaches, in separate lots, coach wise. While this may slow down the work initially, in the long run it is more systematic since bodies don't get mixed up.
- j. Shift dead bodies from coaches to a nominated place at the accident site with the help of paramedical staff, SJAB, Scouts, Civil Defence personnel, other Railway staff and non-Railway volunteers available at site.
- k. Ensure covering of dead bodies with shrouds.
- l. Put label (white cloth of 12"x9" written by marker pen) on body bag on each dead body on the chest just below the neck as below:

Date :.....

Dead Body Serial No :.....

Coach No:.....

Age.....Sex :.....

Name

:.....
.....

- m. In case of unidentified dead bodies, against the item name', it should be written as unidentified-1/unidentified-2, etc. Approximate age should be estimated from the appearance, such as between 35-45 years.
- n. 5 photographs preferably by digital camera should be taken of each dead body. Two should be close up of face from in front and sideways, third should be with the label visible as mentioned above and fourth and fifth should be of full length of the body.
- o. Each body should also be video photographed.
- p. After photographs have been taken, each body should be placed inside a plastic bag with zip having proper labeling system where some information is also to be provided.
- q. After this, bodies will be handed over to GRP or local police for safe custody.
- r. Take necessary steps to handle unhygienic condition that may arise due to decomposed/ mutilated bodies.

3) Preservation of dead bodies

- a. Numbering and photography of bodies should be done even when relatives are on hand to claim the body.
- b. 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.
- c. 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 possession.
- d. This problem is further compounded in unreserved coaches where no reservation charts are available.
- e. Identification problems come up in case of mutilated bodies also. In such cases, photographs are better means of identification.
- f. Arrange for hiring of a couple of big halls, for keeping bodies.
- g. Rooms should preferably be at a single location so that relatives do not have to go around from mortuary to mortuary.
- h. A large building having number of rooms would be ideal for storing them. Best option would be to take over a school building temporarily.
- i. Arrange to move dead bodies to nominated buildings being used as temporary mortuaries.
- j. Bodies should be neatly lined up with their numbers prominently displayed, and kept in different rooms, coach-wise.
- k. Notice Board outside the building should display the room nos where bodies extracted from a particular coach have been kept.
- l. These details should also be posted on a notice board outside each room.
- m. This will prevent unnecessary handling of bodies, which in any case would be in an advanced state of decomposition.
- n. For dead bodies whose relatives are not readily available and delay is expected, arrange for their preservation by dry ice etc.
- o. Procure following items from local market for dealing with dead bodies :

- | | |
|------------------|-----------|
| 1.Shrouds | 2.Coffins |
| 3.Polythene bags | 4.Dry ice |

- p. Commercial staff should be put on round the clock duty in the building housing the temporary mortuary for guiding relatives as and when they come.

7.13.7 Duties of Commercial Department

f) i. Main functions

Main functions of the Commercial department can be broadly classified as:

- a. Providing beverages and catering to injured and uninjured passengers through IRCTC or any nodal agency.
- b. Initial round of hospitals and assessment of situation.
- c. Preparing list of injured passengers.
- d. Assisting transportation of injured passengers to hospitals and getting them admitted.
- e. Payment of ex-gratia to injured and next of kin of dead.
- f. Dealing with refund and claims compensation formalities.
- g. Taking charge of luggage and consignments.
- h. Assistance in post-admittance hospital care of the injured.
- i. Taking care of relatives.

ii. General

- a. Before Sr. DCM proceeds to accident site he should arrange withdrawal of sufficient cash from station earnings.
- b. At the accident site, handpicked commercial supervisors should be deputed for manning commercial counters in UCC and CAC.
- c. Each commercial counter in CAC is to be manned by one group as detailed in Chapter 10, Sec-6(six). Co-ordination with other depts. during the process of salvage is must.

iii. Withdrawal of cash from station earnings

- a. In order to meet accident related expenditure, Officers can withdraw money from station earnings duly following the procedure incorporated in Commercial Manual Vol. II Rule No.2425.
- b. Departmental expenditure necessitated for floods, accidents or earthquakes, etc.
- c. Ex- gratia payments to persons involved in train accidents.

- d. Procedure and accountal as detailed below should be followed (Para xi & xii below).

iv. Hiring of Vehicles

- a. A large number of road vehicles are required at an accident site for following purposes:
 - i. Taking injured passengers, doctors and other important officials to hospitals.
 - ii. Clearance of uninjured passengers.
 - iii. Taking dead bodies to mortuaries.
 - iv. Bringing men and materials, etc. to accident site.
 - v. Taking unclaimed luggage for being kept in safe custody.
 - vi. Taking relatives to hospitals and mortuary.
 - vii. Other miscellaneous work.
- b. For this purpose apart from whatever number of Railway vehicles may be available, extra road vehicles may be hired.
- c. Adequate number of road vehicles should be attached to CAC for taking relatives to hospitals, mortuaries etc.
- d. Nominated Railway staff to be attached to each hired vehicle round the clock (even group 'D' would suffice), so that optimum use can be made of the vehicle.
- e. Buses from State transport authorities should also be requisitioned along with extra Drivers for round the clock duty.
- f. One Railway staff should be put in charge of each bus on round the clock duty, who will accompany the bus wherever it goes and bring it back in time (even group 'D' would suffice).
- g. In case hospitals are in different towns, then road transport buses should be put on fixed time round trip schedule for movement of relatives from CAC to various locations and back.
- h. All hired vehicles and requisitioned buses should have stickers pasted on their front and rear windscreens indicating **'RAILWAY ACCIDENT DUTY'**.

v. Catering arrangements

- a. Arrangements for supply of food and beverages to not only injured but also to other passengers of the accident-involved train should be swiftly organized.
- b. Food and beverages should be supplied free of charge.
- c. These may be arranged from Railway sources or outside sources as necessary, including IRCTC or their contractors.
- d. To supplement Railway catering arrangements nearby dhabas and hotels should be contacted and arrangements made for opening up stalls at the site.

vi. Clearance of uninjured passengers

- a. First of all, arrangements for water and food for stranded passengers should be made.
- b. Clearance of accident-affected passengers from accident site should be planned along with Operating branch who will provide the empty coaching rake.
- c. Make announcement thorough PA system informing passengers regarding their clearance from site either by:
 - i. Front portion of the accident involved train.
 - ii. Rear portion of the accident involved train,
 - iii. Empty coaching rakes that have been brought to the accident site,
 - iv. Road bridging that has been arranged.
- d. Arrange adequate Rail Sahayak & labour for carrying passengers luggage while they transfer to the new train.
- e. In case of road bridging, arrange road transport to clear stranded passengers, record details of passengers dispatched and relay particulars to Divisional Emergency Cell.
- f. Senior-most official at site shall have powers to arrange conveyance for affected passengers free of charge by any available mode of transport and also incur expenditure for carriage of passengers' luggage, etc.

vii. Preparing list of injured passengers

- a. Collect list of injured passengers prepared by TS / TTEs after confirmation by Doctors.
- b. Separate lists to be prepared coach wise by Medical Department.

- c. This list should be fed into the Personal Computer available in the CAC.
- d. The list should also be e-mailed to the Divisional Emergency Cell and Hq. Emergency Cell.
- e. The list of dead and injured that is initially fed into the PC will thereafter be updated periodically, as rescue and relief work continues.
- f. No ex-gratia payment would be admissible to trespassers, persons electrocuted by OHE and road users at unmanned level crossings.
- g. Ex-gratia payment should also be made to Railway staff killed or injured by a moving train while performing their duty, for example, gang-man working on track run-over accidentally by a moving train.
- h. Ex-gratia amount is to be paid in cash.
- i. In case of injured passengers, ex-gratia should be paid to the injured passenger himself or in case he is too ill, to his relative in his presence.
- j. In case of death cases where relatives identify and claim the body, following precautions are to be taken:
 - i. Photograph the face of the body from in front and from the side.
 - ii. Photograph the person taking the ex-gratia payment.
 - iii. Record the relationship of the person claiming the body along with details of proof, if any.
 - iv. In case enhanced ex-gratia is announced by the Hon'ble MR, then the enhanced amount should be paid by cheque by Accounts department.
 - v. Ex-gratia paid is not to be adjusted against claims compensation payable as decreed by RCT subsequently.
- k. Payment should be arranged preferably on the spot by a senior scale officer nominated by GM after making such enquiries as can be reasonably made on the spot after immediate needs by way of medical attendance etc., to injured persons have been attended.

viii. Refund and Claims Compensation

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

- b. Injured passengers and next of kin of deceased passengers must be supplied with blank claims compensation forms along with Claims Booklet explaining complete procedure.
- c. Photocopy of a filled up Claim Compensation form may also be given along with the blank form so as to help them in filling it up.

ix. Luggage and consignments

- a. As and when unclaimed luggage and personal belongings are taken out from coaches, a list should be made coach wise, and each item should be tagged with coach no.
- b. A list of each item with distinguishing marks should be made.
- c. If possible, the cabin number inside the coach should also be indicated.
- d. Luggage claimed should be handed over on satisfactory proof of ownership.
- e. Unclaimed luggage and personal belongings of injured/dead passengers should be taken possession of for safe custody.
- f. Unclaimed luggage should be stored in a safe place, preferably, part of the some building/ enclosure which as being used for preserving dead bodies.
- g. These should be stored in separate rooms coach wise so that it is easy for relatives to identify.
- h. A list should be displayed outside each room indicating the coach no. whose luggage is stored there.
- i. It is the responsibility of Commercial department to take charge of all unclaimed luggage etc. These should be taken over from the charge of RPF.
- j. Booked luggage, parcels and consignments available in SLRs, VPUs etc. should be taken out and sent by road to nearest Jn. Station for safe custody.
- k. Booked perishables goods available in SLRs, VPUs should be taken out and either auctioned at site or sent by road to nearest Jn. Station for being auctioned.
- l. RMS consignments on the train should be shifted for safe custody till Postal Authorities come and take over.

x. Withdrawal from station earnings - Procedure

- a. In order to meet accident related expenditure, Officers can withdraw money from station earnings duly following the procedure incorporated in Commercial manual Vol.II rule No: 2425.
- b. Departmental expenditure necessitated by floods, accidents or earthquakes, etc.
- c. Ex-gratia payments to persons involved in train accidents.

xi. Withdrawal from station earnings - Accountal

- a. The withdrawal from station earnings will be against station pay order. The Officer withdrawing money from station earnings is personally accountable for its correct expenditure and submission of vouchers to the Sr. DFM through Sr. DCM of the concerned Division.
- b. Branch Officer of the concerned department shall be responsible for submission of monthly statements of the amount of money withdrawn from station earnings to Sr. DCM, who shall consolidate such withdrawal and submit a report to PCCM and FA&CAO(T) accompanied with relevant supporting paid vouchers on the 1st week of the subsequent month.
- c. Executive officer concerned shall furnish full particulars of the amount withdrawn, details of payments made, reasons for the payment, the rate and period for which payment is made and the total amount paid with the acquaintance to Sr DFM.
- d. Sr DCM will compile a monthly statement of all withdrawals from station earnings of his division and send it to PCCM and FA&CAO(T).
- e. Branch Officer shall be responsible for submission of vouchers against expenditure incurred out of the station earnings withdrawn within 15 days to the Sr. DCM who shall consolidate such withdrawal and submit to Sr. DFM of the respective Division, failing which the amount so withdrawn shall be recovered from the concerned Officer's salary.

PLAN - III

7.14 DUTIES OF MECHANICAL DEPARTMENT

- : For discharging the dual responsibility of extricating injured passengers & dead bodies from coaches and toppling those coaches whose search has been completed, 2 separate groups will be formed at each end for purposes of 'search and rescue' and 'off tracking of coaches'.

- : Once 4 ARMEs, 2 ARTs and 2 BD specials have arrived at the accident site from both ends, normally no more mechanical equipment will be required from anywhere else. The main work will then consist of using of these resources effectively and efficiently.
- : Different teams and groups will be formed for discharging the dual responsibilities of the Mechanical department. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.
- : One Sr. Supervisor should be in-charge of each team conducting search and rescue at the site. All such 'search and rescue' groups at each end of the accident site would function under directions of an ADME.
- : Similarly, one Sr. Supervisor should be in-charge of each team working on 'off tracking of coaches' at the site. All such 'off tracking of coaches' groups at each end of the accident site, would function under directions of another AME. The second AME concerned would also be in-charge of the crane at that end.(To read AME as ADME)
- : Take precautions in electrified section that power supply is switched off before commencing rescue/relief work.
- : Use necessary safety equipment like hand gloves, helmet etc.
- : If spillage of inflammable substances is suspected, then only cold cutting equipment should be used.
- : In case of suspected sabotage, ensure minimum interference to clues. Save lives and extricate passengers after video and digital photographs have been taken.
- : Be cautious in using rescue tools like gas cutters, cold cutters, spreaders, hydraulic jacks etc. so that passengers trapped inside or buried under the debris do not get hurt.
- : Ensure marshalling of ART according to site requirement before it is sent into the accident involved block section.'
- : For efficient extrication of entrapped passengers take assistance of Medical/ Engineering departments.
- : Each team will join up with Medical teams who would also be involved in extracting dead and injured from coaches.

- : Maximum number of coaches should be tackled simultaneously, except those that have climbed on top or have telescoped into one another.
- : Road cranes of sufficient capacity should be arranged so that these cranes can start working from the centre while the 140T cranes could continue working from either end.
- : Trucks should be arranged for carrying BD equipment near to accident involved coaches, so that number of coaches can be simultaneously tackled and more work centres can be opened up.
- : Examine unaffected or re-railed rolling stock and certify their fitness for further movement.

7.15 DUTIES OF SECURITY DEPARTMENT

Main functions of the Security Department can be broadly classified as :

- i. Co-ordination with GRP and Local Police. ii. Crowd management.
- iii. Protection of luggage iv. Protection of Railway property.

7.15(a)

Liaison with Civil Police

- i. In case of sabotage, liaison with Local Police & officials of District Administration and get early clearance.
- ii. Clearance should be obtained as expeditiously as possible, for starting restoration work.
- iii. Additional manpower should be requisitioned from local police officials and District Administration for purpose of crowd control.
- iv. Obtain assistance from GRP and Local Police as and when required.
- v. Co-ordination with Local Police / GRP for early disposal of dead bodies.

7.15 (b) Crowd Management

- i. The first problem at an accident site is that of surging crowds. Carrying out any kind of rescue and relief operation becomes next to impossible due to crowd. Railway men who try to undertake any kind of rescue and relief work become victims of mob fury.
- ii. Cordon off the site and prevent unauthorized entry of outsiders.

- iii. Segregate the area of accident by putting up temporary barriers using nylon ropes or any other make-shift device available at the scene so that outsiders do not disturb the site or hamper rescue operations.
- iv. These barriers should be at quite some distance away from the track, so that UCC, CAC and LCCs are inside the cordoned off area.
- v. Provide barricade and ask for additional force to control crowd during VIP visit.

7.15 (c) Protection of luggage

- i. Protection of unclaimed luggages of passengers till these are duly taken over by commercial department for safe custody.
- ii. Unclaimed luggage of passengers should be isolated and stacked coach wise, with proper labeling indicating coach no from which recovered.
- iii. If possible, the cabin number inside the coach should also be indicated.
- iv. All such unclaimed luggage should be protected till they are handed over to claimants or taken over by commercial department.
- v. Unclaimed luggage should be stored in a safe place, preferably part of the same school building which is being used for preserving dead bodies.
- vi. These should be stored in separate rooms coach wise so that it is easy for relatives to identify.

7.15 (d) Protection of Railway property

- i. Protect Railway consignments/goods/parcels till these are duly taken over by commercial department and dispatched to nearest station for proper disposal.
- ii. Guard perishables goods till they are auctioned off at site or till they are dispatched to nearest station or being auctioned.
- iii. RMS consignments on the train should be shifted to school building for safe custody till Postal Authorities come and take over the custody.
- iv. Provide security for the cash withdrawn for payment of ex-gratia by the commercial department.
- v. Preserve all clues and evidences regarding probable cause of the accident and ensure that these do not get disturbed.

- vi. Ensure that no Railway staff tampers with any track fittings, or rolling stock parts.
- vii. Anybody found moving under suspicious circumstances should be questioned.
- viii. No Railway staff should be allowed to move about near the accident site with loose or piece meal equipment.

7.15 (e) General

- i. RPF personnel should respond to any call for assistance to rescue victims and transport them to the nearest hospital.
- ii. Information updated by field personnel at the scene of incident to the RPF functionary in the UCC, giving the latest situation.

7.16 DUTIES OF ELECTRICAL DEPARTMENT

b. General

- i. For discharging the dual responsibility of providing illumination at site and managing the OHE, 2 separate units will be formed at each end of the accident site consisting of 'General branch' officers & staff and TRD officers & staff.
- ii. Once 2ARMEs, 2ARTs and 2 BD specials have arrived at the accident site from both ends, normally no more electrical equipment will be required from anywhere else. The main work will then consist of using of these resources effectively and efficiently.
- iii. Different teams and groups will be formed for discharging various duties of the Electrical department. Each team should consist of 4-6 members and each group should consist of 3-5 teams, depending upon requirement.

c. Site illumination

One Sr. Supervisor should be in-charge of each group working at the site. All 'General Services' teams at each end of the accident site, would function under directions of one AEE(G).

- i. Senior most Electrical Officer at site would make a quick assessment of the electrical requirement of the site.
- ii. This would be done keeping in mind the geographical spread of the site, the size of UCC, LCCs, CAC and any other requirement as necessary.

- iii. Thereafter, he would assess the quantity of electrical fittings and generator sets available in ARMEs and ARTs.
- iv. In order to set up adequate illumination facilities, all generator sets and lighting fixtures available in ARMEs and ARTs would be used.
- v. First priority for lighting would be the accident site along the track where rescue, relief and restoration work is going on.
- vi. Next priority would be given to lighting up of UCC, CAC and LCCs.
- vii. Additional requirements of generators and lighting fixtures, if any, should be called for immediately from other Railway sources within the division, well in time.
- viii. In case divisional sources are inadequate, then sources from other divisions should be tapped.
- ix. Officer at site should hire additional generator sets, lighting fixtures and arrange fuel etc. as required, from non-Railway sources available nearby. List of such sources are given in Divisional DM Plans.
- x. Once generators and lighting fixtures have been set up, efforts should be made to tap local power supply from some nearby sources, if available.
- xi. In case power supply is not available nearby and illumination has to continue on generator supply, then sufficient quantity of petrol and diesel should be procured and kept in stock.

: OHE at site

One Sr. Supervisor should be in-charge of each group working at the site. All TRD teams at each end of the accident site, would function under directions of one AEE/TRD.

- i. Immediately OHE should be switched off. In case OHE is to be brought down, the same should be done immediately so that working of crane does not get held up on account of OHE.
- ii. In case slewing of OHE suffices for some sections, then the same should be done quickly to facilitate crane operation.
- iii. Sr. DEE/TRD shall arrange movement of adequate numbers of Tower Wagons along with men and material from adjacent depots from both sides of accident site.

- iv. In case more tower wagons are required these should also be requisitioned from other depots along with men and material.
- v. An assessment should also be made of the extent of damage to OHE masts, and other equipment.
- vi. Additional requirement of materials, if any should be called for immediately from other Railway sources within the division.
- vii. In case divisional sources are inadequate, then sources from other divisions should be tapped.
- viii. In case other divisional sources are also inadequate, then sources from other zones should be tapped.
- ix. Availability of OHE masts is a long lead item. Requirement of masts should be quickly worked out so that these can be moved immediately.
- x. Ensure temporary portals are erected without delay.
- xi. In case damage to OHE is extensive and a wiring train is considered to be more efficient, then the same should be arranged for from other zone after discussion with RE organisation.
- xii. Ensure that the section is earthed before staff starts working near OHE.
- xiii. OHE should not be charged until all staff, tower wagons, cranes etc. have cleared the block section.

7.17 DUTIES OF SIGNAL & TELECOMMUNICATION DEPARTMENT

S&T department is required to provide sufficient and reliable means of communication at the accident site and other work centers. Sectional ASTE shall remain at the site to monitor communication activities.

a. Types of communication facilities

For this purpose following types of communication facilities should be provided:

- i. Satellite telephones.
- ii. BSNL telephones.
- iii. Mobile, in case the area is under mobile coverage.
- iv. Walkie - Talkie sets.
- v. Railway telephones &
- vi. PA system.

b. Locations

These should be provided at following locations:

- | | |
|-----------|-------------------------------------|
| i. UCC | iv. Hospitals |
| ii. CAC | v. Mortuary |
| iii. LCCs | vi. Any other locations as decided. |

c. Numbers to be provided

- i. Satellite telephones
- ii. BSNL telephones - 02 in UCC, 03 in CAC and 01 in each hospital.
- iii. Mobiles - as many as can be arranged in UCC and CAC. In addition to above at least 02 in each hospital.
- iv. Walkie - Talkie sets - each functionary should be covered.
- v. One 25W VHF set shall also be provided in UCC.
- vi. One 25W VHF set shall be installed in a road vehicle so that mobile communication can be set up, upto a range of about 10 Km.
- vii. Railway telephones - each functionary in UCC, CAC and LCCs should be covered.
- viii. In RE area emergency sockets will be utilized for extending communication to the accident site and in non-RE area where 06 Quad cable is available the same will be utilized for providing communication.
- ix. PA system - at UCC, CAC and LCCs.

d. Public Address System

- i. Provide adequate number of PA system, Hand sets.
- ii. PA system should be provided in UCC, CAC and LCCs. These are to be used for communicating with passengers and for giving directions to Railway staff.
- iii. For this purpose, additional PA systems may become necessary depending upon the requirements at accident site.
- iv. Mega mikes available in ART will also be utilized.

- v. Volume of PA system in UCC, CAC and LCCs should be so adjusted that announcements made over one of them reaches only those areas which are under its jurisdiction. It should not interfere with announcements being made by other PA systems.

e. General

- i. Ensure availability of adequate copies of Disaster Management telephone directory containing important telephone numbers.
- ii. Adequate number of Mobile Battery Chargers should be provided in UCC, CAC and LCCs along with number of spare batteries.

7.18 DUTIES OF ENGINEERING DEPARTMENT

Some duties have been detailed in Chapter-6 . Additional duties are as follows:

- i. AEN/SSE (P.Way /Works/ Bridge) shall collect men, rescue tools and arrive at site by fastest means possible.
- ii. Set up UCC, CAC and LCCs at the accident site.
- iii. Assist Medical/Mechanical Department in rescue work.
- iv. If necessary contact Army / Navy / Air Base and collect required personnel like Divers / Swimmers for rescue operation(List available in Annexure).
- v. If necessary hire Private Road Cranes, bulldozers, Earth movers etc.
- vi. 02 Engineering specials, one from each end, carrying engineering material and gang men from the section.
- vii. Additional requirements of track materials, if any, should be called for immediately from other Railway sources within the division, well in time.
- viii. In case divisional sources are inadequate, then sources from other divisions should be tapped.
- ix. 500 additional workmen are required who are to be moved from adjoining Divisions/Zones.
- x. Each such Division sending assistance should move 250 men along with 5 artisans and 5 PWIs.
- xi. One DEN and one AEN each should also move to the site of accident from each such division.

- xii. Plan for coordinated working and movement of track machine for quick restoration in consultation with TRD and operating officials.

7.19 DUTIES OF PERSONNEL DEPARTMENT

- i. Sr DPO shall proceed to accident site along with all Welfare Inspectors.
- ii. Assist Doctors in collecting details of injured/dead and shifting them to hospitals.
- iii. WIs shall be available round the clock in shift duty to look after the welfare of injured persons in each hospital to the extent available.
- iv. Issue complementary return journey passes to relatives for escorting injured and taking them back home.
- v. Manning of personnel branch counters in CAC and discharge duties listed out for those counters.

7.20 DUTIES OF ACCOUNTS DEPARTMENT

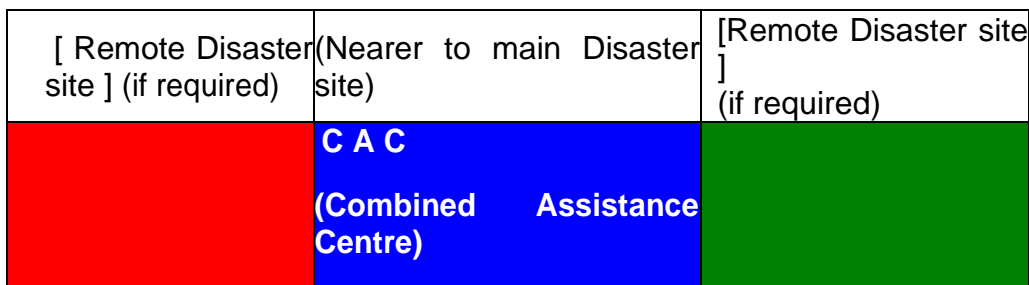
- i. Making available sufficient amount of cash for meeting emergent expenses.
- ii. Opening of current account in a local bank and getting permission for over draft facilities so that large amount of cash is not required to be carried from far off stations.
- iii. Issue of cheques for making of enhanced ex-gratia payments, if so announced at accident site by Hon'ble MR.

7.21 STAFF MATTERS

- i. First problem is of identifying Railway personnel.
- ii. They should be supplied with coloured arm bands to be kept in ARMEs/ARTs.
- iii. Adequate number of armbands, gloves and facemasks should also be provided in the ARMVs/ ARTs.
- iv. Second problem is of communicating with Railway personnel in the crowd.
- v. Microphones/loud hailer provided in ARMEs/ARTs should be used both for crowd control as also for giving instructions to Railway personnel working at accident site.
- vi. Once initial rescue operations have got underway, arrangements have to be made for water and food for Railway staff working at site. Contract arrangement should be made for supply of food.

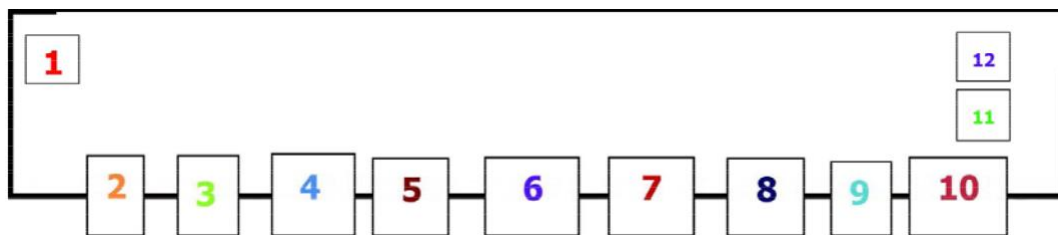
- vii. Spare coaches should be stabled at nearby stations where watering and charging facilities are available for stay of staff

OUTLINE SCHEMATIC PLAN OF UCC / CAC / LCCs



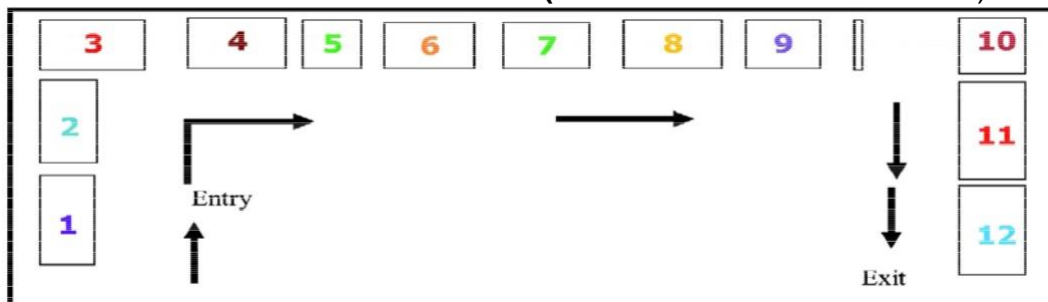
DETAILED SCHEMATIC PLAN OF UCC

(Unified Command Centre)



1	Medical	5	Security	9	Electrical
2	Commercial	6	Public Relations	10	S&T
3	Operating	7	OIC Site and Officers	11	Engineering
4	Safety	8	Mechanical	12	Telecom Centre

DETAIL SCHEMATIC PLAN OF CAC (Combined Assistance Centre)



1	Commercial - Reservation Chart	7	Municipality Official - Issue of Official Death Certificate
2	Medical - List of dead and injured	8	RPF/Local Police - Issue of authority for handing over dead body
3	Commercial - Provision of escort and vehicle	9	Commercial - Payment of Ex-Gratia, Issue of Claims Forms
4	Railway doctor - Issue of Medical Death Certificate	10	Commercial - Assistance for performing of last rites
5	Govt. Doctor - Issue of Post Mortem Report	11	Personnel - Issue of Return Journey Pass
6	CAC in-Charge and Officers	12	Operating - Arrangement for Return Journey

(Set up to be under the overall coordination of Mechanical Department)

CHAPTER - 8

MEDIA MANAGEMENT

8.1 OBJECTIVE OF MEDIA MANAGEMENT:

- i. To post the public with factual periodical information pertaining to the **relief operations**.
- ii. To convey certain **factual periodical** information which is **meaningful for** passengers.
- iii. To convey specific information which is of use to relatives of dead and injured passengers.
- iv. To create a positive public opinion.
- v. To create a healthy relationship with the press and electronic media.

8.2 DUTIES OF PUBLIC RELATION ORGANISATION (PRO)

- i. CPRO and his team will collect **latest** information is available from Divisional/HQ Control Office and first information would be released to the media within 60 minutes of intimation of the accident **and relief measures taken**.
- ii. The information shall include telephone numbers of Help line Enquiry Booths **opened at the stations of home railway and foreign railway**.
- iii. ADRM / Sr.DCM of the concerned Division should act as Official spokesperson at the accident site. Publicity inspector / In-charge at Divisions should assist them in the process. CPRO / Sr.PRO/ PRO should update media at HQs level .
- iv. Photography /Videography can be arranged in-house by Division. Local photographers/ videographers may also be engaged.
- v. Both CPRO and PRO will be available in the UCC during the day.
- vi. Only CPRO / Sr.PRO/ PRO (at HQs) & ADRM / Sr. DCMs (at Divisions) should talk to media. Responsible PR Inspectors to be deputed at night time for filling information gaps and handling social media etc .
- vii. CPRO will organize Press briefings at fixed **and regular** timings as detailed in Section 6 below.
- viii. PR organization shall monitor various important media channels to keep track of media reporting. Suitable corrections/clarifications/**rejoinders** may also be issued, if required.

8.3 SPOKES PERSON

- i. Only GM, DRM, CPRO, Chief Emergency Officer in HQ Emergency Cell and Divisional Emergency Officer in Divisional Emergency Cell are competent to interact or give interview to press and electronic media.
- ii. Apart from the above, any other Officer authorized by GM is competent to interact or give interview to press and electronic media.
- iii. Railway's endeavor shall be to ensure that only factually correct and confirmed information is relayed to the media.

- iv. No inflated or exaggerated version of any fact should be relayed to the media.
- v. Unconfirmed news having no authentic source shall not be relayed to media.
- vi. No Railway men shall express or voice any criticism, or express his personal opinion or views about the accident, at any point of time.

8.4 INFORMATION TO BE RELAYED TO PRESS AND ELECTRONIC MEDIA

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

8.4.1 Accident

- i. Nature of the accident - date, time, place, exact location, train no, number of coaches/lines involved etc.
- ii. Details of most probable cause of accident .
- iii. Prima-facie cause of the accident will be relayed to Media only with the approval of GM.
- iv. Periodic reports regarding progress of rescue and relief work.
- v. Expected date and time of restoration.

8.4.2 Un-injured passengers

- i. Steps being taken to provide beverages, refreshments and first aid treatment for unaffected passengers.
- ii. Steps being taken by Railways for clearance of unaffected passengers.
- iii. Expected time of departure of front portion of accident involved train.
- iv. Likely arrival of front portion at the destination.
- v. Expected time of departure of rear portion of accident involved train.
- vi. Likely diverted route of rear portion having stranded passengers and likely time of arrival at the destination.
- vii. In case empty coaching/scratch rake(s) have been arranged, then details of the same may be intimated to public.
- viii. Road bridging being done, if any ,and laborers provided for transshipment of luggage.

8.4.3 Dead and Injured passengers

- i. Steps taken by Railways to render immediate medical attention.
- ii. No. of injured passengers rescued.
- iii. Breakup of their injuries:
 - Grievous
 - Simple
 - Trivial
- iv. Names of hospitals where injured are being treated.
- v. Approximately how many patients have been admitted in each of these hospitals.
- vi. Names of injured passengers.
- vii. Communication facilities like Cell phones, STD phones provided at these hospitals.
- viii. Payment of ex-gratia.
- ix. Facilities offered to relatives of victims, including free pass for journeys.
- x. Special trains being run for bringing relatives of dead and injured.
- xi. Number of dead bodies recovered and number of bodies identified.

8.4.4 Help line Enquiry Booths

- i. Setting up of Help lines.
- ii. Details of Help lines as follows:
 - Stations where these have been opened.
 - Telephone Nos.
 - FAX Nos.
 - Internet address of ECoR on the Rail net website

8.4.5 Train Services

- i. Details of train operations with regard to diversion, cancellation etc.
- ii. Running of special trains for carrying relatives to the site of accident.
- iii. Expected departure time of relatives special from the originating stations.
- iv. Refund being granted in Help lines for passengers whose journey have been interrupted.

8.5 CASUALTY FIGURES

- i. In all accidents, as long as rescue and relief work continues, there is always a difference between casualty figures given by Railways and casualty figures quoted by the Media.
- ii. The reason for this difference is that Railways give casualty figures based on actual number of dead bodies recovered, whereas Media estimates casualty figures based on the damage visible and likely final tally.
- iii. During Press Briefings, this point should be clarified that at that point of time so many bodies have been recovered.
- iv. However, it should also be made clear that casualty figures are likely to be updated since rescue work is still continuing.
- v. Assessment regarding likely number of deaths and injuries may also be made on the basis of inputs from medical department. Such assessment should be based on:
 - a. Total number of coaches involved.
 - b. Number of coaches searched.
 - c. Number of coaches yet to be dealt with.
 - d. Number of injured passengers dealt by doctors
- vi. Particular reference should also be made to coaches that are crushed or that have climbed on top, and are in the process of searching and relief operations.
- vii. For example, the media can be informed that as of 13 hrs., 02 coaches have been dealt with and so many numbers of bodies have been recovered. 08 more coaches are being searched and casualties /injuries will be updated.

8.6 PRESS BRIEFINGS AT ACCIDENT SITE

- i. CPRO on arrival at accident site shall collect factual information from the Officer In-Charge at site and doctors and relay the same to Media personnel at site and also to Divisional Emergency

Officer in the Divisional Emergency Cell. Thus, an on line communication channel will be established to keep media informed of all important relief details.

- ii. The first Press briefing will be held within one hour of CPRO's arrival at site. Subsequent briefings will be held according to the schedule given below.
- iii. CPRO or PRO should be available in the UCC during Press Briefings.
- iv. There should be fixed time for Press Briefings so that there will be no confusion regarding different versions given to separate news channels at various points of time.
- v. Simultaneous Press Briefings should be held at accident site, at Hq. Emergency Cell and Divisional Emergency Cell as per fixed timings given below so that the same version is given by all concerned.
- vi. Information to be given to the media will be of 30 minutes earlier. For example the media briefing held at 7:30 hrs. will convey all information as at 7:00 hrs on that date.
- vii. On the first two days, there should be 3 media briefings per day. These should be scheduled at the following timings :
 - a. 8:30 hrs, b.13.30 hrs, c.18.30 hrs
- viii. Thereafter, as per condition of the site, media briefing to be done.
- ix. All media releases will be uploaded on the East Coast Railway website, and new page opened to give specific information with regard to the accident. The priority of information released to various media will be as under:
 - TV Channels.
 - Agencies UNI, PTI
 - Print Media.
- x. Convenience and conveyance of media shall be taken care of by PR personnel with assistance of Commercial representatives at site. Media persons should be conveyed to hospitals where injured are being treated.
- xi. Commercial department should ensure that list of passengers who travelled by the accident involved train along with list of dead and injured in the accident is reached to PR officials at the earliest.
- xii. (a) On the first two days, there should be 6 media briefings per day. These should be scheduled at the following timings:
8/30 Hrs. - 10/30 hrs. - 13/30 hrs. - 16/30 hrs. - 19/30 hrs. 22/30 hrs.
- (b). Thereafter, for the remaining days, there should be 3 media briefings per day. These should be scheduled at the following timings: 8/30 hrs, 13/30 hrs, 16/30 hrs.

CHAPTER - 9

PASSENGER MANAGEMENT

9.1 GENERAL

- i. Assistance to passengers and their relatives is of utmost importance in relieving them from some of their misery.
- ii. Injured passengers and their relatives are to be treated with utmost courtesy, concern and sympathy to alleviate their trauma and discomfort.
- iii. For dealing with relatives arriving from far long corners of the country, staff fluent in the local language of the place from where the train originated should be used as interpreters.
- iv. Commercial supervisors & Welfare Inspectors should be assigned to talk to injured passengers to ascertain from them whether they wish to call relatives.
- v. Injured passengers should thereafter be provided with either mobile or BSNL STD phones in order to enable them to speak to their relatives.

9.2 HOSPITALIZATION OF THE INJURED

- i. General policy in case of Railway accidents in which casualties occur is that of rapid evacuation to Railway hospital(s) after rendering immediate and necessary first-aid treatment.
- ii. In case there are no Railway hospitals nearby, then they are to be admitted in the nearest Govt. General Hospitals including Medical Colleges.
- iii. In following cases, injured may be taken to Railway referred Private Hospitals and other Private Hospital(s).

When there is no Railway or govt. hospital available within a radius of say 8 kms, of the site of accident or.

When the attending doctor certifies that the treatment in private hospital is necessary in the interest of the patient.

Except where Railway doctor certified, such injured passenger should normally be eligible to the lowest class of accommodation in private hospitals where different scales are available.

Where the family of the injured person desires to be provided with a higher class accommodation, the family should give in writing to pay the extra cost involved directly to hospital authorities.

- iv. For this purpose, each division should make out a working arrangement with such private hospitals as may be necessary in areas served by them so that in an emergency injury cases can be referred to hospitals concerned without loss of time.

- v. To facilitate matters and to avoid misunderstandings, CMD should draw up a list of such private hospitals bearing in mind Railway and non-Railway hospitals in the vicinity.
- vi. Power has been delegated to MS/ARME-in-charge for settlement of charges to be paid for such cases for each class of accommodation.
- vii. Payments to private hospitals under this para can be arranged locally by the Railways.
- viii. When injured are admitted in non-Railway hospitals, Railway doctors should be deputed to these hospitals to render necessary assistance, including supply of medicines as required which may not be available in these hospitals.
- ix. They should also 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 coordinate and maintain centralized updated position.

9.3 FACILITIES TO BE MADE AVAILABLE IN HOSPITAL

- i. There should be a separate reception counter manned by commercial supervisor or Welfare Inspector at the entry to the hospital for dealing with arriving relatives of patients.
- ii. A chart should be displayed at this reception counter indicating ward nos. where accident patients are admitted along with their names, coach no wise.
- iii. At the entry to each such ward, a second list should display the name of the patient, coach no and the bed no inside the ward.
- iv. Commercial staff and Welfare Inspector on duty at that hospital should carry a list indicating the name, address and telephone no of relatives as given by the patient, and whether they have been informed or not.
- v. Arrangements should be made to inform the next of kin or a relative or friend of the deceased, in case identity of the person involved in accident becomes known.
- vi. As each relative arrives his name should be marked in the list against the passenger's name.
- vii. Reception counter should be provided with mobile/BSNL telephone with STD facility.
- viii. Two extra mobile telephones should be kept which can be used by patients for making out going calls to their relatives.
- ix. Complete medical care of all passengers including payment of medical bills till their final discharge should be provided.

9.4 COMMUNICATION

- i. STD Telephones/Mobile phones should be made available to passengers to communicate with their relatives.
- ii. Railway Telephones available at adjoining Stations/Cabins/Gates shall be extended to the accident site till restoration.
- iii. In case of passenger train accident mobile phones which will be kept at ART/ARME will be made available to the stranded passengers at free of cost for talking to their near and dear ones.

9.5 ARRIVAL OF THE RELATIVES.

- i). After a few hours the relatives of the dead/injure will start arriving.
- ii). Adequate number of 'Display Boards' should be available in the ARME/ART.
- iii). They should be placed at a suitable place to lead the relatives to the CAC.
- iv). Loud speaker(s) should be used to direct the relatives to CAC.
- v. Different counter(s) should be opened to assist them as per Para 13.7.

9.6.1 Single window clearance

Assistance Centre at site should provide single window clearance for all legal formalities and paper work. It should provide the following facilities:

- i. Reservation chart for locating the names.
- ii. List of dead and injured along with the name of hospitals.
- iii. Vehicle, to take the relatives to various hospitals or mortuary.
- iv. Railway doctor for issue of medical Death Certificate.
- v. Govt. doctor for issue of post mortem clearance.
- vi. Municipality official for issue of Death Certificate.
- vii. Local police for handing over of dead body.
- viii. Claim counter for payment of ex-gratia and issue of Claim Compensation Form.
- ix. Counter to help in performing last rites in case relatives/dependents decide to cremate the body there itself.
- x. Pass counter for issue of return journey pass.
- xi. Return journey facilitation counter to make reservation arrangements for return journey.

9.6.2 Dealing with dead bodies:

- i. Adequate number of Safaiwalas and other health workers who have come to the accident site should be mobilized for this purpose since rescue and relief operations may continue for more than 48 hours.
- ii. Dismembered bodies begin emitting foul odor after two days, hence dry ice may be arranged in sufficient quantity. Carrying out this task under such circumstances becomes a real problem.

Hence target should be made to extricate all dead bodies within 24 hours

- iii. Dead bodies should be dealt with coach wise; otherwise bodies taken out from different coaches' will get mixed up.
- iv. Bodies taken out from coaches should be stacked at quite some distance from the track in front of respective coaches, in separate lots, coach wise. While this may slow down the work initially, in the long run it is more systematic since bodies don't get mixed up.
- v. Shift dead bodies from coaches to a nominated place at the accident site with the help of paramedical staff, SJAB, Scouts, Civil Defence personnel, other railway staff and non-railway volunteers available at site.
- vi. Put dead bodies in body bags.
- vii. Put label written by Marker pen on each dead body in the pocket provided in body bag.
 - a. Date
 - b. Dead body Serial No.....
 - c. Name
 - Age.....Sex.....
 - Coach No.....
- viii. In case of unidentified dead bodies, against the item 'name' it should be written as unidentified-1/unidentified-2 etc. Approximate age should be estimated from the appearance, such as between 35-45 years as indicated by doctors.
- ix. 5 Photographs preferably by digital camera should be taken of each dead body. Two should be close up of face from in front and sideways, third should be of full length of the body.
- x. If possible each body should also be video photographed.
- xi. After photographs have been taken, each body should be placed inside a plastic bag with zip having proper labelling system where same information is also to be provided.
- xii. After this, bodies will be handed over to GRP or Local Police for safe custody.
- xiii. Take necessary steps to handle unhygienic condition that may arise due to decomposed/ mutilated bodies by arranging dry ice.

9.6.3 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 with these 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 community halls/School Buildings for keeping dead 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 or the like temporarily.
- ix. Arrange to move dead bodies to nominated buildings being used as temporary mortuaries. Bodies likely to be hold for more days should be embalmed.
- x. Bodies should be neatly lined up with their numbers prominently displayed, and kept, coach-wise.
- xi. Notice Board outside the building should display the room nos. where bodies extracted from a particular coach have been kept.
- xii. These details should also be posted on a notice board outside each room.
- xiii. This will prevent unnecessary handling of bodies, which in any case would be in an advanced state of decomposition.
- xiv. For dead bodies whose relatives are not readily available and delay is expected, arrange for their preservation by dry ice etc.
- xv. Procure following items from local market for dealing with dead bodies if sufficiently not available in the accident relief train:
 - a. Shrouds,
 - b. Polythene bags,
 - c. Coffins,
 - d. Dry ice.
- xvi. 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. Services of commercial supervisors/Welfare Inspectors from adjoining railways may be requisitioned.

9.7 Stay of relatives/dependents of dead and injured

- i. Commercial supervisors or Welfare Inspectors deputed with relatives/dependents should arrange for their stay and accommodation also.

- ii. Depending upon the need, accommodation in budget hotels/dharamshalas should be hired for accommodating passengers.
- iii. Arrangements should be made for their meals etc.

9.8 Performance of last rites

In many cases relatives/dependents decide to perform the last rites at the place of accident itself.

Necessary assistance should be rendered to relatives/dependents in locating:

- i. The nearest cremation or burial ground as the case may be.
- ii. Shopkeepers who sell necessary material for funeral rites
- iii. Priest for performing the ceremony.
- iv. The above information should be conveyed to relatives/dependents and transport provided for carrying the body.
- v. Commercial supervisor or Welfare Inspector should help the relatives/dependents in these endeavors.

9.9 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 complimentary 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 the relatives so desire.

a. Number of dead and injured - Medical Department:

- i. Medical department at site should confirm the number of dead.
- ii. Doctors in charge of various teams working on different coaches should give 3 hours report to Medical counter in Site Officer who in turn will inform Medical Site Officer.
- iii. Number of injured passengers.
- iv. Type of injuries, whether grievous, minor or trivial.
- v. Names of injured, and names of various hospitals where injured have been sent.

b. Identification of dead bodies - Commercial Department:

- i. Ex - gratia paid to injured.
- ii. Number of dead bodies identified.
- iii. Ex - gratia paid to the relatives of dead.

- iv. No. of bodies handed over to relatives.
- c. **Number of coaches dealt with - Mechanical Department:**
 - i. No. of coaches thoroughly searched.
 - ii. No. of coaches made off track.
 - iii. No. of coaches yet to be dealt with.



CHAPTER -10

FIRE DISASTER MANAGEMENT

Fire on a running train is more catastrophic than on a stationary one, since fanning effect by wind helps spread of fire to other coaches. Moreover, passengers sometimes jump out of a running train on fire resulting in increased casualties.

In case of fire in running train, every railway staff available on the train or at the site shall immediately try to stop the train by pulling alarm chain and plunge into action to save lives and property.

10.1 Material factors Causing Fire on Train

- i. Carrying inflammable articles stoves, sigris, gas cylinders, kerosene oil, petrol, fireworks etc. in passenger compartments/coaches.
- ii. Making/using fire near paper, wood, petrol or such other inflammable articles.
- iii. Throwing waste material outside the dustbin, near door, non-removal of garbage from dust bins of pantry car/coaches.
- iv. Wrong -closing of gas regulators, flame arresters and pressure gauge after use.
- v. Bad habits like careless throwing of lighted match sticks, cigarette butts, Bidi butts etc.
- vi. Leakages in pantry car gas cylinders and pipe lines.
- vii. Improper storage of inflammable materials like newspapers, edible oil etc. in pantry cars.
- viii. Insertion of cigarette/Bidi butts, Gutkha pouch etc. in fan base, fuse distribution boards, roof openings.
- ix. Sabotage.
- x. Mishandling/Careless use of pantry electrical equipment by pantry car staff.
- xi. Poor maintenance of electrical equipments and short circuits.
- xii. Loose or temporary connections, hanging wires/exposed joints etc.
- xiii. Defects in locomotive wiring and overheating causing fire.
- xiv. Use of open fire, smoking near trains containing gas/petrol tank wagons at the road side stations.
- xv. Short circuit in electrical wirings.
- xvi. Shunting of inflammable loads, sealing of inflammable wagons/SLRs/VPUs.

- xvii. All railway staff and passengers should take all possible precautions to avoid any of the above mistakes so that possibility of fire breaking out can be minimized.

10.2 INSTANT ACTION TEAM TO RESPOND TO FIRE HAZARDS

- i. Loco pilot, Asst loco pilot, Guard
- ii. All TTEs, AC Coach Attendants/AC Mechanics
- iii. Pantry car staff (railway and/or contractor)
- iv. On Board House Keeping (OBHS) staff(Railway /contractual)
- v. TXR staff present in train.
- vi. RPF/GRP staff.
- vii. Railway employees either on duty or on leave as passengers travelling in the fire affected train.
- viii. Doctors travelling by train.
- ix. Passengers travelling in the train who volunteer for rescue and relief work.
- x. Railway staff working at site or available nearby the site of the fire incident or at stations if fire affected train is controlled in station yard.

10.3 ACTION TO BE TAKEN IN CASE OF FIRE ON TRAIN IN GENERAL-

- (i) First and foremost immediately stop the train by pulling the chain.
- (ii) Summon the fire brigade.
- (iii) If any passenger smells gas or vapour, or even in case of excessive smoke, should hold a wet cloth loosely over nose , mouth and breath through it in as normal a manner as possible.
- (iv) In the event of a vehicle on a running train catching fire the train should be stopped by passing quick communication to loco pilot/guard to stop the train.
- (v) Immediately the on board staff should pull the alarm chain.
- (vi) AC mechanic/electrical staff will turn off electrical appliances. In case of fire from electricity, switch off the sources of electricity.
- (vii) The hammer should be taken out by breaking the glass panes of the hammer box and the window glass of AC coaches should be broken so that fresh air can come inside & the smoke out of fire can go outside & the passengers can also get out of the coaches along with their belongings.
- (viii) Make all efforts to segregate the coaches/wagons with a distance of not less than 45 mts. by hand shunting by taking the help of all available railway men and passengers.
- (ix) Loco pilot will put flasher light of loco "ON" to attract the attention of the loco pilot of passing train on other direction to stop his train & ask for assistance in segregating the coaches/wagons already caught fire.

- (x)
- (xi) Start evacuating the affected coach(es) by leaving the personal belongings as More people expire due to suffocation from smoke rather than due to actual burning.
- (xii) Try and put out the fire before it becomes a big blaze by using either water or blankets etc.
- (xiii) Advise passengers to take a cloth, wet it in their drinking water and cover their nostrils. This reduces the smoke inhalation & subsequently its bad effects
- (xiv) Report it to the nearest station/control/fire station (Fire services: 101, disaster help line: 138 & security control: 182) Civil police, RPF Control post etc for sending assistance by informing on mobile.
- (xv) Initiate action for closing the rolling shutters of coaches near the vestibules on fire to contain the spread of fire.
- (xvi) Instruct elderly passengers including women and children to go to the other adjacent coach(es) which are unaffected from the fire and if possible cross over to the next coach through the vestibule.
- (xvii) Insist that passengers should save themselves first and not to bother about their luggage which can be retrieved later on.
- (xviii) Locate the fire extinguishing substances viz. fire extinguishers, water buckets. Use water from coaches.
- (xix) Try to find out the source of the fire and use the available fire extinguishers before it becomes a big blaze.
- (xx) Make use of blankets in case some passenger has been affected by fire and try to smoothen the effect & arrange to send him/her to the nearest hospital as and when the ambulance arrives.
- (xxi) Make sure that no passenger lies down on the floor.
- (xxii) All efforts should be made to put off the fire in the affected coaches and saving of important parcel/luggage in case of fire in SLR should be resorted to.
- (xxiii) Building up confidence of injured passengers by suitable advice is of great importance.
- (xxiv) Advice them not to get panic.
- (xxiv) Ascertain the type of fire (viz. dry, all gaseous & electric) and use the available fire extinguishers in coaches, pantry cars, Power cars, guard van and locomotives.
- (xxv) Isolate the burning vehicle from other vehicles by uncoupling and hand shunting with the help of volunteer passengers.
- (xxvi) Train to be protected by Loco Pilot and guard at both ends according to the provision of G&SR 6.03
- (xxvii) In case of fire caused by petrol or other inflammable liquids, acids or gas don't bring naked lights near the site of fire, warn the people living in the surrounding area within 1km radius and inform the nearest fire stations that the fire has been caused by petrol/acids/gas as laid down as (f) of chapter-25 of Operating Manual of E.Co.Railway.

(xxviii) In case of fire due to explosives/inflammables/dangerous goods follow the instructions contained in Operating Manual, as per para (g) of Chapter-25 of East Coast Railway, 2005.

- (1) Extinguish by closing the valve or isolating LPG feed to fire by other suitable controls.
- (2) Following steps may be taken if no undue risk is involved:
 - (i) Move cool 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.
- (3) 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.

10.3.1 ROLE OF CREW (LOCO PILOT/ASSISTANT LOCO-PILOT, GUARD)

1. 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 so as to pool the help to tackle fire.
2. Loco Pilot & Guard will immediately inform the control directly by mobile telephone or talking to nearest Station Master on walkie-talkie about the incident of fire and preliminary details about the fire.
3. Guard and Loco pilot will protect their train as per provisions of GR & SR , secure the train to prevent rolling down and protection of adjacent line , if any
4. Guard of the train to arrange the stretcher and first-aid box for providing assistance to the injured passengers.
5. Guard and Loco pilot will make use of the unlocking keys made available to them by Carriage & Wagon depot for unlocking the LHB couplers in the affected train and arrange for isolating the affected coaches from other coaches by decoupling both Mechanical & Electrical couplers and hand shunting by taking help of passengers & railway staff travelling in the train. In this endeavor, coach attendants and OBHS staff will also assist, who are also provided the keys.
6. Report it to the nearest station/control/fire station, Civil police, RPF/GRP Control post through mobile telephone.
7. Provide anti rolling arrangements on the isolated coaches and train as well by taking help of railway staff travelling in train & passengers.
8. Render first aid to injured passengers, by obtaining assistance of the railway staff, doctors and/ or volunteers on the help of Ambulance service, means available.
9. Advise passengers to remain calm and not panic and also instruct not to venture onto adjacent line while detraining from the coach as to avoid run over by train coming from opposite track.
10. Use of available fire extinguishers, sand, loose earth, water, blankets etc. to extinguish the fire & help the passengers trapped in fire and also to arrest big blaze.
11. 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 after establishing communication with the nearest station & section controller.
12. The guard of the train should lodge an FIR, if required.
13. The guard and the loco pilot shall make initiative for extinguishing the fire from the nearby tank or water columns at stations while the train caught fire each nearer to tank or water hydrants at watering stations.

14. The loco pilot shall immediately switch off the circuit breaker and load the pantograph in the event of fire on electric engine as provided in SR 6.10.04.

10.3.2 ROLE OF TRAIN TTEs:

1. Observe any alarm or buzzer from smoke detectors provided in AC coaches. In case, heard any buzzer from smoke detectors, try to find out the smoke or fire from where it coming.
2. Use fire extinguishers available in coaches to extinguish the fire or use water available in coaches.
3. If fire is not in control, then try to stop the train by pulling alarm chain.
4. 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 Help Line to arrange rescue & relief on war footing.
5. 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 the rolling shutters of coaches on fire to be closed with the help of available railway man & passengers to contain the spread of fire.
6. Call the doctor after checking the charts & advise him about the passengers affected by fire.
7. Kindly take the help of other railway staff including RPF and GRP and smartian passengers to help the doctor in providing first aid and other aid to the affected passengers.
8. Arrange the stretcher and first-aid box for the injured passengers.
9. Insist that passengers should save themselves first and not to bother about their valuables/luggage which can be retrieved later on.
10. Locate the fire extinguisher substances viz, fire extinguishers, water buckets. Use water from the coaches.
11. Take assistance of volunteers from passengers, Railway employees travelling doctors on trains, on train board contractor staff etc. in rescue operation.
12. Advise passengers to take a cloth wet it in their drinking water and cover their nostrils. This reduces the smoke inhalation & subsequently its bad effects.

10.3.3 ROLE OF AC COACH MAINTENANCE STAFF:

1. Immediately isolate the affected coach/coaches electrically.
2. Use fire extinguisher to extinguish fire to the extent possible.
3. AC attendant should break the box & take out the hammer to break the glass panes of AC coaches so that fresh air can come inside & the smoke out of fire can go outside.
4. Help in taking out the old, women & children passengers trapped due to fire.
5. Take necessary action as a man of common prudence will take not only to help stranded passenger but also to arrange such helps as would be demanded by circumstances.

10.3.4 ROLE OF PANTRY CAR STAFF:

1. Immediately isolate the electric appliances electrically & close cooking gas appliances in the Pantry car.
2. Protect the inflammable available & take out the cooking gas appliances in the Pantry car out in open.
3. Use the fire extinguishers available at pantry & provide necessary assistance to TTE as directed.

10.3.5 DUTIES OF POWER CAR STAFF:

1. Use fire extinguishers and fire balls provided in engine room in case of fire in power car to extinguish the fire.
2. In case fire is not controlled, they will try to stop the train by pulling alarm chain and try to detach the power car in consultation with crew and guard and taking help of Railway men and fellow passengers.

10.3.6 ROLE OF ON BOARD HOUSEKEEPING STAFF & TXR:

1. Open the doors of both sides of coaches.
2. Open the emergency windows & exhort the passengers to vacate the coaches immediately so that the effect of the smoke of fire can be minimized.
3. 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 the rolling shutters of coaches on fire to be closed to contain the spread of fire.
4. Provide necessary assistance to TTE , Guard & other train staff as directed.

10.3.7 ROLE OF RPF/GRP:

1. The escorting RPF & GRP should pull the alarm chain in order to stop the train.
2. They will rush to the affected coach/coaches of the train immediately and will assist the TTE/Guard in extinguishing the fire and follow up action.
3. The affected coaches will be evacuated on top priority & first aid will be provided to the affected passengers.
4. In case the Doctor is available, necessary assistance will be provided to ease the working of Doctor.
5. Protection of the properties/belongings of affected coaches/passengers as per as possible.
6. Separate the area of incident by establishing temporary barriers by using rope and ensure that the onlookers and spectators do not enter the affected area to disturb the scene or hamper the rescue operations.
7. RPF & GRP personnel should respond to any call for assistance to rescue the passengers and escort them to the nearest hospital on arrival of Ambulance.
8. Check, save and record the evidences/clues of the fire while attending the affected coaches & talk to passengers of those coaches as first information about the fire is possible from them.
9. And help the Guard in the lodging of FIR.

10.3.8 OTHER RELEVANT RESPONDERS

- a. Station master
- b. Section controller
- c. Chief Controller punctuality
- d. Train examiner
- e. SSE(Electrical)

10.3.9 Role of Station Master-

1. On getting the information of fire, ASM will inform Section Controller & TPC about the fire in train.
2. In case of passenger train/coaches on fire, local fire brigades are to be promptly requisitioned.

3. All officers/supervisors of various departments available at the station to be informed.
4. Controlling Station Master to be informed who will proceed to site with sufficient staff of various departments.
5. Local Hospitals as per list available at Station will be contacted for sending Ambulances/Doctors along with Para-medical staff promptly.
6. Do not permit any train on the adjacent track till the fire is extinguished & clearance is given by the officer in charge at site.
7. 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 in consultation with section controller.

10.3.10 Role of Section Controller/Other Controllers-

1. Will immediately inform the TPC on duty. TPC will switch off OHE and will charge only after clearance from the site.
2. Order out SPARME or ARME in case of fire reported on passenger carrying train without waiting for further details.
3. Press the alarm bell in control to appraise all controls about the fire incident.
4. 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 in consultation with Dy. CHC/CHC.

10.3.11 Role of Dy. CHC/CHC-

1. Promptly inform Sr. DOM & DRM immediately.
2. Instruct Chief controller punctuality to inform & fire brigade & casualty of Divisional Hospital to inform Doctors.
3. Instruct Chief Controller (Goods) to order SPARME/ARME immediately & arrange Diesel/Electric power accordingly with Crew & Guard.
4. Hooter will be sounded by DPC in the Divisional control and in the Loco shed.
5. Promptly inform C&W, Engineering, Loco, Commercial, Security, TRD Controllers.
6. In case of fire to a passenger carrying train civil authorities should be promptly advised.
7. 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. Fire tenders will be called. On advise of the fire officer, OHE of required line will be switched off by taking local power block/traffic block as the case may be & fire will be extinguished.
8. Fill the proforma about the accident as circulated by the Railway Board and advise all concerned.

10.3.12 TIPS FOR FIRE RESPONDERS WHEN A PERSON IS ON FIRE:-

1. Approach him holding the nearest available wrap in front of you.
2. Wrap it round him.
3. Lay him flat and smother the flames.
4. He may roll on the floor, smothering the flames.
5. On no account, he should run into open air.
6. Call for assistance of Doctors.

10.3.13 HANDLING OF INJURED PASSENGERS

1. Building up confidence of injured passengers by constantly talking to him.
2. First aid should be rendered to the injured passengers by trained staff.

3. On arrival of Ambulance & medical assistance, shift the injured passengers quickly to hospital.

10.3.14 In the event of fire on an Electric engine/EMU

- i. Loco Pilot/ Motorman shall immediately switch off the circuit and lower the pantograph. The train shall then be brought to a stop at once.

After disconnecting the electric supply to affected circuits, Loco Pilot/Motorman shall take necessary action to put out the fire.

If fire cannot be extinguished by the above means Loco Pilot shall advice TPC through emergency telephone to switch off the OHE power of the affected section. The Guard and any other staff available shall render all possible assistance to the Loco Pilot in putting out the fire.

- ii. Ordinary fire extinguishers or water from a hose pipe shall not be used to extinguish fire on live wire or electrical equipment.
- iii. If services of fire brigade are required, fire brigade shall not be allowed to commence operation until all electrical equipments in the vicinity of the fire have been made dead/switch off.

10.3.15 In the event of a fire on a Diesel Engine/DMU stock

- i. The Loco Pilot/Motorman shall immediately switch off the circuit breaker and shut down the engine. The train shall be brought to stop at once.
- ii. The Guard shall give all possible assistance to the Loco Pilot in putting out the fire.
- iii. Fire extinguishers available shall be used till arrival of fire brigade.

10.3.16 When a person is on fire

- i. Approach the person holding the nearest available wrap in front of you.
- ii. Wrap it round around the person.
- iii. Try to lay the person flat and smother the flames.
- iv. The person may roll on the floor to smother the flames.
- v. On no account, the person should rush out in the open air which will result in more damage in burning.
- vi. Call for medical aid by arranging and looking for a doctor.

10.3.17 Fire caused by Petrol or other inflammable liquids, acids or gases

- i. Segregate the affected wagon, or area involved.
- ii. On opening a wagon do not enter it immediately. You would thus, avoid fumes, which may be dangerous.
- iii. Use foam type fire extinguishers, sand and not water or soda acid type fire extinguishers.
- iv. Do not bring naked lights near the site of fire.
- v. Warn people living in the surrounding areas within one kilometer radius.
- vi. Stay away from ends of tanks, as tanks normally burst from the ends.

- vii. Cool tanks that are exposed to flames spraying water from the sides only after the fire is put out.
- viii. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.
- ix. Inform the nearest Fire Stations intimating that the fire has been caused by Petrol or any other inflammable liquids, acids or gases.
- x. Inform Explosive Inspector and teams of HPCL/IOCL/BPLCL.
- xi. Inform Civil Police to cordon of the area for safety of public.

10.3.18 In case of fire due to Explosives/Inflammables/Dangerous Goods

- i. Extinguish by closing the valve or isolating LPG feed to fire by other suitable controls.
- ii. Following steps may be taken if no undue risk is involved.
 - a. Move unheated cylinders to a safe place after ensuring closing of valves.
 - b. Cool the hot cylinders by spraying water from a safe position. The person directing the spray should take up a position where he would be protected from possible explosion.
- iii. If cylinder containing inflammable/toxic gas develops leak during transportation, remove it to an isolated open place away from any source of ignition and advise the filler or consignor as required.
- iv. Inform the Chief Controller of Explosives by fax/telephone/mobile.
- v. Inform Officer in charge of nearest police station.
- vi. Inform departmental Officers concerned.
- vii. Pending the visit of the Chief Controller of Explosives/his representative, the wreckage and debris shall be left undisturbed/cordoned off except to save lives.
- viii. After getting information from the Chief Controller of Explosives that he does not wish to have any further investigation, the restoration work may be commenced.

10.4 FIRE FIGHTING

10.4.1 Dry chemical powder type fire extinguisher (DCP)

These types are suitable for tackling petroleum, gas, electrical fire and controlling fires of textile, fibers. Sodium based chemical powder is to be used on a fire which undergo chemical reaction.

10.4.2 How to Use

- i. Carry to the place of fire and keep it up right.
- ii. Remove the safety clip.
- iii. Strike the knob located in the cap.
- iv. Sealing disc of the cartridge gets broken and allows carbon dioxide gas to escape to the main shell and powder is pushed out.
- v. Direct the stem of the powder at the base of the flame.
- vi. For effective result stand at about 1.5 to 2.5 m. from the base of the fire.

- vii. Move forward with moving the nozzle rapidly from side to side in sweeping motion.
- viii. When using on outdoor fires operate from the up wind side for effective spray.



Using of Fire Extinguisher



Spraying of DCPT Fire Extinguisher

Suspicious substance in Railway premises

- i. Clear and isolate the contaminated area. Do not touch or disturb anything.
- ii. Call Police/Fire service/Bomb squad.
- iii. Wash your hands with soap and water.
- iv. Identify individuals who may have been exposed to the material.
- v. Do not leave premises until disposed off by authorities.

10.5 OTHER ACCIDENTS

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

- i. A strict vigil should be kept by introduction of special patrolling over the area as and when warranted.
- ii. Some persons to be trained specially and to be drafted for duty over the area if required.

10.6 GENERAL INFORMATION ABOUT FIRE DISASTER

OTHER THAN TRAIN IN CASE OF FIRE.

- i. Raise an alarm and inform the Fire Brigade on Telephone No. 101
- ii. Attack the fire with available equipment(Fire Extinguishers), if it can be done without undue risk.

If you hear the Fire Alarm

- i. Leave the premises by the nearest available exit.
- ii. Use Emergency exits

- iii. Kindly ensure that no one is left inside and then arrange to close all the doors and windows
- iv. Report to the person in-charge at the assembly point.

In the interest of Your Own Safety

- i. You must know the escape routes, how to operate fire alarm and how to use first aid fire fighting equipments.
- ii. Do not use lift as a means of escape.
- iii. Do not shout or run. This tends to cause panic.
- iv. Call the fire brigade.
- v. The services of the fire brigade are provided free of cost Dial 101 irrespective of the size of the fire.
- vi. In case of catching fire, try to extinguish by asking for a wrapper and laying down on ground and taking rolls.

Help the Firemen to Help You

- i. Give way to fire engines & engineers/volunteers to enable them to reach at the incident/site quickly.
- ii. Allow them to use your telephone to communicate with the control room.
- iii. Don't park your cars/truck close to fire hydrants/underground static water tanks.
- iv. Guide firemen to water sources i.e., Tube wells, ponds, static tanks etc. in case of fire.
- v. Also guide the ways to reach the affected premises and the available pathways /ladders,etc.

You should know that

- i. About 600 liters of water flow through a nozzle in a minute.
- ii. A water tender carries 4500 liters of water only.
- iii. If two nozzles are used to throw water on to the fire. It takes only 4 minutes to empty a water tender.
- iv. Guide the fire in-charge regarding the nearest available water bodies and ensure that the entries to these water bodies are kept open.

Hydraulic Platform/turn table ladders can reach to a height of 30m/45m under most favourable operating conditions.

- i. No objection certificate from Fire Service is not a guarantee against the out break of fire.
- ii. Availability of fire fighting equipment in the premises do not prevent outbreak of fire. They help in minimizing the losses due to fire if maintained properly and operated immediately, effectively and efficiently.
- iii. Non-informing to fire service about the fire incident is a cognizable offence.

iv. Fire is fast

In less than 30 seconds a small flame can get completely out of control and turn into a major fire. It only takes minutes to fill a house

by thick black smoke. In minutes, a house can be engulfed in flames. Then there might not be any time to escape.

Fire is hot

A fire's heat alone can kill. Room temperatures in a fire can be 100 degrees at floor level and 600 degrees at eye/head level. Inhaling this super hot air will scorch your lungs. This heat can melt clothes to your skin. In five minutes a room can get so hot that everything in it ignites at once with an explosion.

Fire is dark

Fire starts bright, but quickly produces black smoke and complete darkness.

Fire is deadly

Smoke and toxic gases kill more people than flames do. Fire consumes up the oxygen you need and produces more smoke and poisonous gases that kill human. Breathing even small amounts of smoke and toxic gases can make you drowsy, disoriented and short of breath. The odourless, colourless fume silences you into a deep sleep before the flames reach your door.

Fixed Fire Fighting Equipment :

The Fire Alarm system consists of smoke/heat detectors, hooters, manual call points, and a Fire Monitor Panel.

Smoke/Heat Detectors:

Smoke/Heat detectors are a sensitive instrument used in detecting the initial stages of a fire. It raises an alarm as soon as it comes into contact with smoke/ heat. These detectors should be installed in each room and corridor. They should be fitted in the false ceiling, facing downward.

Hooters:

A hooter creates a loud warning sound to alert members of the staff in the premises as well as neighbors about a fire. Hooters should be installed at the main entrance to the premises and in each zone. They should be fitted at the top of the walls.

Manual Call Point :

A manual call point enables anyone who detects a fire to raise the alarm in case the smoke/heat detectors do not activate the hooter. Anyone who detects a fire should break the glass at the manual control point. This causes the alarm button to come outward and the hooter to turn on. Manual control points should be installed in each zone in the premises. They should be fitted on the wall close to the exit in each zone.

Fire Monitor Panel:

The fire monitor panel shows the broad location of any fire in the premises. It also helps in testing the electronic fire equipment installed at the site. It should be installed close to the main Security Guard post or at a point where it can be seen by most of the members of the staff.

Three ways to make your workplace a safer place to be:

- i. Maintenance of Fire fighting equipment: The Fire Prevention & Life Safety Act has been introduced in some states like Maharastra, from

the year 2006. The Act defines the duties and responsibilities of the "Occupier/Owner". The law also defines the penalties in case fire fighting system is not maintained properly.

- ii. **Get Training:** It makes business sense to improve fire safety in your workplace. It has always been emphasized on "Production is a must but Safety First" but we seldom practice the same. The basics of fire fighting can be given by our local fire stations.
- iii. **Fire Risks:** The fire risks may have serious implications and should be dealt with quickly and in confidence by trained people only. A "risk to life and property" could include a disregard to fire safety practices, for example, blocked or locked fire exits.

Fire Safety Plan:

Multi storied/high rise office buildings should have siren/hooter for fire, which will be sounded after outbreak of fire. The person who first sees the fire should call loudly for alerting & hinting others near fire to escape and close the door & windows behind them. All personnel should have been trained to operate/switch on the fire alarm/hooter/siren. After hearing the siren of fire, volunteers / firefighters should search for where fire exists. Immediately identify the area of fire and then approach towards fire cautiously. While approaching the fire clear the exit path if found obstructed. Try to extinguish the fire by using available fire extinguisher as per Annexure - 37, as much as possible. Do not use lift during fire disaster. Other than fire fighters every body should go to the "Assigned reporting place" by the "escape / exit path" only, as identified earlier. Electrical connections should be switched off immediately. In-charge should take the attendance of the staff. Keep the approach road clear for fire brigade vehicles so that they could start combating the fire quickly on arrival before it spreads for massive destruction. During the process of combating fire few staff nominated/trained as surveyor should have been deployed to record the constraint/obstruction faced during the fire fighting operation. The HODs/In-charge should jointly organize a meeting to review the fire risk management plan and evacuation plan. Implement execute recommendations of surveyor of Fire Department or building professional before reusing offices for utilization.

Remember to conduct the mock drills once in a year and escape plan half-yearly. All Electrical Installations/circuits should be certified once in a year in the month of February by inspection and testing as "free from fire danger".

10.7 FIRE AWARENESS FOR OFFICES

10.7.1 BEFORE :

- i. The office must have sufficient exit routes.
- ii. Identify the fire hazards and where fires might start.
- iii. Staff to have training in fire safety.

- iv. Staff to be made aware about the "Do's & Don'ts". Office should have an emergency exit plan.
- v. Check the adequacy of fire fighting equipments and its maintenance.
- vi. Ensure fire escape routes and fire exit doors/ passageways are unobstructed and doors open freely.
- vii. Have first aid kits.
- viii. Keep electrical inspection and testing up to date and carry out repairs.
- ix. Kitchen has to be in secured and safe location only.
- x. Impart elementary fire fighting training to users.
- xi. Conduct fire drills once in a year and Escape path drill half-yearly.
- xii. Consult with and implement recommendations of the local fire brigade instructions.

10.7.2 DURING :

- i. Exit from the office to an assigned open area.
- ii. Enclose the fire if possible. If not, get outdoors immediately.
- iii. Execute evacuation plan and practice fire drills procedures.
- iv. Call the Fire Brigade by dialing "101 ".
- v. Nearest hospital/authority to be alerted.
- vi. Do not allow any body to create panic.
- vii. Do not let anyone hide. HODs/In-charges to ensure that nobody is trapped in toilet/indoors.
- viii. If the room is filled with smoke, ask staff to stay low to the ground during exit.
- ix. Feel on top of any closed door about fire (hot) before they are to be opened.
- x. If the door is hot, use the nearest window or another exit.
- xi. Staff should go to pre - arranged locations (assigned open area), HODs / In-charges should take attendance of their staff.
- xii. Doctors should comfort distressed staff.
- xiii. Do not allow injured staff to leave on their own.

10.7.3 AFTER:

- i. DON'T re-enter or permit anyone to enter the office building, unless the fire officials have given permission to enter.
- ii. HOD/In-charges to confirm that all staff have reached the assigned open area safely.
- iii. Review the fire risk management plan and evacuation plan.
- iv. Implement / execute recommendations of surveyor of Fire Department and /or building professional before reusing offices for utilization.

10.8 DOs

- i. When you know the fire escape first then alert your nearby co-workers by calling loudly for help.
- ii. Switch on the fire hooter/siren to warn everybody if available.
- iii. Inform Electrical Break down Office & switch off the electrical circuits.
- iv. Inform Fire station, Ambulance using emergency calls (telephone numbers - Fire -101, Ambulance -102, Police - 100)
- v. Evacuate the place with all members by warning them.
- vi. Use staircase while evacuating the building.
- vii. Before opening door ensure the heat by touching top portion of the door.

- viii. If door is found to be cool then only open slightly and observe the escaping path.
- ix. If path is clear & being confirmed that there is no fire/smoke then proceed carefully on staircase.
- x. Use fire extinguishers if available, untrained staff should act as per the instructions over the extinguisher.
- xi. If you are unable to come out side, keep patience & wait till rescue team approaches you.
- xii. Escape out by crawling mode if possible.
- xiii. Escape towards the balcony if not on fire.
- xiv. Approach towards window if no fire nearer the window & show any sign by waving handkerchief/ shirt etc to attract rescue team.
- xv. If possible shift the gas cylinders to unaffected / safe area.
- xvi. Use ISI certified electrical appliances.

10.9 Don't

- i. Don't use lift during fire accident.
- ii. Don't block the passages of escape / staircase.
- iii. Don't plug too many appliances in one socket.
- iv. Don't use damaged cord & avoid temporary connections.
- v. Don't use non-ISI electrical appliances.

Note: About 50% fires are of electric origin on account of electric short circuit, overheating, overloading, use of non-standard appliances, illegal tapping of electrical wires, improper electrical wiring, carelessness and ignorance etc. 20% of fire are from the cooking elements like LPG gas, kerosene, grease, petroleum products etc. All these can lead to serious fire and fatal accidents, if proper instructions are not followed. Such incidents can be minimized to a great extent if adequate fire precautions are observed. Electrical fires spread rapidly especially in buildings and cause loss of lives and property. It is, therefore, necessary to act fast. Raise an alarm for help. Switch off power supply to de-energize the equipment. Use dry sand, CO₂, dry powder extinguishers in both the cases.

ALWAYS REMEMBER :

" Fire is a Good Servant, But a Bad Master - Prevent Fire "

CHAPTER-11

CYCLONE MANAGEMENT

11.0 SCOPE

The coastal Divisions of Indian Railway come under the influence of South West monsoons and are situated along the Bay of Bengal. A number of sections along the East Coast are prone to storms, cyclones and heavy intensity of rainfall, which affect the safety of traveling public and also result in disruption to traffic and communication.

11.1 DEFINITION & CLASSIFICATION OF CYCLONES

The following are the definitions of the terms and meaning of abbreviations used in this manual -

11.1.1 India Meteorological Department (I.M.D) : It is the department under Govt. of India responsible for, inter-alia, issue of weather warnings.

Since pre monsoon cyclone season of 1999, IMD has introduced a 4-stage warning system to issue cyclone warnings.

- i. Pre-Cyclone Watch - Issued when a depression forms over the Bay of Bengal irrespective of distance from the coast and is likely to affect Indian coast in future. The pre-cyclone watch is issued in advance at least 72 hrs in advance of the commencement of adverse weather. It is issued at least once in a day.
- ii. Cyclone alert - Issued at least 48 hrs before commencement of the bad weather when the cyclone is located beyond 500 KM from the coast.
- iii. Cyclone warning - Issued at least 24 hrs before commencement of the bad weather when the cyclone is located within 500 KM from the coast.
- iv. Post landfall look out - Issued at least 12 hrs before the cyclone landfall, when the cyclone is located within 200 KM from the coast.

11.1.2 Regional Meteorological Centers (RMC) : These are the centers under the administrative control of the India Meteorological Department, who directly issue the weather warning telegrams on the basis of forecasts. On ECoR system, Regional Meteorological Centres are situated at Bhubaneswar and Visakhapatnam.

11.1.3 Cyclone Warning Centres (C.W.C) : It is a special establishment established in 1986 under the India Meteorological Department located at Visakhapatnam. It specializes in forecasting of development, movement and progress of cyclone on the Bay of Bengal. It is the main source to provide information related to cyclone not only to the Railway and such other organisations, but also to the

Regional Meteorological Centers under the India Meteorological Department situated elsewhere.

11.1.4 First Stage Warning' by CWC : It is the warning issued by CWC as soon as a cyclonic storm is located at such a distance from the coast that it is expected to cause bad weather' over the coast during next 48 hours.

11.1.5 Second Stage Warning' by CWC : Following the first stage warning', the second stage' warning is issued as soon as there is "actual threat" of cyclone over the coastal area.

11.1.6 Tropical cyclone Storm:

- i. Severe Cyclonic Storm : When the wind speed on the strike of cyclone on land is expected to be 120 Kmph.
- ii. Very Severe Cyclonic Storm : When the wind speeds in the strike of cyclone on land is expected to be 180 Kmph.
- iii. Super Cyclonic Storm: When the wind speeds on the strike of cyclone on land is expected to be 220 Kmph.

11.1.7 De-warning Message: A message issued by CWC/Visakhapatnam after the cyclonic storm has adequately weakened or passed fully.

11.2 INFORMATION DISSEMINATION & CYCLONE INTENSITY MONITORING SYSTEM

11.2.1 Arrangements exist with the Meteorological Dept., Govt. of India for issuing telegrams/bulletins of warning whenever there is storm, gale and heavy rainfall. The conditions under which warnings are issued are detailed below -

- i. Amount of rainfall considered dangerous - 75 mm and above in 24 hours.
- ii. Wind velocity considered dangerous - 65 Kmph and above.
- iii. Period when warnings will be given - Throughout the year.

These weather telegrams/bulletins are issued by the I.M.D. offices at Bhubaneswar and the Cyclone Warning Centre/Visakhapatnam to the Chief Controllers of all the 03 Divisions of ECoR apart from Central Control at Chandrasekharapur/ Bhubaneswar. Arrangements exist that in case of failure of DOT communication system during bad weather/ cyclone, VHF communication systems or satellite phones will be utilized.

11.3 PRE-CYCLONE PREPARATION

Pre-cyclone preparation essentially involves ensuring of adequate inventory of necessary stores and equipments as per the check list.

- i. Pre-monsoon co-ordination meeting should be convened by the Engg. Dept. in Divisions involving representatives from state Govt., NDRF, SDRAF Fire service Organisation etc. to assess the preparedness, rolls & responsibilities to address the situations.

- ii. Mock drill exercises should be conducted in regular manner involving various stake holders.
- iii. Web GIS based application should be brought into use for effective management of cyclone and other disasters.
- iv. Training of community volunteers of various cyclone prone areas needs to be organised as first responders for assisting in rescue, evacuation, first -aid, cutting of fallen trees , clearing of path/ roads etc.
- v. List of items/ Railway properties which are prone to damage of all departments to be prepared for early removal or to cover/protect before cyclone and to be placed at safe place and safe custody.

11.4 CHECK LIST OF STORES

Since the time available between initial warnings upto the actual occurrence of cyclone and its damages/disruptions is often very short, pre-emptive action is essential to ensure adequate preparedness in terms of stores and equipment necessary to deal with the disruptions/damages.

11.5 STORES DEPARTMENT

- i. The Stores Department will ensure stock of items with quantities given in Annexure. The locations for these stocked materials shall be at CRW/ MCS & GSD/ MCS which are accessible by rail as well as road.
- ii. Mechanism for supply chain management needs to be established for smoother procurement , transport and distribution of relief supply to the affected involving Comm., S&T, Electrical, Mechanical, Optg & Engg dept.

11.6 ENGINEERING DEPARTMENT

The list of materials which should be kept at strategic locations on the East-Coast section at all times is available. Apart from the standing inventory of materials are listed & the following arrangements should exist;

- i. Standing arrangements on 'whenever required' basis should exist for supply of adequate rake loads of dust, boulders and sand with ballast contractors at Engg. sidings.
- ii. As restoration of traffic often requires heavy handling of earth, availability of heavy earth moving machinery viz., Proclains, JCBs, Pay-loaders, Road Water-tankers(Drinking Water) etc should be identified in the coastal towns along with firm's/owner's names, addresses and telephone numbers so as to hire and mobilize them whenever as the necessity arises.
- iii. Standing contracts with 100% option clause may be entered into on annual basis from strategic quarry dust and boulder supply locations viz Tapang, Niligiri, Chandikhole (near Dhanmandal) and at other nominated stations on East Coast Railway.

- iv. Pool of multiple skilled trained volunteers from various departmental staff should be formed to involve themselves in immediate rescue and relief.
- v. Identification of locations in Rly area or within the nearby vicinity with co-ordination of state Govt. for use as cyclone shelters for affected people & animals.
- vi. Over head tanks for supply of water to colonies and other area of Rly infrastructure should be filled in advance to its full capacity.
- vii. Removal of Railway property which are prone to damage should be removed/relocated/ covered before cyclone and to be placed at safe place and safe custody.
- viii. During pre-cyclone Engg Department will arrange for provision of water through Road tankers .

11.7 ELECTRICAL DEPARTMENT

- i. The items, quantity and locations of electrical materials to be kept as pre-cyclone measure are available at Annexure, (Electrical). In addition to these materials, the locations of additional generator cars should be identified in advance so that they can be requisitioned from other Divisions/Railways in case of necessity. OHE should be switched off when the wind speed is very high in consultation with Section Controller.
- ii. Arrangement for resumption of emergency electric supply by promoting solar system may be ensured.
- iii. Arrangement may be there for by suitable methodology of availability of electric poles and its erection to ensure immediate restoration of power system in case of damage in cyclone.
- iv. Removal of Railway property which prone to damage should be removed before cyclone like light fittings, fans, etc. if possible.

11.8 S&T DEPARTMENT

The experience has shown that the communication links including terrestrial, underground and microwave server off at the onset of cyclone. In such cases, VHF sets for short distance communication and satellite phones for long distance communication are the only means available for exchange of vital information. However, following pre-cyclone arrangements should be made -

- i. Availability of emergency generator sets for charging of VHF equipment at all nominated stations with adequate fuel.
- ii. The satellite phones should be kept in working order at Chandrashekharpur/ BBS.

- iii. Spare 25 W VHF set complete with battery and antenna to the extent of 25% of total sets provided in the Divisions should be available with SSE/Tele on East Coast Route.
- iv. One extra DG set along with 02 number of 20 litres of jerkin full with fuel should be stored at each of the three locations (SBP, KUR & VSKP) along the East Coast route at SSE(Sig)/SSE(Tele)'s stores.

11.10 MEDICAL DEPARTMENT

- i. Medical Department will procure sufficient Chlorine tablets & Bleaching power as per demand before to handle the cyclone.
- ii. Streamlining of ambulance system.
- iii. Mobilise mobile health team.
- iv. Special care to children, pregnant women, lactating mother, aged and differently-able persons.

11.11 ACTION TO BE TAKEN 48 HOURS IN ADVANCE OF HITTING CYCLONE

Formation of low-pressure area, its development into cyclonic storm and its tentative direction of propagation becomes known much before (well above 48 hours) the estimated time for it's striking the coast. A broad assessment of anticipated severity of cyclone becomes known at least 48 hours before it's strike to the coast. From this point of time, prompt action to combat the cyclone is warranted.

11.11.1 CHECK ON THE INVENTORIES AND EQUIPMENTS OF STORES

Inventories/Stores to be maintained by each Department on specified locations is detailed in Annexure. After initial warnings of cyclones have been received from the I.M.D / C.W.C each department will conduct a check for physical availability of these stocked items with quantities and locations.

The following actions are required by each Department :-

11.11.2 STORES DEPARTMENT

- i. Reviewing the stock position of items given in Annexure- (Stores) (in the stocking depots).
- ii. Arranging transportation of above stocked materials to the likely affected areas through available transport before natural calamity strikes.

11.11.3 ENGINEERING DEPARTMENT

The engineering material as stocked at various site should be cross checked for its physical availability in full. The fitness of vehicles on which the materials have been loaded 'on wheel' should be obtained. Apart from this, the following action needs to be taken -

- i. Based on the anticipated severity and warnings, the modalities for movement of materials should be planned.

- ii. The firms/owners having heavy earth moving machineries should be contacted, alerted and asked to be in readiness to provide the machineries to the Railway. Movement of such machine including loading and unloading arrangements should be planned in consultation with the Operating Department.
- iii. A review of availability of the following materials with stockholders should be done to know the availability position -
 - (a). GI Wires, (b) Asbestos Sheets, (c) GI Sheets, (d) Tents & (e) Pipes/ Bamboo.
- iv. Sr,DEN/Co. of each Division and CE/ Con's shall prepare statement of working contractors with their address ,telephone nos. machinery and manpower available with them.

11.11.4 ELECTRICAL DEPARTMENT

Check working of DG sets, stock position of fuel oil, K-Oil, position of light fittings and other materials so as to ensure that they are available in working condition at nominated depots. This should be ensured by DEE(G)/ AEE(G)/ Supervisor in-charge for their respective jurisdiction.

Any shortage should be made good. HQs Control should be informed for assistance if required. Complete list of vital equipment & consumables should be available in Divisional Control.

11.11.5 MECHANICAL DEPARTMENT

The fitness of rolling stock for transportation of drinking water as well as those of ARTs, ARMEs/SPARMEs should be checked and ensured.

11.11.6 S & T DEPARTMENT

a. Communication

- i. Check that 25 W VHF set provided at each station is functioning properly & battery in fully charged.
- ii. Check that emergency generator set is functioning properly with adequate fuel.
- iii. Check that fuel supply tanks of the generator sets have been fully filled and adequate fuel for 72 hrs has been stocked.

b. Tele-communication equipment

- i. Telecom channels via alternative routes should be lined up and kept terminated for Administrative trunks and control working.
- ii. Satellite phones wherever available should be tested and accompanying staff identified along with battery charging arrangement.
- iii. Communication equipment in ART should be tested for proper working order.

c. Block working

- i. Check all the Block Instruments and their Batteries.

- ii. Extend power supply from emergency generator set to Block Battery charger.

11.11.7 MEDICAL DEPARTMENT

Medical Dept will check the availability of stock as detailed in Annexure-04 (D)

11.11.8 OPERATING DEPARTMENT

Sr.DOM of the concerned divisions will make a rough assessment of staff and area of deployment and advise HQs and Emergency Control/BBS. The Divisional Control will also obtain the status of functioning of VHF sets and batteries/generators from each station and bring the discrepancies to the notice of Sr.DSTE.

SMs of the area with assistance of Sr.DOM of the division which is likely to be affected will ensure storage of adequate drinking water, functioning of LED hurricane lamps, match box, adequate availability of fuel for generator sets, functioning of VHF sets, charging of stand by batteries and adequacy of first aid equipment.

11.11.9 ACTIVATION OF ALARMS TO STAFF & COLONY:-

All staff , staff-family and colony members are to be warned.

11.11.10 Action by Central Control - COM's Office

- i. At HQs Office the Central Control Unit who is the recipient of the weather warning telegrams/bulletins will arrange for the distribution of the message to the CE, CBE, CTE, PCOM, PCSO, PCME, PCEE and PCSTE through their concerned departmental counterparts in Central Control.
- ii. Central Control should also verify with the Divisional Control that such weather warnings, telegrams/bulletins have been received by the Chief Controller of the concerned Division to enable them take prompt action at field level, if not should be informed immediately.

11.12 Action by the Divisional Control Office

The Chief Controller or in his absence the Dy. Controller should immediately arrange for the weather warning telegram/bulletins to be repeated verbatim to the Divisional Officers as well as AENs concerned and all SMs on the section likely to be affected on the control telephone. The Controller repeating the telegram/ bulletins should record the name of the SM to whom the telegram/ bulletins has been repeated.

11.13 PREPARATION OF ACTIVITIES FOR STATIONS LIKELY TO BE AFFECTED BY CYCLONES

- i. Diversion of Trains : Divisional/HQ Emergency Control will remain in touch and take action for diversion of trains based on the ground situation. All diversions ordered shall be

advised through a bulletin to all concerned including CPRO for publicity.

- ii. In order to avoid any mishaps or damage to the passenger trains and to avoid marooning of passengers, the PCOM or CPTM will issue instructions to all concerned for either cancellation or regulating the trains in time so as to avoid running through likely affected area by cyclone.

11.14 NOMINATION OF OFFICERS TO MAN THE EMERGENCY CONTROL AND WAY-SIDE STATIONS

- i. In addition to the action taken as per above para by various departments, each PHOD/ concerned, DRM will identify and nominate the officers for opening up and manning of emergency control at short notice at HQ/Division.
- ii. Two light motor trolleys should be arranged & kept in readiness at strategic stations which should be away from the likely affected zone. At least one Officer & a few staff should be nominated for each. They should be provided with VHF sets & 01 satellite phone each so that they can accomplish the mission of physically covering the entire affected zone & give "First information on damage" through these equipment to the control after passage of the cyclone.

11.15 ACTIVATION OF EMERGENCY CONTROL AND NOMINATION OF STAFF FOR VARIOUS DUTIES

11.15.1 Emergency Controls

- i. Emergency offices shall be opened in the HQ Control, Divisional Control (affected division) and important junction stations in all case of warning of super cyclone or very severe cyclone storm viz. VZM, CHE, PSA, BAM, KUR, CTC, PRDP & BHC .
- ii. The Divisional and HQ Emergency control shall obtain every two hourly position from Meteorological Office for up to 12 hrs before the likely time of cyclone hitting the coast and thereafter every hour.
- iii. The SM shall inform Local Revenue Officers, Sub-Collectors of the area regarding the holding of trains in his station.

11.15.2 (a) Relief Train

- i. Any available rake of preferably 06 coaches of any type to be nominated and kept ready at VSKP, KUR at least 24 hrs before the cyclone is likely to hit for carrying staff, Doctor, Food, medicines & Relief materials by Operating Department.
- ii. Empty flat wagons (BRH/BRN) will be got placed at suitable sidings (preferably goods platform line with ramps) to enable quick loading of earth moving machinery in consultation with Engineering Department.

b. Action by Commercial Department

Enquiry offices/Help lines should be opened by PCCM at important stations with public address system and information about running of trains, arrangements made for supply of food, transshipment of passengers, etc. should be repeatedly given over the public address system for the benefit of the passengers.

c. Engineering Department

The ongoing patrolling of track shall be intensified 24 hrs before anticipated strike of the cyclone at locations which are likely to be affected by cyclone. The trains loaded with the 'monsoon reserve' materials (cinders, boulders, quarry dust, empty cement bags filled with earth/sand etc.) will be ordered to run-in consultation with operating department to the stations near to the last likely affected stations.

d. Mechanical Department

- i. The SPARME, ARME & ARTs staff and crane driver will be kept alert to rush to duties at minimum notice.
- ii. The drinking water, food items (including biscuits & ration) shall be provided ready on SPARME/ARTs & ARMEs. ARTs will be equipped with fuel & portable generator with adequate provisions for 72 hours.

11.16 PREPAREDNESS OF RELIEF MATERIALS, ROAD VEHICLES & EQUIPMENT

a. Road Vehicles

All road vehicles including jeeps, cars, light & heavy material carrying vehicles shall be kept in readiness at the nominated Stations/Divisional offices with adequate fuel & two (roster duty) drivers to move men/materials/equipment at minimum notice.

b. Communication Equipment

As the coastal areas likely to be affected will be quite clear by then, Satellite phones with personnel competent to use, handle & troubleshoot, shall be dispatched to a strategic stations (larger among those likely to be affected).

- c. Electrical:-** Tower cars should be kept in readiness with full complements of fuel, tree cutting machines & other equipment.

d. Stores Department Items

Preparations for packing, transportation & distribution of these stocked materials shall be started.

Nomination of Stores Officers in HQs will be done for coordinating the material supply activities with Officer-in-charge at site/ nominated Officers of user department in HQs.

11.17 SECURITY

The Security personnel will be nominated by Sr.DSCs / DSCs at following positions -

- i. To accompany 'relief material' carrying trains when ordered.
- ii. To help commercial & station staff of major stations to handle public enquiries etc.
- iii. At each station where any passenger carrying train is regulated.
- iv. On heavy vehicles carrying relief materials.
- v. At major restoration sites after cyclone recedes & work commences.

11.18 COORDINATION AT HQ, DIVISIONAL & BOARD'S LEVEL

A complete fluidity inflow of information between HQ, Division & Board's level will be the objective.

- i.
 - i. The HQs cell will keep the Rly Board cell informed & updated periodically and ask for assistance from the neighboring (other Railways) as required. It will watch inter-division movement of relief trains, restoration materials and equipment and guide the Division in marking a plan of action for rescue, relief and restoration. It will also be responsible for documenting the developments.
 - ii. The monitoring cell of adjacent division will be responsible to ensure a complete compliance of HQ instructions as per the disaster management plan worked from their & requiring resources of the division. It will ensure that top priority is accorded to the relief and restoration work in the neighboring affected divisions.

11.19 ACTIONS DURING CYCLONE (RELIEF AND RESCUE)

Heavy devastation is often caused by the cyclonic winds and heavy downpour during the cyclone. The first priority, during cyclonic storm, is therefore to protect the traveling passengers in trains passing through/near to the cyclone affected zone. The action to be taken by different department is as follow;

a. Action by Operating Department

Coaching trains should be controlled/diverted so that the trains do not enter the cyclone affected area, suitable publicity to be arranged. The controlling of trains should, as far as possible, be done where adequate water supply, lighting catering and medical facilities are available.

b. Action by Commercial Department

- i. All Commercial staff should guide the passengers, whether they are on a running train or at a station when the cyclone actually strikes, regarding taking adequate measures for ensuring their personal safety.
- ii. If a train is stranded in the block section, the conductors/TTEs manning the train should take a census of the passengers, and try to pass on the information to the station at either end through the Mobile phones/walkie-talkie sets available with the Guard/Driver of the train so that the information can be passed on to the Divisional Control Office in case communication is available.

- iii. If any passenger is found to have injured during the cyclone, first aid should be provided by the Guard/ TTEs/ Station staff, as the case may be. In case of injured passengers at a station, medical aid as locally available should be arranged. Wherever possible, details of such cases should be passed on the Divisional Commercial Control.
- c. **Action by Electrical Department:-**
Supply of OHE & over head electrical general lives should be kept off when wind speed is very high with consultation with Section Controller.

11.20 POST CYCLONE OPERATION

a. FIRST ASSESSMENT OF DAMAGE

1. Motor Trolley Survey

- i. The cyclones and consequent floods, if any, do not damage the continuity of track frame even in case of breaches, washouts, erosions etc.,. Experience has shown that in most cases, a light motor trolley can pass through the entire cyclone affected zone (on its own power or augmented manually) without much difficulty except if the track frame itself is submerged in water.
- ii. The Officer(s) & staff, nominated & in readiness, as in Chapter 07, should proceed immediately after cyclone has passed off the affected zone. Equipped with satellite phone and VHF sets, the two trolleys - from either end of the affected zone - should proceed through the affected zone and give precise information to control regarding;
 - Nature of damage/obstruction to track with location.
 - Possible method/system for restoration.
 - Resources required for restoration.
 - Whether or not a light vehicle (e.g. Tower Wagon) or light engine or full relief train can pass.
 - Likely time to clear the location by repairing the damage/removing the obstruction.

2. Damage assessment

This will be carried out concurrently and independently with motor trolley survey and will not be **called off** till completed, to give corroborative information.

By Boats:- In circumstances when substantial portion of track get inundated under water, boats shall be hired locally to navigate across the water body and assess the damage.

11.21 MOVEMENT OF RELIEF TRAIN FOR RESCUE, RELIEF AND RESTORATION

- i. On receipt of first information of super cyclone having passed the coast, after assessment of the damaged Railway property or assistance required, all the relief trains on the section must be ordered and should be started with full complement of men, equipment and materials. The movement of relief train shall not wait for receipt of detailed report from site. The staff required to move on these trains shall be accommodated on the train itself and should not be allowed to come back home. This may involve organizing supply of food from local sources for staff who have to remain on the relief trains for long hours.
- ii. These trains will move up to the neck of the affected zone in normal course. Thereafter, the trains will move forward in such a way that the section in the front is cleared of all physical obstructions to the moving dimensions. It will leave each station after confirming on VHF by the SM with the adjacent station that no breaches/washouts have occurred on that section.

11.21 MOVEMENT OF RELIEF MATERIALS AND RESTORATION

a. Engineering Department

Based on damage report and restoration strategy, priority and sequencing of movement of available materials on wheels (e.g. boulder fillers, earth moving machinery & bridge girder etc.) and labour should be quickly chalked out by Engg. Dept. and conveyed to the Operating personnel at Central Control and respective divisional controls.

b. Electrical Department

- i. Restoration Work - The damage caused to electrical installations is to be assessed location-wise. For this purpose, competent officials shall be deputed to obtain detailed assessment of the damages. Supervisors and staff should be deputed with necessary materials and tools either by Rail or by Road for immediate restoration work.
- ii. In case of power failure at stations where trains are controlled, temporary lighting may be arranged with portable DG sets.

c. Stores Department

During restoration, Stores Dept shall play a pro-active role in making emergency purchases preferably by standing Spot Purchase Committee & supplying the same to the user departments at sites.

d. Commercial Department

Commercial Department will continue to take action as per Chapter -7.

e. Medical Department

- i. The Medical team will accompany each of the relief train ordered. It will carry with them at least 1,00,000 chlorine

tablets and 1000 kgs. of bleaching powder for distribution at various stations.

- ii. The medical team will attend to stranded passengers and Railway personnel and their families for any ailment. For this purpose sufficiently wide portfolio of medicines will be carried in relief trains for various ailments in sufficient quantity.

11.23 MOVEMENT OF RELIEF MATERIALS

CPTM will order the special/material/labour trains for carrying the relief material. Wide publicity shall be given in Press and Media to attract voluntary organizations, individuals, NGOs, medical practitioners etc. to avail of the service. The composition & timings will be planned and publicized.

11.24 PROCEDURE FOR ACCOUNTAL, AUDIT & FINALIZATION OF ACCOUNTS

a. Special Returns by Stockholders after Restoration

All stockholders of all departments in-charge of custody of Railway stores shall submit a "special Return" of the material transaction that took place during restoration.

b. Emergency Purchase of materials

Emergency demands placed through HOD's notes shall be compiled by the Stores Department through a Spot Purchase Committee.

c. Works Contracts - Single tender and hiring of machinery

For restoration of traffic single tenders may be awarded to the competent contractors who have exceptional capacity to mobilize machinery and materials. Prior consent of the General Manager will be taken while processing the case.

CHAPTER-12

TSUNAMI MANAGEMENT

12.1 Tsunami risk:

The tsunami risk and vulnerability which the coastal communities in India are exposed to, even by a distant high intensity earthquake in Indonesia, came as a shock and surprise to the unsuspecting public.

Most Tsunamis are caused by earthquakes of magnitude more than 6.5 on the Richter scale, with a vertical disruption of the water column generally caused by a vertical tectonic displacement of the sea bottom along a zone of fracture in the earth's crust which underlies or borders the ocean floor. Tsunamis are also generated by volcanic eruptions and submarine landslides, nuclear explosions, and even due to impact or fall of large size meteorites, asteroids, and comets from outer space.

Tsunamigenic zones that threaten the Indian Coast have been identified by considering the historical tsunamis, earthquakes, their magnitudes, location of the area relative to a fault, and also by tsunami modeling. Both the east and west coasts of India and the island regions are likely to be affected by tsunamis from the five potential source regions, viz., the Andaman-Nicobar-Sumatra island arc, Indo-Burmese zone, Nascent Boundary (in the central Indian Ocean), Chicago's archipelago and the Makran subduction zone.

The DM Act 2005 envisaged a paradigm shift in the GOI's focus from its hitherto post disaster rescue, relief and rehabilitation-centric approach to a more proactive pre-disaster preparedness, mitigation and improved response capacities approach. This paradigm shift is also influenced by global best practices, which have established that strengthening preparedness and mitigation strategies would considerably reduce the vulnerability of disaster prone communities and thereby reduce the risks associated with tsunamis in the coastal areas.

12.2 Preparedness :-

The critical gaps that now remain are the lack of public awareness on tsunami risk and vulnerability in the coastal areas, development control regulations and building codes in the coastal areas, and the challenges in implementation of appropriate technologies to disseminate and communicate the early warning to the inhabitants of colony at coastal areas located in the near vicinity of a near source tsunami.

Local populations at risk must be able to recognize the signs of impending tsunami hazard such as strong, prolonged ground shaking, the receding of the shoreline, bubbles in the sea,

change in colour of the sea, etc. and seek safety in higher ground immediately.

Communities of Employees also need to know the ear marked areas likely to be inundated, possible evacuation areas, designated evacuation routes and safe regions to assemble evacuees and set up temporary relief camps in safe high ground in the coastal areas. Mangrove wetlands should be regenerated.

- i. Coral reefs, grass beds, and coastal forests should be preserved and conserved for both short-term and long-term ecological and livelihood benefits.
- ii. Raising coastal plantations like casuarinas, saliconia, palm, bamboo, etc. will act as an effective bio shield and provide protection to the coastal stations areas and colonies.
- iii. Nearby geomorphologic features like sand dunes, beaches, coastal cliffs should be protected.

A probabilistic approach is necessary for evaluating tsunami hazard from nearby seismogenic sources as well as from distant sources because many uncertainties exist in a process of estimating tsunami heights along coastal areas from tsunamigenic source models. However, a Probabilistic Tsunami Hazard Analysis (PTHA) is not common in comparison with a Probabilistic Seismic Hazard Analysis (PSHA). The PSHA is a methodology for estimating the probability that specified levels of earthquake ground motions exceed at a given location in a given future time period by combining the probabilistic models of earthquake occurrence and earthquake-caused ground motion. On this basis, PTHA is to be carried out. Essentially it reflects the likelihood of exceeding certain wave parameters. This method can be developed based on source zone identification and Land Sea.

12.3 DOs & DON'Ts:

- i. You should find out if your home, school, workplace, or other frequently visited locations are in tsunami hazard areas.
- ii. Know the height of your street above sea level and the distance of your street from the coast or other high risk waters. (Local administration may put sign boards). Evacuation orders may be based on these numbers. Also find out the height above sea level and the distance from the coast of outbuildings that house animals, as well as pastures or corrals.

- iii. Plan evacuation routes from your home, school, workplace, or any other place you could be where Tsunami is present a risk. If possible, pick areas (30 meters) above sea level or go as far as 3 kilometers inland, away from the coastline. If you cannot get this high or far, go as high or far as you can. Every meter inland or upward may make a difference. You should be able to reach your safe location on foot within 15 minutes. After a disaster, roads may become blocked or unusable. Be prepared to evacuate by foot if necessary. Footpaths normally lead uphill and inland, while many roads parallel coastlines. Follow posted Tsunami evacuation routes; these will lead to safety. Local emergency management officials can advise you on the best route to safety and likely shelter locations.
- iv. If your children's school is in an identified inundation zone, then find out what is the school evacuation plan. Find out if the plan requires you to pick your children up from school or from another location. Telephone lines during a Tsunami watch or warning may be overloaded and routes to and from schools may be jammed.
- v. Practice your evacuation routes. Familiarity may save your life. Be able to follow your escape route at night and during inclement weather. Practicing your plan makes the appropriate response more of a reaction, requiring less thinking during an actual emergency situation.
- vi. Use a Weather Radio or stay tuned to a local radio or television station to keep informed of local watches and warnings.
- vii. Talk to your insurance agent. Home owners' policies may not cover flooding from a tsunami. Ask the Insurance Agent about the benefits from Multi-Hazard Insurance Schemes. Discuss tsunamis with your family. Everyone should know what to do in a tsunami situation. Discussing tsunamis ahead of time will help reduce fear and save precious time in an emergency. Review flood safety and preparedness measures with your family.

12.4 KIT bag : The following items might be needed at home or for an evacuation.

Keeping them in an easy-to-carry backpack or duffel bag near your door would be best in case you need to evacuate quickly, such as in a tsunami, flash flood, or major chemical emergency. Store your kit in a convenient place known to all family members. Kit basics are: A smart mobile phone including portable, battery-powered radio or television and extra batteries.

- i. Flashlight and extra batteries.

- ii. First aid kit and first aid manual.
- iii. Supply of prescription medications.
- iv. Credit card and cash.
- v. Personal identification.
- vi. An extra set of car keys.
- vii. Matches in a waterproof container.
- viii. Signal flare.
- ix. Map of the area and phone numbers of places you could go.
- x. Special needs, for example, diapers or formula, prescription medicines and copies of prescriptions, hearing aid batteries, spare wheelchair battery, spare eyeglasses, or other physical needs.

If you have additional space, consider adding some of the items from your Evacuation Supplies Kit.

12.5 Action on Division/Zones on Orange/Red Alert :

On the issue of an Orange Alert (or of a higher level) the Responders have to be activated as required for relief etc. as under :

Mobilisation of Gangmen / Trackman

- i. Hospitals to mobilize Doctors and Para-medical staff.
- ii. Civil Defence units to be activated.
- iii. RPF and RPSF deployment.
- iv. Scouts and Guides for colony care and passenger guidance.
- v. Operation and manning of the disaster control room.
- vi. Coordination amongst various stake holders through advance warnings.
- vii. Communication system to be ensured and backups to be in readiness for immediate use when required.

TA Units Deployment:- In case the existing railway staff may not be able to maintain train services to be operational, the TA units have to be mobilized. (It takes 2-3 days for the deployment of the TA unit after issue of their mobilization order; hence advance warning is of essence)

12.6 Monitoring/Reporting of Effects of Disaster :

The Safety Dte./Department in the Board would be given information regarding Orange / Red Alerts by Zonal Railway. 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 PCSO 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.

12.7 Standard Operating Procedure (SOP) on Railways:

National Disasters:

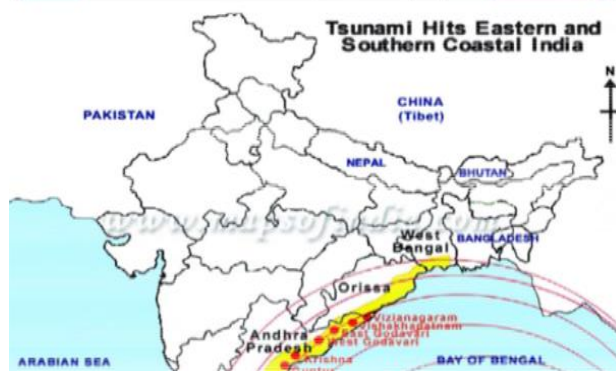
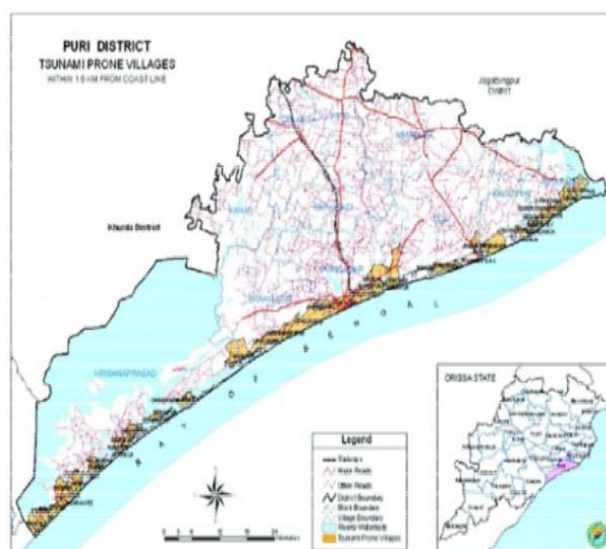
The Civil Engineering Department at the field level and on the Divisions gets information through advance warning sent by the respective Government Departments on the possibility of Floods, Cyclones, Earthquakes, Landslides etc. Depending on

the gravity of the disaster /crises/ calamity expected the information would be passed on to the Divisional Officers through the EmergencyControl which will act as the Immediate Response System.

Where train operations have to be suspended or regulated the operating departments would be suitably advised. After making the train regulation plan the divisional control would advise the commercial and security departments for management of the welfare of passengers. Alerts to the passengers would be issued through the PR Department of the Railway in the Print and Electronic Media.

The DRMs on the divisions shall ensure coordination amongst the Departments for ensuring running of train services (including relief special trains) as also relief arrangements for the passengers and for the Welfare of Railways own staff. Assistance of other Divisions and from the Zonal Railways would be taken through the Headquarter of the Zonal Railways (i.e. by involving the General Manager). Coordination with the IOC of MHA and NDMA / NDRF would be through the Emergency Control of each Zonal Headquarter.

Zonal Emergency Control / BBS -CUG telephone No.	-	08455885939.
Divisional Emergency Control / KUR -CUG telephone No.	-	08455887939.
Divisional Emergency Control / WAT- CUG telephone No.	-	08978080939.
Divisional Emergency Control / SBP- CUG telephone No.	-	08455886939.



CHAPTER-13

FLOOD MANAGEMENT

13.0 SCOPE

Flood is the most common and widespread of all natural disasters. India is one of the highly flood prone countries in the world. Around 40 million hectares of land in India is prone to flood as per [National Flood Commission report](#).

The coastal area of East Coast Railway comes under the influence of South West monsoon and is situated along the Bay of Bengal. A large area along the East Coast are prone to cyclone and heavy intensity of rain fall. The recent flood in Balasore district in June 2008, damaged the Railway bridge in Kharagpur- Bhadrak section in Howrah Chennai main line of South Eastern Railway, consequently train service in Howrah - Chennai main line via Bhubaneswar remained disrupted for nearly two months.

The flood caused by the Super cyclone combined with huge storm surge of about 230 Kmph during October 1999 in the coastal belt of Orissa in Jagatsinghpur district was the worst of it's kind in the recent past.

13.1 Areas of East Coast Railway affected by flood:

- i. North Orissa- This area is flooded by Baitarani and Brahmani rivers. Jajpur, Bhadrak and Cuttack district come under this zone. Every year these two rivers flood a large area and disrupt rail service between Bhubaneswar-Howrah.
- ii. Central Orissa and Coastal Orissa:- Mahanadi river system cause flood in Sambalpur & Bolangir districts of central Orissa as well as Cuttack, Jagatsinghpur, Kendrapara, Jajpur, Nayagarh, Khurda & Puri districts of coastal areas of Orissa.
- iii. Southern Orissa:- Koraput, Rayagada, Gajapati district come under this zone. Flood generally caused due to Vansadhara and Saleru river system.
- iv. Flash flood- Small culverts located in particularly in coastal areas some times over flow and cause flash floods and disrupt Railway communication.

13.2 EFFECT OF FLOOD

- i. Damage to embankment including breaches / wash away of embankments thereby affecting Railway track.
- ii. Rain due to sudden cloud burst resulting in flooding of the Railway track causing sinkage or washing away of track, damaging track components which affect the level and alignment of Railway line and consequently affect the safety of traveling public and disruption to traffic and communication.
- iii. Washing-away or damage bridges, piers, abutment and other components of bridges.
- iv. Inundate the Railway colonies at low levels.

13.3 INFORMATION AND FLOOD MONITORING SYSTEM:

Regional Meteorological Centre, located at Bhubaneswar and Vishakhapatnam, under the administrative control of the Indian Meteorological Department, is responsible for issuing warnings/bulletins of warning whenever there is expectation of heavy rainfall. The condition under which warning for

flood is issued when amount of rain fall is expected above 75 mm in 24 hours. The warning/bulletin is issued by I.M.D at **Bhubaneswar/ Vishakhapatnam** to the Chief Controllers of all the Divisions in East Coast Railway and Central Control at Bhubaneswar. In case of failure of DOT communication system during bad weather, VHF Communication systems or satellite phones are used for the purpose.

13.3 Action taken before flood :

- i. Co-ordination with Meteorological Department for advance information.
- ii. Data base for (Railway Affecting Tank)RAT / (Railway Affecting Works)RAW / Vulnerable bridges on topo sheet and information on approach road to location.
- iii. Identification, Inspection and Attention to RAT / RAW & Bridges.
- iv. Co-ordination with state Government officials of Hirakund Dam over phone/mobile/hot line/satellite phones.
- v. Flood monitoring system in addition to patrolling.
- vi. Adequate prevention by executing anti erosion works of tracks, formations, bridges etc., improvement to water ways of bridges in track formation, and with Monsoon Reserve.
- vii. Materials required for flood prevention /management like Empty Cement Bags, sands, boulder etc are stocked and also the sources from where they can be arranged at short notice in case of dire necessity is clearly identified with all details.
- viii. Development of flood shelters for staffs and passengers at suitable locations in the area prone to repeated floods.
- ix. Emergency response team on floods.
- x. Emergency equipment and relief logistics.
- xi. Medical preparedness plan.

PRE-FLOOD PREPARATION

13.5ENGINEERING DEPARTMENT:

- i. Safety Measures for track during heavy rain:- Gang Patrol during monsoon to detect damage to Track and Bridges as per IRPWM-2020 Para 1004.
- ii. Night patrolling during monsoon to detect any threat to the track safety and damage such as breaches, settlements, slips as well as scours and immediate action is to be taken to protect the track. Posting of stationary watchman may be considered.
- iii. If it is found that water level has a rising trend to danger level on a river bridge, immediate action to be taken to control /divert the passenger carrying train or impose speed restriction if the situation permits. Constant monitoring is to be done at Officer Level by manning Engineering Control.
- iv. Daily patrolling by Key Man to inspect entire track daily on foot and take immediate action in case of any unusual occurrences like heavy rain, flood and landslides.
- v. Deputing Watchman at vulnerable location like bridges, flood cause-way etc, to provide safety of Railway track.
- vi. Check the availability of materials which should be kept at strategic locations in East Coast Railway at all time are shown in Annexure.
- vii. Choked drains in the Railway colony to be cleaned before monsoon so that rain water can freely flow and the Railway colony is not submerged in water.

- viii. Materials required for flood management like empty cement bags, sand, boulder, cinder etc is stocked at strategic locations and also the source from which it can be arranged at short notice in case of dire necessity clearly identified.
- ix. Standing arrangements on "whenever required" basis should exist for supply of adequate rake loads of quarry dust, sand, morum, boulders etc. with ballast from contractors. The fitness of rolling stock should be reassured during such circumstances.
- x. As restoration of traffic after flood often requires heavy handling of earth, availability of heavy earth moving machinery viz. Proclains, JCBs and Pay Loaders etc., should be identified in the nearby coastal town with firm / Owners name, address and telephone no so as to hire and mobilize them as and when necessity arises.
- xi. Standing contract with 100% option clause may be entered into on annual basis from strategic quarry dust and boulder supply locations etc.

13.6 LIST OF STORES AND STORAGE LOCATIONS.

Since the time available between initial warning and up to the actual occurrence of flood and its damages/disruptions is often very short, pre-emptive action is essential to ensure adequate preparedness in terms of stores and equipment necessary to deal with the disruption/damages.

13.7 STORES DEPARTMENT :

Stores Department will ensure stock of items with quantities given in Annexure. The location for of these materials shall be at CRW / MCS & GSD / MCS which are accessible by rail as well as road.

13.8 ELECTRICAL DEPARTMENT :

The items, quantity and location of electrical materials to be kept ready as pre-flood measure at annexure. In addition to these materials, the location of additional generator cars should be identified in advance so that they can be requisitioned from other Divisions/Railways in case of necessity.

13.9 MECHANICAL DEPARTMENT :

Mechanical Department during pre-flood preparation need to ensure that all necessary equipment in ARTs & ARMEs/ SPARMEs should be made good and to Keep close liaison with adjoining Divisions /Railways for ordering of additional ARTs/ ARMEs if required.

13.10 S & T DEPARTMENT :

During flood the communication link is cut off. In such cases VHF sets for short distance communication and satellite phones for long distance communication are the only means available for exchange of vital information. Following pre-flood arrangement should be made:-

- i. Availability of emergency generator for charging of VHF sets at all nominated stations with adequate fuel.
- ii. The satellite phones should be kept in working order at Chandrasekharpur/ Bhubaneswar, Divisional Control Offices of KUR, WAT & SBP as well as all other strategic locations..
- iii. Spare 5 & 25 W VHF sets complete with battery and antenna to extent of 25% of total sets provided in division should be available with SSE/T/Wireless in-charge as well as all other strategic locations on East Coast Route.
- iv. One extra DG set along with 02 number of 20 liter capacity jarken full with fuel should be stored at each of the three locations (KUR,VSKP & SBP)

13.11 MEDICAL DEPARTMENT:

Medical Dept will procure sufficient Chlorine tablets & Bleaching power as per experience to combat the exigencies at time of flood.

13.12 ACTIVITIES DURING FLOOD:

- i. Opening of Emergency Control Room at Zonal HQ and Division to be managed by Operating & Engineering Departments round the clock in shifts.
- ii. First priority, during flood, is to protect the traveling passengers in the train passing through/ near the affected zone. Whenever incident of flood occurs in any Railway area the respective DRM of the division should immediately take charge of the situation and take all steps to bring under control. He should pass orders to the different departments to take necessary relief and rescue measures for the passengers of the affected train(s).
- iii. Local Law and order authorities may be kept in touch as in flood affected Zone as the local public may sometimes take shelter on embankments making movement of train(s) difficult. Adequate RPF patrolling staff along with Engineering staff with PA systems may be kept in readiness for the purpose.
- iv. DRMs are empowered to requisition help from nearest NDRF and ODRAF battalions through HQ as per DM Act 2005 for relief and rescue of the passengers in the situation when a passenger train is washed away partly / fully by flood or the train is stranded in the section due to washing away of track, where boats and divers are essential.

POST-FLOOD/EARTHQUAKE DISASTER PLAN - (PREPARATION)

13.13 Post - Flood/Earthquake Disaster Plan :

After a major disaster, the first priority is to provide relief and medical aid to affected persons to minimize loss of lives. During the disaster like Gujarat earthquake, roofs of several quarters in Railway colony had collapsed. A number of families were rendered destitute. During earthquake others, whose dwellings were intact, preferred to live outside because of fear of continuing tremors. The water and electric power supply to Railway stations and colonies had been disrupted. Fortunately, there were no stranded passengers and no trains in mid-section. Rail infrastructure had been extensively damaged. Communication channels were down and organization was in disarray as most Officers and supervisors in the affected area were themselves victims of damage. Movement of men and material for rescue and relief in such circumstances becomes a challenging task. The Divisional Control office should function under the direct charge of ADRM. Assistance of headquarters office can be sought for mobilizing relief from outside the Division also.

13.13.1 ACTION BY OPERATING DEPARTMENT:

In the event of severe disaster like flood/earthquake situation when it is not feasible to continue the normal train operations due to damage at various locations in this Railway, it is necessary to have a central organization which can receive information, messages and reports etc., from the affected areas and issue necessary instructions as required. For this purpose a "Central Emergency Control Office" at HQ and Divisional level will be set up. These emergency control offices shall be opened in the Disaster Resistance Control Room. CPTM will be the chief emergency officer at HQ and Sr.DOM will be the Divisional emergency officer at Divisional Level. In addition to this, emergency offices shall be manned by emergency officers as nominated by GM and DRMs for the round the clock operation at HQ and Division respectively. The emergency offices will work in three shifts of 08 hourly basis as mentioned below.

Shifts	Central Emergency Office	Divisional Emergency Office
1st shift	06:00 - 14:00 hrs	08:00 - 16:00 hrs
2nd shift	14:00 - 22:00 hrs	16:00 - 24:00 hrs
3rd shift	22:00 - 06:00 hrs	00:00 - 08:00 hrs

- i. An Emergency Control Order register shall be opened at HQ and Divisional Level and every message communicated between HQ, Division and other Officer/Organizations should be recorded bearing message no's serially. Making over and taking over charges should also be recorded in this register along with important remarks if any. Means of communication if disrupted will be immediately restored (by mobile/satellite phone, VHF & wireless) and made known to all concerned.
- ii. Chief Emergency Officer will decide and communicate to the DRMs about the cancellation, rescheduling and short termination of passenger trains.
- iii. Coaching trains should be controlled/diverted so that the trains do not enter the flood affected section(s), suitable publicity to be arranged. Controlling of trains should, as far as possible, be done where adequate water supply, lighting, catering and medical facilities are available.
- iv. When control communication is damaged, provision of VHF sets for station to station for train working on "paper line clear" should be made till more permanent arrangement is arranged.
- v. Cancellation/diversion of trains should be widely announced through News Papers, TV, News Channels, All India Radio and Public address system.
- vi. Movement should be done on top priority for restoration material, equipments, labours and other items for restoration work as demanded by site officials.

13.13.2 ACTION BY COMMERCIAL DEPARTMENT:


- i. All commercial staff should guide the passengers and volunteers, whether they are on a running train or at station when train services are affected by flood, regarding taking adequate measures for ensuring their personal safety.
- ii. Food and water to be arranged for the entrapped passengers & victims.
- iii. Alternative arrangement should be made for the passengers for safe journey to their destination.
- iv. If a passenger train is stranded in the flood affected section(s), the conductor/TTEs manning the train should take census of passengers, and try to pass information to the station at either end through walkie-talkie set, so that information can be passed on to the Divisional control office.

- v. If any passenger is found injured or sick, First Aid should be provided by the guard/TTEs of the train.
- vi. If a Railway colony is affected in flood, the victims and residents of the colony to be shifted to a safe place as quick as possible and can be told to go to the roofs at the first instance.
- vii. Adequate supply of drinking water and food packets should be arranged at the stations , railway colonies and for the stranded passengers

13.13.3 ACTION BY MEDICAL DEPARTMENT:

Doctors& Paramedical staffs should be rushed to the site with medical kits, where the victims and train passengers are entrapped in a train or at a station to provide medical help and take all precautions that epidemics may not spread.

13.13.4 ACTION BY ENGINEERING DEPARTMENT:

- i). The Officers and staff should proceed immediately to affected zone as soon as information received equipped with satellite phone and VHF set  be made available by S&T to give precise information to control office regarding;
 - a. Nature of damage/washed away/obstruction to track & colonies with location.
 - b. Possible method /system for restoration.
 - c. Maximum resources required for taking out the victims,
 - d. Whether or not a light vehicle can used for the same.
 - e. Likely time to clear the trapped victims from locations.
- ii. Vehicles/helicopters shall be hired locally to navigate across the affected area to assess the damage and arrangements may be made to clear the affected stranded passengers/railway families.
- iii. Based on the damage report and restoration strategy, priority and sequencing of movement of available materials on wheels (e.g. boulders, earth moving machinery, bridge girder and cranes etc) and labour should be quickly chalked out and conveyed to the Traffic officers at Central Control and respective Divisional control.

- iv. Heavy Earth Equipment, road cranes etc., may be requisitioned as per requirement from the sources within the Division and out side.

13.13.5 Electrical Department

- i. Damage caused to electrical installations is to be assessed location wise. For this purpose, competent officials shall be deputed to obtain detailed assessment of the damages. Supervisors and staff should be deputed with necessary materials and tools either by rail or by road for restoration work for supplying Power to affected area and lighting arrangement for rescue and restoration..
- ii. In case of power failure at station where trains are controlled, temporary lighting may be arranged with portable DG set.

13.13.6 Mechanical Department

- i. The ART/ARME staff and crane with crane driver will be kept ready to rush to duties at minimum notice whenever required.
- ii. Drinking water, readymade food items shall be kept ready on ART/ARME. ARTs will be equipped with fuel, and portable generator with adequate provision for 120 hours.

13.13.7 Signal & Telecommunication Department.

S & T department will look after the communication system at affected zone. For this purpose they will do the following activities:

- i. Check the 25 W VHF set provided at each station functioning properly & battery is fully charged.
- ii. Check the emergency generator set is functioning properly with adequate fuel.
- iii. Check that fuel supply tanks of the generator set have been fully filled and adequate fuel for 72 hrs has been checked.
- iv. Check and align all Microwave equipment and battery of DG sets with adequate fuel.
- v. Telecom channel via alternative routes should be lined up and kept terminated for administrative trunks and control working.
- vi. Satellite phones where ever available should be tested and accompanying staff identified along with battery charging arrangement.
- vii. Communication equipment in ART should be tested for proper working order.

- viii. Check all the Block Instruments and their batteries.
Extend power supply from emergency generator set to Block Battery charger.

13.13.8 Stores Department

During restoration, Stores Department shall play a pro-active role in making emergency purchases preferably by standing Spot Purchase Committee & supplying the same to the user department at sites.

13.13.9 Security Department

Security personnel will be nominated by Sr.DSC/DSC at following position(s)-

- i. To accompany the relief material carrying trains when ordered.
- ii. To help commercial & station staff of major station to handle public enquiries.
- iii. At each station where passenger train is regulated.
- iv. On heavy vehicle carrying relief materials.
- v. At major restoration sites after flood recedes and work commences.
- vi. Officer & staff will be trained to tackle the rescue operation in flooded area.
- vii. Rescue team of 15 RPF personnel will be kept in each division and HQrs also.
- viii. Each team will be required 02 boats, 04 rafts, 15 live jackets and two foldable ladders. Total four teams will have 08 boats, 16 rafts, 60 live jackets and 8 foldable ladders.

13.14. MOVEMENT OF RELIEF MATERIALS:

CPTM will order the special train for carrying the relief materials. Wide publicity be given in Press and Media to attract voluntary organizations, individuals, NGOs, Medical practitioners etc to avail the services. The composition and timings will be planned and published by CPRO.

13.15. PROOCEDURE FOR ACCOUNTED, AUDIT & FINALIZATION OF ACCOUNTS:

- i. Special Returns by Stockholders after restoration.
- ii. All stock holders of all departments in-charge of custody of Railway stores shall submit a "Special Return" of the materials transaction that took place during restoration.

13.16. Emergency Purchase of Materials

Emergency demands placed through HOD's notes shall be completed by the Stores Department through a Spot

Purchase Committee.13.17. Work Contracts- Single Tender and hiring of machinery.

For restoration of traffic, single Tender may be awarded to the competent contractors who have the exceptional capacity to mobilize machinery and materials. Prior consent of the General Manager will be taken while processing of the case.

13.18 External Assistance:

Devastation in floods does not get limited to Railway. As such Co-ordination with District Administration through NDMA, State DMAs is an absolute necessity for both availing and rendering help.

- i. All road transport available outside are generally requisitioned by Civil Administration for relief supply. Expeditious clearance and delivery of relief material should be planned with District Administration by Commercial Department. Similarly Engg. Dept. should co-ordinate with Dist. Administration for releasing of water and opening of gates of water reservoirs, track restoration by earth moving machinery, road cranes, trippers etc., available locally as command of these are generally taken over by Dist. Administration.
- ii. Once rail working is restored, movement of relief materials through train is to be co-ordinated with Dist. Administration by Operating Department.
- iii. Specialised trained staff and equipment for rescue of passengers/ dwellers may be co-ordinated through State DMA (like ODRAF of Orissa).
- iv. Provisions for affected families in Railway colonies may not be available for considerable period. Help of NGOs may be taken to supply bare necessary provisions during the flood time.
- v.
 - a) Help of Military/ Para-Military Forces, requirement of boats, divers, helicopters etc., may be availed through NDMA and State DMAs.
 - b) Help of Local Hospitals to be co-ordinated through State DMAs and medical department.
 - c). Railway may provide mobile Medical facility to staff and civilians by self propelled mobile medical units (SPRAME/ ARME)

CHAPTER-14

EARTH QUAKE MANAGEMENT

14.1 INTRODUCTION

Considering Precambrian geological set-up in major parts of Orissa, seismicity is relatively high as evident from the number of earthquakes in the hard rock terrain. A couple of events originated close to the basin marginal faults of Gondwana Garben. Records of historical seismicity indicate activity along the Orissa Coastal belt also.

As per the recent categorization, the country has been divided into four zones. Similarly the Seismic Zoning of Orissa has been revised and Orissa falls between Zone II to III, i.e. low damage risk zone and moderate damage risk zones. However, it may be noted that major part of Gujarat, including Ahmedabad, also comes in the moderate zone but Ahmedabad City was badly affected by the impact of the Bhuj earthquake.

The jurisdiction of ECoR like Bhubaneswar, Cuttack, Paradip, Puri and the critical Hirakud Dam fall within the Zone-II (Low damage risk zone), while VSKP and KK line comes under Zone-III (Moderate damage risk zone). The city of Ahmedabad, which was badly affected by the impact of Gujarat earthquake 2001, is also located in the moderate damage risk zone.

District coming under Low Damage Risk Zones:-	Districts coming under Moderate Damage Risk Zones:-
Bargarh, Sambalpur, Anugul, Dhenkanal, Jajpur, Cuttack, Khurda, Puri, Bhubaneswar, Cuttack, Jagasinghpur, Kendrapada, Bhadrak.	Koraput, Rayagada, Gajapati, Ganjam, Bolangir, Srikakulam, Vizianagaram, Visakhapatnam.

14.2 SEVERITY IDENTIFICATION :

Measure of intensity of earthquake according to Modified Mercalli (MM) scale and its possible impact is given below:

MM scale intensity of earthquake	Measure of intensity described in terms of possible impact
I	Not felt except by a very few under especially favourable circumstances.
II	Felt only by a few persons at rest, especially on upper floors of building.
III	Felt quite noticeably indoors, especially on upper floors of buildings.
IV	Felt by many indoors, during the day by a few outdoors. At night some are awakened. Dishes, windows, doors are disturbed. Standing motorcars rock noticeably.
V	Felt by nearly everyone, may awakened. Some dishes, windows, etc., broken; Pendulum clock may stop
VI	Felt by all : many frighten and run outdoors. Heavy furniture may move. A few instances of fallen plaster or damaged chimeys - damage slight.

VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction, slight to moderate in well built ordinary structures, but considerable in poorly built or badly designed structures.
VIII	Damage slight in specially designed structures; considerable in ordinary structures and great in poorly built structures. Fall of chimneys, stacks and columns. Persons driving motorcars are disturbed.
IX	Damage considerable, even in especially designed structures; well-designed frame structures thrown out of plumbing. Buildings shift off foundations. Ground cracked conspicuously.
X	Some well-built wooden structures destroyed; ground badly cracked; rails bent. Landslides and shifting of sand and mud.
XI	Few, if any (masonry) structures, remain standing. Broad fractures, on ground.
XII	Damage total. Waves seen on ground surface. Lines of sight and level distorted. Objects thrown upward into the air.

The technical paper of GIS states that ORISSA, if at all, experiences any earthquake, it may attain the intensity of 5.9 on the Richter scale. Accordingly, the intensity as per modified Mercalli scale goes in the rang of VI & VII.

Richter Scale Magnitude (M)	Modified Mercalli Scale Intensity (MM)
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - VIII

14.3 Pre Earthquake Disaster Management Plan

Warning and disaster preparedness are the important components of pre-disaster plan. However, in case of earthquake, there is very little scope of prior warning since the event comes very suddenly.

The critical factors responsible for the high seismic risk zone in India and consequently the identified six sets of critical interventions have been presented as the six pillars of earthquake management.

- i. Ensure incorporation of earthquake-resistant design features for the construction of new structures.
- ii. Facilitate selective strengthening and seismic retrofitting of existing priority and lifeline structures in earthquake-prone areas.
- iii. Improve the compliance regime through appropriate regulations and enforcement.
- iv. Improve the awareness and preparedness of all stakeholders.
- v. Introduce appropriate capacity development interventions for effective earthquake management (including education, training, R&D, and documentation).
- vi. Strengthen the stakeholders for emergency response capability in earthquake prone areas.

14.4 Emergency Response Plan

- i. In the event of an earthquake striking some area, the IMD and GSI seismic observation centres give the exact location of the epicentre and the intensity of the earthquake on the Richter scale. With this information in hand, the disaster emergency squad will make an immediate visit to the spot of the affected area for a quick on-site assessment of the situation. Simultaneously, there will be a public announcement about the epicentres and probably affected area and the intensity of the earthquake. The emergency squad on ground shall take video photographs of the affected area. The on-site visit and assessment shall be completed within hours and such news will be broadcast through All India Radio and Door Darshan as well as through Rly. Communication network and other means for information to the public and also to the people in the affected area.
- ii. The information on affected area as well as the first assessment of the emergency squad will be immediately super-imposed in the hazard zone map. The Control Room at the particular affected areas as well as the Central Control Room will be put under red alert within the shortest period after the earthquake strikes.
- iii. A good pre-disaster preparedness plan results in a very good emergency response plan in the time of need.

POST-EARTHQUAKE DISASTER PLAN - (PREPARATION)

14.5 Post - Earthquake Disaster Plan :

After a major disaster, the first priority is to provide relief and medical aid to affected persons to minimize loss of lives. During the disaster like Gujarat earthquake, roofs of several quarters in Railway colony had collapsed. A number of families were rendered destitute. During earthquake others, whose dwellings were intact, preferred to live outside because of fear of continuing tremors. The water and electric power supply to Railway stations and colonies had been disrupted. Fortunately, there were no stranded passengers and no trains in mid-section. Rail infrastructure had been extensively damaged. Communication channels were down and organization was in disarray as most Officers and supervisors in the affected area were themselves victims of damage. Movement of men and material for rescue and relief in such circumstances becomes a challenging task. The Divisional Control office should function under the direct charge of ADRM. Assistance of headquarters office can be sought for mobilizing relief from outside the Division also.

14.6 ACTION BY OPERATING DEPARTMENT:

In the event of severe disaster like earthquake situation when it is not feasible to continue the normal train operations due to damage at various locations in this Railway, it is

necessary to have a central organization which can receive information, messages and reports etc., from the affected areas and issue necessary instructions as required. For this purpose a "Central Emergency Control Office" at HQ and Divisional level will be set up. These emergency control offices shall be opened in the Disaster Resistance Control Room. CPTM will be the chief emergency officer at HQ and Sr.DOM will be the Divisional emergency officer at Divisional Level. In addition to this, emergency offices shall be manned by emergency officers as nominated by GM and DRMs for the round the clock operation at HQ and Division respectively. The emergency offices will work in three shifts of 08 hourly basis as mentioned below.

Shifts	Central Emergency Office	Divisional Emergency Office
1st shift	06:00 - 14:00 hrs	08:00 - 16:00 hrs
2nd shift	14:00 - 22:00 hrs	16:00 - 24:00 hrs
3rd shift	22:00 - 06:00 hrs	00:00 - 08:00 hrs

- vii. An Emergency Control Order register shall be opened at HQ and Divisional Level and every message communicated between HQ, Division and other Officer/Organizations should be recorded bearing message no's serially. Making over and taking over charges should also be recorded in this register along with important remarks if any. Means of communication if disrupted will be immediately restored (by mobile/satellite phone, VHF & wireless) and made known to all concerned.
- viii. Chief Emergency Officer will decide and communicate to the DRMs about the cancellation, rescheduling and short termination of passenger trains.
- ix. Coaching trains should be controlled/diverted so that the trains do not enter the affected section(s), suitable publicity to be arranged. Controlling of trains should, as far as possible, be done where adequate water supply, lighting, catering and medical facilities are available.
- x. When control communication is damaged, provision of VHF sets for station to station for train working on "paper line clear" should be made till more permanent arrangement is arranged.
- xi. Cancellation/diversion of trains should be widely announced through News Papers, TV, News Channels, All India Radio and Public address system.

- xii. Movement should be done on top priority for restoration material, equipments, labours and other items for restoration work as demanded by site officials.

14.7 ACTION BY COMMERCIAL DEPARTMENT:

- viii. All commercial staff should guide the passengers and volunteers, whether they are on a running train or at station when train services are affected by earthquake, regarding taking adequate measures for ensuring their personal safety.
- ix. Food and water to be arranged for the entrapped passengers & victims.
- x. Alternative arrangement should be made for the passengers for safe journey to their destination.
- xi. If a passenger train is stranded in the earthquake affected section(s), the conductor/TTEs manning the train should take census of passengers, and try to pass information to the station at either end through walkie-talkie set, so that information can be passed on to the Divisional control office.
- xii. If any passenger is found injured or sick, First Aid should be provided by the guard/TTEs of the train.
- xiii. If a Railway colony is affected in earthquake, the victims and residents of the colony to be shifted to a safe place as quick as possible .
- xiv. Adequate supply of drinking water and food packets should be arranged at the stations , railway colonies and for the stranded passengers.

14.8 ACTION BY MEDICAL DEPARTMENT:

Doctors & Paramedical staffs should be rushed to the site with medical kits, where the victims and train passengers are entrapped in a train or at a station to provide medical help and take all precautions that epidemics may not spread.

14.8.1 ACTION BY ENGINEERING DEPARTMENT:

- i). The Officers and staff should proceed immediately to affected zone as soon as information received equipped with satellite phone and VHF set to be made available by S&T to give precise information to control office regarding;
 - f. Nature of damage/cracked/sank tracks/obstruction to track & colonies with locations.
 - g. Possible method /system for restoration.
 - h. Maximum resources required for taking out the victims,
 - i. Whether or not a light vehicle can used for the same.
 - j. Likely time to clear the trapped victims from locations.

- ii. Vehicles/helicopters shall be hired locally to do aerial survey across the affected area to assess the damage and arrangements may be made to clear the affected stranded passengers/railway families.
- v. Based on the damage report and restoration strategy, priority and sequencing of movement of available materials on wheels (e.g. boulders, earth moving machinery, bridge girder and cranes etc) and labour should be quickly chalked out and conveyed to the Traffic officers at Central Control and respective Divisional control.
- vi. Heavy Earth Equipment, road cranes etc., may be requisitioned as per requirement from the sources within the Division and out side.
- vii. If any bridge/pillar/embankment has collapsed then a long term strategy to planned and thought off.

14.8.2 Electrical Department

- iii. Damage caused to electrical installations is to be assessed location wise. For this purpose, competent officials shall be deputed to obtain detailed assessment of the damages. Supervisors and staff should be deputed with necessary materials and tools either by rail or by road for restoration work for supplying Power to affected area and lighting arrangement for rescue and restoration..
- iv. In case of power failure at station where trains are controlled, temporary lighting may be arranged with portable DG set.
- v. Close coordination with State Govt. and State Electricity Boards to restore Power supply to affected service buildings and restoration by electric traction.

14.8.3 Mechanical Department

- iii. The RMTV/ART/ARME staff and crane with crane driver will be kept ready to rush to duties at minimum notice whenever required.
- iv. Drinking water, readymade food items shall be kept ready on ART/ARME. ARTs will be equipped with fuel, and portable generator with adequate provision for 120 hours.

14.8.4 Signal & Telecommunication Department.

S & T department will look after the communication system at affected zone. For this purpose they will do the following activities:

- ix. Check the 25 W VHF set provided at each station functioning properly & battery is fully charged.
- x. Check the emergency generator set is functioning properly with adequate fuel.
- xi. Check that fuel supply tanks of the generator set have been fully filled and adequate fuel for 72 hrs has been checked.
- xii. Check and align all Microwave equipment and battery of DG sets with adequate fuel.
- xiii. Telecom channel via alternative routes should be lined up and kept terminated for administrative trunks and control working.
- xiv. Satellite phones where ever available should be tested and accompanying staff identified along with battery charging arrangement.
- xv. Communication equipment in ART should be tested for proper working order.
- xvi. Check all the Block Instruments and their batteries.

Extend power supply from emergency generator set to Block Battery charger.

- ix. Restoration to damaged Signal Posts/service buildings to restore normal train operations by shifting the signaling gears to alternate service buildings.

14.8.5 Stores Department

During restoration, Stores Department shall play a proactive role in making emergency purchases preferably by standing Spot Purchase Committee & supplying the same to the user department at sites.

14.8.6 Security Department

Security personnel will be nominated by Sr.DSC/DSC at following position(s)-

- ix. To accompany the relief material carrying trains when ordered.
- x. To help commercial & station staff of major station to handle public enquiries.
- xi. At each station where passenger train is regulated.
- xii. On heavy vehicle carrying relief materials.
- xiii. At major restoration sites and work sites .
- xiv. Officer & staff will be trained to tackle the rescue operation in flooded area.
- xv. Rescue team of 15 RPF personnel will be kept in each division and HQrs also.

- xvi. Each team will require 02 boats, 04 rafts, 15 life jackets and two foldable ladders. Total four teams will have 08 boats, 16 rafts, 60 life jackets and 8 foldable ladders.

14.8.7 MOVEMENT OF RELIEF MATERIALS:

CPTM will order the special train for carrying the relief materials. Wide publicity be given in Press and Media to attract voluntary organizations, individuals, NGOs, Medical practitioners etc to avail the services. The composition and timings will be planned and published by CPRO.

14.8.8. PROCEDURE FOR ACCOUNTED, AUDIT & FINALIZATION OF ACCOUNTS:

- iii. Special Returns by Stockholders after restoration.
- iv. All stock holders of all departments in-charge of custody of Railway stores shall submit a "Special Return" of the materials transaction that took place during restoration.

14.8.9. Emergency Purchase of Materials

Emergency demands placed through HOD's notes shall be completed by the Stores Department through a Spot Purchase Committee.

14.8.10. Work Contracts- Single Tender and hiring of machinery.

For restoration of traffic, single Tender may be awarded to the competent contractors who have the exceptional capacity to mobilize machinery and materials. Prior consent of the General Manager will be taken while processing of the case.

14.8.11 External Assistance:

Devastation in floods does not get limited to Railway. As such Co-ordination with District Administration through NDMA, State DMAs is an absolute necessity for both availing and rendering help.

- vi. All road transport available outside are generally requisitioned by Civil Administration for relief supply. Expeditious clearance and delivery of relief material should be planned with District Administration by Commercial Department. Similarly Engg. Dept. should co-ordinate with Dist. Administration for track restoration by earth moving machinery, road cranes, trippers etc., available locally as command of these are generally taken over by Dist. Administration.
- vii. Once rail working is restored, movement of relief materials through train is to be co-ordinated with Dist. Administration by Operating Department.

- viii. Specialized trained staff and equipment for rescue of passengers/ dwellers may be co-ordinated through State DMA (like ODRAF of Orissa).
- ix. Provisions for affected families in Railway colonies may not be available for considerable period. Help of NGOs may be taken to supply bare necessary provisions during the earthquake time.
- x.
 - a) Help of Military/ Para-Military Forces, requirement of boats, divers, helicopters etc., may be availed through NDMA and State DMAs.
 - c) Help of Local Hospitals to be co-ordinated through State DMAs and medical department.
 - c). Railway may provide mobile Medical facility to staff and civilians by self propelled mobile medical units (SPRAME/ ARME)

CHAPTER-15

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 Rly. 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.

15.1 Actions to be taken during Land/Hill Slide

- i. After receiving the message from the concerned Station Master under whose jurisdiction the Section is situated, the Section Controller will inform concerned 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.
- ii. DRM with Sr.DEN(Co-ord) and Sectional DEN will proceed to site. ART/MRT will be ordered, if required.
- iii. Sr.DEN(Co-ord) will requisition earth moving equipment including, Pay loader, JCB, Dozer, Proclains & Jack Hammer Dumper & Trucks from the nearest available Railways & Non-Railway sources.
- iv. Licensed Rock Blasting staff, with sufficient quantity of explosive & detonators, Rock drills, Rock drilling equipment 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.
- v. DRM, after getting detailed information from site will seek the help of Army, Border Road Organization Units, as the case may be.
- vi. Sufficient quantity of explosive & detonators has to be sent to the site for replenishment.
- vii. The residents of the nearby houses/Staff quarters must be evacuated to safer places before starting the Blasting of Rocks.
- viii. 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.
- ix. Similarly, Signaling, Elect., TRD staff also should be kept in readiness with men & materials for immediate repair of installation.
- x. Sufficient numbers of labours are to be requisitioned and deployed at site to help in clearing the landmass.
- xi. Critical/injured persons/staff should be shifted to nearest Hospital for treatment.
- xii. The loose boulders are to be dislodged and the need for flattening the slope by earthwork or protection of cutting by boulders nets or rock bolting or short creting is to be explored.

15.2 Preparedness for Management of land/hill slides:

- i. Vulnerable areas for land /hill slides in ECoR territory are to be identified/reviewed by the Engineering Dept based on past history , actual

survey , etc., in accordance with relevant para of IRBM (Chapter-10) and in consultation with expert organisations like Geological Survey of India/Ministry of Mines and special precautions taken accordingly. User friendly landslide maps are to be prepared by the Engineering Department and to be displayed at stations & offices prone to land slide area.

ii. **Early Warning System(EWS):-**

Basically the land / hill slide occurs following the major rain fall & earthquake. For early warning, the Engg department should develop the Numerical Weather Prediction (NWP), Automatic rain gauges, Wireless Sensor Network (WSN), Micro- Electro Mechanical Sensors (MEMS) to cover the vulnerable locations in the division in consultation with State & Central Govt. during monsoon season, Engg. Control should keep close liaison with IMD (India Meteorological Department) in the state & State Disaster Management Authority.

iii. Rainfall pattern and data base on rainfall should be analyzed to understand the variability of rain in the region / territory land slide in ECoR

15.3 Awareness Programme & Training:

- i. Division should ensure by arranging regular pre-monsoon trainings that field staffs of engineering as well as other departments are conversant with their respective duties during accident/ land slide.
- ii. User friendly land slide maps to be prepared by Engg Dept and displayed at stations & offices prone to land slide area. Some vulnerable locations of land slide, boulder falling and floods in the ECoR Zone causing interruption to traffic in the past are enclosed at **Annexure-30**.
- iii. The field staff of P.Way, works and other train passing staff should be trained regarding land slide precaution, search & rescue operations etc. which should be organised by division in coordination with NDRF/SDRF (State Disaster Response Force).
- iv. Engineering department should arrange to develop a special team of civil engineers to receive specialized training / knowledge regarding land/hill slides and response to it during emergent situations by coordinating with institutions like NIDM, New Delhi.



TERRORISM DISASTER

Terrorism: Politically motivated and perpetrated in a clandestine manner against non-combatants. The act is committed in order to create a fearful state of mind in an audience different from the victims.

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

- i. Loss of lives
- ii. Loss of properties.
- iii. Workers' compensation.
- iv. Accident and health.
- v. Disability.
- vi. Political and social instability in the region and between countries.
- vii. Long term damage to a country's economy and production capacity

16.2 Types of Terrorism- Researchers has began to distinguish different types of terrorism such as Hijacking, Bombing, Diplomatic kidnapping and assassination to assert their demands.

16.3 Some terrorist attack in India:

On Dec.13/2001, in a suicide attack on Indian Parliament, nine police men and parliament staffer were killed. On June 22, 2000, two powerful car bomb explosion took place in south Mumbai killing at least 46 people. On 22 Jan.2002, militants attacked American cultural center in Kolkata, killing four police and injured 21. On 1st Oct.2001, a car bomb exploded near the state Assembly J&K, killing 38 people. On July 2005, Jaunpur train explosion at least 10 people were killed and more than 50 were injured. On 29 Oct.2005, bomb blast in New Delhi, 70 people were killed and several injured. On March 2006, serial blast in Varanasi, at least 100 were injured. On 11 July 2006, Mumbai train blast, at least 190 people were killed in the 1st class compartment. On 26th Nov.2008, terrorist attacked Taj hotel in Mumbai and killed at least 185 people and injured more than 300.

16.4 TERRORISM MANAGEMENT MEASURES:

16.4.1 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 stair case are located.
- iv. Terrorist may damage the Railway track or Railway bridge, therefore patrolling should 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 collapsing of 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 track/traction installations. 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 got of a bomb threat, do not touch any suspicious packages. Clear the area around the suspicious packages and inform the police immediately. In evacuating a building, avoid standing in front of window or other potentially hazardous area.
- xi. Install video/CC cameras at the busy railway station to watch movement of suspicious persons.
- xii. Bomb detecting machines 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 colonies.

16.4.2 During terrorist attack

- i. In a building/train explosion, get out of the building/train as quickly and calmly as possible. 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.

16.4.3 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 specialized emergency personnel to arrive.
- v. Where a chemical 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.

16.5 Duties of Departments :

After a terrorist attack at station/train , the **DRM** of affected Division should rise to the situation and take all steps to bring the situation under control. RPF and officers of other departments should rush the spot immediately for relief and rescue work.

The duties of RPF is vital in the terrorist attack. They should immediately inform State Police and rush to the spot with full force to handle the situation.

16.5.1 Duties of RPF department

- i. Evacuate the injured and un-conscious persons from the affected zone with the help of ODRAF, 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 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 too.

16.5.2 Duties of medical department-

- i. Terrorist attack may cause loss of life, serious/minor injury to passengers/railwaymen. On receipt of the information of a terrorist attack on any Railway establishment, the ARME in-charge should rush to the spot immediately with sufficient nurses and doctors.
- ii. They should have sufficient number of stretchers.
- iii. Ambulance with life saving medicines, dressing materials, Tetanus toxoid and Intravenous fluids should leave for the spot.
- iv. Seriously injured to be shifted to the nearest hospital and first aid to be given to injured.

16.5.3 Duties of Mechanical department:

- i. During terrorist attack train may be seriously damaged/derailed, in such situation senior most officer should rush to the site immediately.

- ii. 140 Ton Crane / ART/ ARME / SPARME may be ordered as per the requirement at site.
- iii. Senior most officers should monitor the rescue operation at site.

16.5.4 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 terrorists is received, Chief Operations Manager shall decide to run an advance pilot engine 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 arrangements to be run.

16.5.5 Duties of Commercial Department:

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

16.5.6 Duties of Personnel Department

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

16.5.7 Duties of Engineering Department:

- i. Terrorist attack may damage the Railway track/ bridges. Sufficient number of rails and bridge girders may be stocked at suitable places.
- ii. Boulder and sand may be stocked at places to meet the situation.

16.5.8 Duties of S&T Department:

- i. The attack may damage the communication and signaling system.
- ii. Satellite phones and VHF sets are to be kept ready in ART/ARMEs.

CHAPTER-17

CHEMICAL DISASTER

17.0 Handling large quantity of HAZCHEM (Hazardous Chemicals) in installation, isolated storages and transportation, poses the grave risk of sudden release of copious quantities of toxicants on the environment. Indian Railway transport these HAZCHEM e.g. Petroleum products (petrol, HSD, naphtha etc.), caustic soda, alcohol, compressed gases (LPG), chemical manures, acids, matches etc. These goods are carried either in piece meal system in SLR or wagon or in bulk load in full rake of tank wagons.

Indian Railway's Rule for carrying dangerous chemicals i.e. HAZCHEM by rail have been legislated in the Railway Red Tariff Rule 2000 as per which dangerous goods have been classified in the following 8 categories.

- i. Explosives.
- ii. Gases, compressed, liquefied or dissolved under pressure.
- iii. Petroleum and other inflammable liquids.
- iv. Inflammable solids.
- v. Oxidizing substances.
- vi. Poisonous /Toxic substances.
- vii. Radio active substances.
- viii. Acid and corrosives.

Improper or unsafe handling i.e. loading, unloading, leveling and transporting may cause chemical accident/disaster resulting in fire, explosion, toxic release poisoning the environment and combination of the above.

The Bhopal gas disaster in December 1984 brought in to sharp focus the unprecedented potential of HAZCHEM like Methyl isocyanides in terms of loss of life, health, injury and long effect on population.

Petroleum and other inflammable liquids considered dangerous as per Railway Act 1989 (24 of 1989) and have been classified in three classes i.e. class "A", class "B" & class "C".

- a. Class "A" - Petroleum & other inflammable liquids, the vapour of which having flash point below 230 C.
- b. Class "B"- Petroleum & other inflammable liquids, the vapour of which having flash point above 230 C but below 650 C.

- c. Class "C"- Petroleum & other inflammable liquids, the vapour of which having flash point 650 C and above.

A number of factors including human errors could spark of chemical accident with the potential to become chemical disaster. These are:-

- i. Process and Safety system failure.
- ii. Technical error:- Design defect, Fatigue, metal failure, corrosion etc.
- iii. Human error:- Neglecting safety instructions while handling the HAZCHEM, deviation from specified process etc.
- iv. Lack of information/knowledge:- Absence of emergency warning procedure, non disclosure of line of treatment etc.
- v. Transportation: - Transportation in unsafe manner i.e. in leaky containers/tank wagons, loose shunting during attachment/detachment of wagons, rough driving while transporting by rail.
- vi. Organizational error:- Poor emergency planning and coordination with public, non compliance of mock drills/exercises.
- vii. Terrorist attack/sabotage:- Vulnerable chemical disaster is further compounded by likely terrorist and warfare activities which includes sabotage and attack on HAZCHEM installations/ storage and transportation vehicles. These can occur at any time and at any place.
- viii. Improper storage. Improper storing of HAZCHEM.
- ix. Packing : Packing and labeling in unsafe manner.

17.1 Preparedness for Chemical Disaster Measures

In view of recent styrene gas leakage in VSKP div., the following Responsive Protocols, Resource Activation and Mobilization and Standard Operating Protocols of different departments in ECoR have been incorporated.

- i. In case of chemical disaster, organizations/agencies like the DAE (Dept. of Atomic Energy) and central Govt. from time to time, Explosive environment safety MOE&F, MHI & PE, professional institutes' private voluntary organizations NGO may be contacted.
- ii. Railway Hospital, including various Hospitals under direct supervision of MH & FW should cater to medical emergencies for prompt medical response with requisite capacity building in emergency medical services.

- iii. Crisis control room for rapid exchange of information and coordination of activities during emergency to be set up in Division and HQs.
- iv. Fire service, Civil defense, NDRF, SDRF & state authorities' assistance immediately is sought. Important Phone numbers are as follows:

State	Unit	Telephone number	Mobile number
Odisha & Chattishgarha	NDRF(Orissa)	0671-2879711 (Control Room) 0671-2879710 (Office)	9437581614
	ODRF	0671-2303263 (Office) 0671-2339555 (Control Room)	
Andra Pradesh & Telangana	NDRG(AP)	0863-2293050	8333068559
	SDRF	0864-5237347 (Guntur)	9440906404 (Control) 9440627425 (Office)
Chattisgarha	Fire & Emergency Control Room NDRF	0771-2512331	
Delhi	NDRF	011-23438091 (control & fax) 011-23438091,23438136 (Off)	9711077372
	DG/NDRF	011-23438020, 23438119	

- v. The train services in the section are immediately requested to control /cancel/divert within the vicinity for time being till the hazards are brought under control.
- vi. Evacuation process of all human beings including animals with the help of NGO/State govt. immediately is resorted to.
- vii. Effective medical emergency services in comprehensive manner are pressed in service immediately.

Standard Operating Protocol (SOPs)

- i. Installation of Public addresses (PA) system.
- ii. Setting up of aero meters with continuous recording system & back up installation of wind box at vulnerable location.
- iii. Provision of adequate quantity of foam and any other suppressant for control of vaporization of spill or leak.
- iv. Keep ready sufficient number of fire extinguishers.
- v. Availability of well equipped emergency medical rooms with requisite no of Ambulance vans.
- vi. Preparation & inclusion of resources directory with complete details. Source availability of resource person's/ officer's contact phone/mobile no, address.
- vii. Facility of good broadcasting, Law & Order, evacuation, transport, rescues relief facilities.
- viii. Financial support from competent authority to meet the emergency procurements.
- ix. Creation of decontamination facilities.
- x. Arrangement of adequate stock of PPEs including respirators and medical oxygen cylinders.

17.2 Pre-Disaster Measures:

General Rules regarding acceptance of the dangerous chemicals for carriage by rail are given in Rules 202, 203, 204, 205, 206 of Red Tariff No 20. Those are to be followed meticulously. There are various process of handling the dangerous chemicals. Those are:-

- 17.2.1 Packing:- Before the dangerous chemicals are transported by rail, it must be packed as per Rule 207.1 & 207.2 of Red Tariff No 20. Rule 207.2 i.e. rule for protection cylinder valves during transportation shall not apply to cylinders containing oxygen or nitrous oxide for medical purposes having water capacity less than 5 liters.

Acid and other corrosives is to be packed by consignor but more precautions need to be taken by concerned Railway Officials, that it is packed strictly in the manner laid down in Rule 807 of Red Tariff No. 20. The outer most package containing acid and other corrosives must be marked with word "Corrosive" and name of the acid or corrosive.

17.2.2 Marking and labeling of cylinders or containers:

Rule for marking and labeling of cylinders are given in Rule 208 & 209 of Red Tariff No 20. It must be ensured that the dates of the last hydraulic test are marked on every cylinder. In case of liquefied petroleum gas cylinder, the quarter of the year of test shall be given additionally in neck ring or on a shoulder plate. It is to be ensured that the words "Highly inflammable" and "Inflammable" as the case may be is marked on every package/container containing inflammable liquids. Every tank wagon used for transportation of petroleum must be marked on each side and rear thereof in letter at least 7cms high on a background of sharply contrasting color the word "INFLAMMABLE" and the name of the liquid transported.

17.2.3 Storage (Refer Rule 211 of Red Tariff No 20)

During storage, the following points must be ensured.

- i. Thin walled cylinders such as LPG cylinders and dissolved gas cylinders shall not be stored in horizontal position.
- ii. Cylinders containing inflammable gases, other toxic gases shall be kept away from cylinders containing other type of gases.
- iii. Cylinders shall not be stored along with any combustible materials or explosives or other dangerous goods.
- iv. Smoking and carrying any type of naked fire must not be allowed near these commodities.
- v. All operation of loading, unloading and handling of petroleum and other inflammable liquids shall be conducted between sunrise and sun set. Loading and unloading can be done if adequate lighting arrangement is made. All loading and unloading points of petroleum products must have been

provided with adequate fire fighting facilities with trained fire fighting staff.

- vi. Smoking, taking fire or naked light matches or other article of inflammable nature is strictly prohibited near the storage or loading/unloading point of petroleum liquids.
- vii. All due precautions should be taken at all times to prevent any escape of petroleum and other inflammable liquids.
- viii. All the storage place of the dangerous goods like HSD, Petrol, and Lubricants etc. must have road access so that fire tender can approach in the event of any major fire.
- ix. Adequate security arrangements should be made at these locations to prevent any outside interference which may cause any untoward incident.
- x. The facility for storage of petroleum products by the Railways should conform the Petroleum Rules 2002 notified in Gazette of India.
- xi. Where there is storage of petroleum product other than Railway but adjacent to Railway infrastructure, Railway should liaise with such private owners that adequate safety precautions are taken and locations are suitably guarded to avoid any untoward incident that might affect Railway system.

17.2.4 Transportation:

Petroleum and other inflammable liquids class "A" shall be transported by goods train only. Petroleum and other inflammable liquids class "B" & "C" may be transported in wagons by all trains except passenger train.

Petroleum and other inflammable liquids class "A" may be transported in wagons by mixed train or parcel train on any section on which goods trains are not running provided that immediately after entering any section on which goods train are running, the wagon containing petroleum and other inflammable liquids class "A" shall be detached.

Petroleum and other inflammable liquids shall not be carried in brake van of passenger train. Whenever these commodities are permitted to be carried in brake van the following points must be ensured.

- i. The total quantity in the brake van at any one time shall not exceed 50 liters.
- ii. Petroleum and other inflammable liquids shall not be conveyed in the same carriage with any matches or fuses or appliance producing ignition or explosive or dangerous goods.
- iii. Package containing petroleum and other inflammable liquids shall be carried only in rear brake van with good ventilation. Packages containing petroleum and other inflammable liquids shall be placed as far away as possible from other packages in the brake van and from the tail light of the brake van.
- iv. Acids and other corrosives in wagons may be transported by all trains including passenger trains, but not to be carried in the brake van of trains.
- v. Acids and other corrosives shall be carried in covered iron wagons and tank wagons. End opening carriages or wagons shall not be used.

17.2.5 Precautions to be taken during loading/unloading tank wagons:

- i. Tank wagons used for carrying petroleum and other inflammable liquids shall be of a design approved by Chief Controller of Explosives.
- ii. Tank wagons used for conveyance of petroleum shall be in good condition and free from leakage. In filling the tank wagons, an air space of more than 5 % of the capacity of the tank shall be left. The air space may be reduced to
 - a. 2.5% in case of some important items like HSD, Furnace oil, Kerosene, aviation turbine fuel.
 - b. 4% for some important items like Aviation Spirit, Petrol, and Naphtha.
- iii. All inlets and outlets shall be closed securely and tightly.
- iv. Petroleum and other inflammable class "A" shall not be loaded or unloaded from tank wagons where tank wagons is exposed to spark within 30 meter from any fire, furnace or artificial light capable of igniting inflammable vapor.

- v. After unloading petroleum liquid from tank wagons the top cover shall be left open to discharge the vapor.
- vi. Before filling petroleum liquids in tank wagons, they should be cleaned thoroughly and should be tested for leakage.
- vii. Tank wagons containing petroleum should not be loose shunted during attachment or detachment.
- viii. Packages containing acids and other corrosives not to be thrown dropped down or dragged along the ground of floor and care should be taken to avoid striking them against any hard object.
- ix. When loading and unloading heavy drums or casks cushions of a suitable type, thick coir matting, felt, bags filled with saw dust or similar protection should be used to avoid damage to the drums or casks and to prevent leakage.
- x. Whenever practicable, packages containing acids and other corrosives shall be carried or conveyed on trolley or hand barrows.
- xi. Acids and other corrosives not to be stored or handled with or near explosives or other dangerous goods of inflammable nature.
- xii. Acids and other corrosives not to be stored or handled with or near foodstuffs or foodstuff empties.
- xiii. The floor of any place or wagon on which acids and other corrosives have been stored or carried shall swept and thoroughly cleaned after removal of the goods there from.

17.3.1 Rescue, Relief and Restoration:

Railway's expertise in dealing with the miss-happenings like spillage, explosion, catching fire, release of toxic etc. of the dangerous chemicals is very limited. Therefore help from agencies and organizations such as NDRF, ODRAF, IOC, BPCL/HPCL who have expert knowledge in dealing with the hazardous goods is asked for relief and rescue operation during a chemical disaster.

The agencies and their contact numbers are given at the end of the chapter.

If any untoward incident related to dangerous chemicals happen in the Railway premises, without delay those agencies or organization can be called for relief and rescue operation.

The staff of ARMEs, ARTs and a few of the staff maintaining rolling stock which is used for transportation of hazardous chemicals may be trained and equipped with the equipment used for dealing with such materials in eventualities.

17.3.2 Precautions for Prevention of Chemical Disasters

As lessons learnt from the recent styrene gas leakage of LG Polymers situated near about 1 km from SCMN station establishment in Waltair Division, it is indeed necessary to have pre-precautionary planning at nearby railway premises to save any unwarranted situations.

- i. There should be joint Audit by representatives of concerned state authorities, Industry and Railways on a periodical manner.
- ii. Oximeter to be made available to detect oxygen levels
- iii. Alarm system to be provided in company as well as nearby locations to warn the public about any adverse situation.
- iv. The evacuation plan to be made ready in advance.
- v. Provision of First aid kit for the railway personnel to save them this kind of situations to be made.

17.4 MEDICAL DEPARTMENT

17.4.1 Chemical Disasters or Accidents

Chemical accident means an accident involving sudden or unintended occurrence while handling any hazardous chemicals resulting in continuous, intermittent or repeated exposure to death or injury to any person or damage to any property but does not include an accident by reason only of war or radio-activity.

Major chemical accident means - an occurrence including any particular major emission, fire or explosion involving one or more hazardous chemicals and resulting from uncontrolled

developments in the course of industrial activity or transportation or due to natural events leading to serious effects both immediate or delayed, inside or outside the installation likely to cause substantial loss of life and property including adverse effects on the environment.

17.4.2 Sources of the above disasters and accidents

The above accidents as defined may happen to any one of the following

"Industrial activity"

- i. carried out in an industrial installation involving or likely to involve one or more hazardous chemicals
- ii. on-site storage or on-site transport which is associated with that operational process as the case may be
- iii. isolated storage
- iv. Pipelines.

17.4.3 Types of major chemicals/industrial hazards

In addition to loss of life, the major consequences of chemical disasters include impact on livestock, flora/fauna, the environment (air, soil, and water) and loss to industry.

17.4.5 Do's and Don'ts

Precautions to be taken during and after the Chemical (Industrial) Accidents

- i. Do not panic, evacuate calmly and quickly perpendicular to wind direction through the designated escape route.
- ii. Keep a wet handkerchief or piece of cloth / sari on face during evacuation.
- iii. Keep the sick, elderly, weak, handicapped and other people who are unable to evacuate inside house and close all the doors and windows tightly.
- iv. Do not consume the uncovered food/water etc open to the air, drink only from bottle.
- v. Change into fresh clothing after reaching safe place/shelter and wash hands properly.

- vi. Inform Fire & Emergency Services, Police and Medical services from safe location by calling 101, 100 and 108 respectively.
- vii. Provide correct and accurate information to government officials.
- viii. Inform others regarding occurrence of event at public gathering places (like school, shopping centre, theatre etc.)
- ix. Don't pay attention to the rumors and don't spread rumors.

17.4.6 General Precautions during Normal Time

- i. Do not smoke/ lit fire or spark in the identified hazardous area.
- ii. Sensitize the community living near the industrial units and they should be more vigilant about the nature of industrial units and associated risks.
- iii. Keep the contact numbers of nearest hazardous industry, fire station, police station, control room, health services and direct control room, for emergency use.
- iv. Avoid housing near the industries producing or processing the hazardous chemicals, if possible.
- v. Participate in all the capacity building programmes organized by the government/voluntary organization/industrial units.
- vi. Take part in preparatory disaster management plan for the community and identify safe shelter along with safe and easy access routes.
- vii. Prepare a family disaster management plan and explain it to all the family members.
- viii. Make the family/neighbors aware of the basic characteristics of various poisonous/hazardous chemicals and the first aid required to treat them.
- ix. Adequate number of personal protective equipments (PPEs) needs to be made available in health units and work places, to deal with emergency situation.
- x. Prepare an emergency kit of items and essentials in the house including medicines, documents and valuables.

17.5 OPERATING DEPARTMENT

"Post Disaster action to be taken"

- i. Chemical plant/Factories are potential threat to leakage of poisonous gas which is hazardous to living beings. Stations/Railway track situated in the vicinity of Chemical Plant/factory need to be identified and notified for knowledge of all concerned.
- ii. Railway staff/ officers working at these stations/sections should be sensitized about the possible occurrence of any eventualities due to leakage of poisonous gas from these Plants/ factories.
- iii. Standard Operating Procedure to be prepared and to be displayed at these stations to meet any eventualities.
- iv. Personal Protection Equipment may be provided to railway officials working at these stations to meet any eventualities.
- v. In the event of leakage and spreading of chemicals/gas in the location train movement over these locations should be stopped immediately.
- vi. Arrangement should be made to evacuate railway officials/family members from the affected areas.
- vii. Scheduled Stoppages of trains at these stations should be cancelled for the time being if such trains already left the rear station. These trains to be allowed to go through.
- viii. Running staff/Ticket checking staff working in the trains plying over the vulnerable locations should be provided with Personal Protective Equipment. These may be kept in Train SLR/ Guard Brake Van cup board with OTL.
- ix. Guards, Loco Pilots and ticket checking staff should be counseled to advise passengers to close doors and windows of the trains in the event of leakage of poisonous gas.

17.6 MECHANICAL DEPARTMENT

- i. Responsive Role: Supportive Role
- ii. Resource Activation & Mobilization:

Mock drills will be conducted to all ARTs/ARMEs/SPARMEs to tackle situations like chemical disasters in consultation with NDRF& ODRF / SDRF.

- iii. Standard Operating Protocols (SOPs): SOPs will be issued to tackle the type of chemical disasters (like gas leakages, HAZCHEM leakages, etc.) by the BD staff of ARTs /ARMEs.

17.7 SECURITY DEPARTMENT

In reference to the above, the following action plans are suggested to tackle the Chemical Disaster hazards;

- i. The Zonal & Divisional disaster management team in the Railway should be given special training regarding possible Chemical hazards in their operational environment.
- ii. The personnel protection equipments (PPEs) should be procured and supplied to the disaster management team to tackle such disasters.
- iii. Quarterly mock drill should be arranged at Zonal & Divisional level for those disaster Management team.
- iv. The RPF disaster management team should assist Railway authority and State authority for evacuation process during such a Chemical Disaster.
- v. Frequent announcement should be made through PA system in the affected areas to alleviate the panic situation.

17.8 PUBLIC RELATIONS DEPARTEMENT:

Media Management to be done and fake news against railways to be controlled and ensure only correct and factual news to be published in the disasters or eventualities.

17.9 ENGINEERING DEPARTMENT

Regarding the control of chemical disaster, the role of Civil Engg Department is limited to educating the staff in the field for taking timely measures in case of any mass evacuation is required to provide medical aid in time. Each works centre of Civil Engineering Department, Divisional Engineers and Assistant Officers and Inspectors at field levels should be vigilant in collecting and reporting any abnormalities in the adjoining chemical units/installations regarding their poor safety measures and report the same to the district authorities. Time to time all

the Civil Engineering persons engaged in the field should be imparted with the training on **DOs** and **DON'Ts** of the chemical disaster management so as to increase the level of preparedness and action taken in emergency in case of any outbreak of any such chemical disaster. The field officials should promptly render required assistance to the affected persons in consultation with the Divisional / Medical authorities.

Besides the above, periodical joint inspections at the level of Assistant scale officers and Divisional officers with the concerned state counterpart officials should be carried out regarding adherence of safety norms for all Hazardous prone chemical installations in the vicinity of railway track/major railway setups. The deficiencies/shortfalls noticed during the joint inspections be send to the district authorities for enforcing necessary compliance by the plant owners in time. Records of such inspections and action taken to be maintained in the Divisional Office of Engg. Department.

Guidelines for Management of Chemical Disasters Please contact:

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Web: www.ndma.gov.in

Sl. No	Location	Officer of Factory & Boilers	Telephone
1	Bhubaneswar	Director, Factories & Boilers	0674-2396070(O), 0674-2304979
2	Bhubaneswar	Dy Director (Safety)	0674-2393786
3	Rourkela	Dy. Director	0661-2508042
4	Cuttack	Dy. Director	0671-2505575
5	Jajapur	Dy. Director	06726-222359

6	Angul	Dy.director	06764-220164
7	Rayagada	Dy Director	06856-222158(O), 222157
8	Sambalpur	Dy. director	0663-2411305(O) 2412226
9	Keonjhar	Asst.Director	06766-253673
10	Jeypore	Asst.Derctor	06854-231656

CHAPTER-18

CHEMICAL TERRORISM DISASTERS (CTD)

A terrorist attack involving chemical agents differs from a normal terrorist attack as it results in specific effects on health and can cause fatal injuries, create panic, and affect the morale of the community. The targets of terrorists include market places, densely populated areas, public functions, important dignitaries, water and electricity supplies, restaurants/food plazas, malls, places of entertainment, busy railway stations in metros and critical and sensitive military, civil and economic institutions.

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

18.1 NDMA's Guidelines:

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

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

- i. Security and surveillance measures for installations manufacturing/ using/ storing chemical materials.

- ii. Strengthening intelligence regarding the movement of chemicals.
- iii. Preparedness for counter-terrorism measures:
 - a. Issues regarding the safety of chemicals and risk reduction strategies etc.
 - b. Strengthening of response through rescue and emergency medical resources.
 - c. Preparedness of all emergency functionaries in terms of protection, detection, de-contamination, de-corporation, capacity building and infrastructure development.
 - d. Community-centric mechanism for the management of chemical terrorism disasters.

18.2 CTD Preparedness Plan :

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

18.3 Preparedness for Emergency Response:

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

18.4 Guidelines on Chemical Disasters:

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

18.5 Training for the Responders (Preparedness):

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

CHAPTER-19

NUCLEAR AND RADIOLOGICAL EMERGENCY DISASTER

Any radiation incident resulting in or having a potential to result in exposure and/or contamination of the workers or the public in excess of the respective permissible radiation limits can lead to a nuclear/radiological emergency. In the incident of Fukushima, Japan, plant released a large-scale of radiation in the environment due to failure of cooling system of nuclear facility. The nuclear fuel cycle/nuclear reactors using radioactive resources burst due to uncontrolled nuclear reaction, in 11th March 2011 earthquake and tsunami resulting triggering of fires, explosions and radiation leaks in the world's worst nuclear disaster since Chernobyl, USSR in 1986. The March disaster is believed to have killed more than 24,500 people.

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

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

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

As regards the vulnerability of various nuclear fuel cycle facilities to terrorists attacks, these facilities have elaborate physical protection arrangements in place to ensure their security. The structural design of these facilities ensures that even in the event of a physical attack,

the structural barriers prevent the release of any radioactivity outside the plant area itself and hence the public shall not be exposed to radiation.

While their radioactive strength is in itself a deterrent to pilferage, the radioactive sources can still be stolen and used in a Radiological Dispersal Device or Improvised Nuclear Device. Essentially, a Radiological Dispersal Device is a conventional explosive device 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 groups 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 Centers 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 could take place and how to tackle the disaster.

CHAPTER-20

BIOLOGICAL DISASTERS

20.1 Causes of Biological Disasters :

Biological disasters might be caused by epidemics, accidental release of virulent microorganism(s) or Bioterrorism (BT) with the use of biological agents such as anthrax, smallpox, etc. The existence of infectious diseases have been known among human communities and civilizations since the dawn of history. The classical literature of nearly all civilizations record the ability of major infections to decimate populations, thwart military campaigns and unsettle nations. Social upheavals caused by epidemics have contributed in shaping history over the ages.

In recent times travelling has become easier. More and more people are travelling all over the world which exposes the whole world to epidemics. As our society is in a state of flux, novel pathogens emerge to pose challenges not only at the point of primary contact but also in far remote locations.

COVID-19 pandemic causing widespread deaths throughout the World reflected the lack of adequate preparedness for the Biological Disaster.

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 late 19th century and early 20th century enabled nations to develop biological weapons. The Biological and Toxin Weapons Convention, however, resolved to eliminate these weapons of mass destruction. Despite considerable enthusiasm, the convention has been a non-starter.

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 mobilization of investigational and therapeutic counter measures.

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

In the case of deliberately generated outbreaks (bio-terrorism) the spectrum of possible pathogens is narrow, while natural outbreaks can have a wide range of organisms. The mechanism required however, to face both can be similar if the service providers are adequately sensitized.

The Data base of medical care infrastructure with capability of casualty evacuation and treatment, have an important role to play in managing the Biological Disaster cases is available in Divisional DM Plan.

20.4 Support of other:

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

20.5 Handling CBRN Disaster - Training:

(CBRN- Chemical, Biology, Radiology & Nuclear)

In view of COVID-19 pandemic, a group of Doctors and paramedics like Anesthetist, Chest Physician, General Physician, Nursing staff should be trained in providing Ventilator services to serious patients. Training can be arranged in Tie-up Private Hospitals & Medical Colleges. Doctors & paramedics working in ICU should be provided training for dealing serious cases. Doctors & paramedics should be periodically sensitized to face such emergent situations.

With the help of trained Doctors Medical Department should be able to handle and provide adequate medical relief for all cases of CBRN disaster (Biological Disaster include a BW and BT affected Railway staff) in consultation with Local Civil Administration and Health Administration.

A skeleton number of Medical Doctors in each Divisional Hospital need to be trained to manage CBRN casualties.

20.6 MEDICAL DEPARTMENT

Responsive Protocol: Command, Planning and control

Medical Department with specific authorization from competent authority (GM) should play command and control to requisition resources inspect any premises, seek help from State and Central and enforce quarantine to victims, etc.

- i. The primary role is to identify the outbreak of bioterrorism instituting policy mechanism process. The medical department at once has to coordinate with MoH&FW immediately.
- ii. Immediately initiate action for making arrangements for keeping the affected persons in isolation.
- iii. Initiate mobilization of investigational and therapeutic counter measures.
- iv. Affected people must be identified for further treatment.
- v. Coordination between state public health, medical care intelligence agencies with the help of RPF personnel to prevent bioterrorism should be ensured.
- vi. Rapid health assessment, arrangement of early laboratory test and making immunization of fast responder with stock piling of vaccines to be undertaken.

Resource Activation & Mobilization:

- i. Arrangement of communication of networking system for coordination with state ambulance /transport services, state police department other emergency services as measure for patient caring, equipping with as first medical responder with all materials and logistics.
- ii. Up-gradation of earmarked railway hospitals for patient management affected with medical disaster.
- iii. Laying down minimum standards for water, food, shelter, sanitation and hygiene of the railway premises.
- iv. Coordination with NDRF and State Health Services.

- v. Developing the system for community awareness programs for at least for first aid to victims.

Standard Operating Protocols (SOPs):

As per the constitution, 'health' is a state subject. Biological Disasters rest with State Govt.

Disaster Management Act envisages NDRF having specialized response capacity to alleviate the threat of the biological disaster accordingly the authority in regional response centre to be contacted. The State Disaster Response Force (SDRF), Police, Civil Defense, and Home Guard may also be coordinated for meeting such biological disasters.

- i. MOHFW is the sole authority for handling the epidemics needs to be contacted.
- ii. The Central Govt., Health Services, Centre Govt., Hospitals, Media Professional help must be obtained for specialized medical assistance.
- iii. In case of emergency the assistance of Ministry of Defense, Ministry of Agriculture, DRDO / Urban Development should be obtained.
- iv. Core capacity needs to be developed for surveillance and quarantine facilities with robust coordination among District and Local Bodies should be there to act in mitigation process.
- v. Establishment of control room should nominated at different locations ad per need base with nodal centre to get all relevant information and transmit to the concerned department.
- vi. The control Room should have the telephone numbers of Dist. Collectors/Dist., Magistrates, Dist Health Officers, Local Hospitals, Specialists from various medical disciplines and list of all stake holders from private sector.
- vii. Biological Disaster related educational programmes shall be given in various vernacular languages along with DM plan to be rehearsed in every six months.
- viii. Usage of PPEs (masks, etc) and usage of sanitizers preferably no hand operation mechanism at work places.

MEDICAL DISASTERS

In view of recent outbreak of COVID-19 pandemic, the GOI has declared it as Medical Disaster. The following Responsive Protocols, Resource Activation , Mobilization and Standard Operating Protocols of different departments in ECoR has been incorporated under Medical Disasters.

20.7. MEDICAL DEPARTMENT

In view of COVID-19 pandemic, the GOI has declared it as Medical Disaster. On the experience gained the following additions are suggested.

In view of COVID-19 pandemic, Ministry of Health & Family Welfare/Govt. of India has issued various guidelines to contain the spread of disease as follows:-

- i. Total stoppage of international & domestic travels
- ii. Early identification of cases from clinical symptoms & by testing.
- iii. Identifying the suspects by contact tracing, travel history and by conducting more number of tests of the suspects
- iv. Total lock-down & shut-down of the whole area
- v. Social distancing
- vi. Confining to homes mostly
- vii. Managing office, if required to open, with minimum staff with screening of staff at entry by Thermal scanner.
- viii. Use of mask
- ix. Frequent hand washing
- x. Use of sanitizer
- xi. Quarantine & Isolation of suspects

- xii. Establishing dedicated COVID Hospitals with adequate infrastructure and trained personnel for treatment of COVID patients.
- xiii. Intensive sanitation and disinfection of all surfaces generally exposed to public contact like offices, coaches, colony area, etc by spraying and moping with 1% Hypochlorite solution.

In view of COVID-19 pandemic, besides coaches, places may be identified for Quarantine and Isolation of suspects/contacts of infected persons. Infrastructure in Railway Hospitals & Health Units may be improved like availability of Ventilators, Bi-PAP machines, Oxygen cylinders, Central Oxygen Gas Pipeline system, Oxygen Concentrator, Defibrillator, Multipara monitor etc. ICU beds with all required infrastructures should be available in all Railway Hospitals.

20.7.1 In view of COVID-19 pandemic, a group of Doctors and paramedics like Anaesthetist, Chest Physician, General Physician, Nursing staff should be trained in providing Ventilator services to serious patients. Training can be arranged in Tie-up Private Hospitals & Medical Colleges. Doctors & paramedics working in ICU should be provided training for dealing serious cases. Doctors & paramedics should be periodically sensitized to face such emergent situations.

20.7.2 Environmental management:

Safe water supply, proper maintenance of water pipe lines. This will prevent water borne diseases.

- i. Vector control: Environmental Engineering
- ii. Water management: not permitting water stagnation.
- iii. Anti larval measures for water bodies
- iv. Regular spraying of insecticides.
- v. Control of rodent population (Pest control)

20.8 OPEARTING DEPARTMENT:

"Post Disaster Action to be taken":

- i. In the event of outbreak of epidemic/pandemic, time to time guidelines issued from centre/state/ local administration should be followed strictly.
- ii. Necessary guidelines/instructions need to be issued depending upon the nature of the epidemic.
- iii. Railway officials working in the field should be supplied with necessary protective equipment to protect themselves from the epidemic/pandemic.
- iv. Ensure regular cleanliness of stations/railway colonies/coaches/running rooms should be done to prevent spreading of the epidemic.
- v. Equipment/Machineries handled by multiple staff should be sanitized regularly to prevent spreading of virus/bacteria/disease. Advise Crew lobbies to avoid breath analyzer tests and biometric attendances on instructions by competent authorities.
- vi. Face Mask/Gloves may be made personal equipment of running staff, ticket checking staff and staff dealing with general public.
- vii. To prevent the spreading of contagious diseases gathering should be avoided. As far as possible physical & social distance to be maintained to prevent the spreading.
- viii. However, for smooth day to day working of railways, focus to be made on online working wherever feasible.
- ix. Railways should develop system to facilitate online working in the event of COVID-19 like situations.
- x. Identified Staff & Officers shall be trained and encouraged to work online to meet any eventualities in case situation restricts to stay at home.
- xi. Necessary facilities for online working may be provided to the Staff/ Officers in this regard.

20.9 MECHANICAL DEPARTMENT

Role: *Supportive role*

a. Resource activation & mobilization:

- i. Follow the instructions issued by Mo H& FW, State Govt., and Local authorities from time to time.
- ii. Support to the medical department in supplying PPEs to the staff & victims in case epidemic diseases to protect themselves.
- iii. Support to medical department for manufacturing of isolation beds, coach care centers, for quarantine/isolation of diseased persons, equipments like IV stands, oxygen cylinder stands, etc., if required.

b. Standard Operating Protocols (SOPs):

- i. SOPs should be issued to the work places where multiple staff are involved in maintenance and operation of carriages & wagons like coaching depots, platform TXRs, freight yards, and sick lines. This contains-
- ii. Restriction of working of staff at higher risk (age more than 55 years) and employees who have advised by medical authorities to take extra precautions.
- iii. Restriction of parent employees having children less than 5 years
- iv. Usage of PPEs (masks, etc) and usage of sanitizers preferably no hand operation mechanism at work places.
- v. Restriction of employees who are advised to home quarantine /hot and contaminated zones, if notified by the Govt. authorities.
- vi. Intimation to higher authorities about affected family persons by any diseases due to epidemic
- vii. Closure of non essential services like training schools, etc
- viii. Working of important /essential activities at coaching depots , sick lines, platforms, examination of rakes at pit lines, washing and cleaning of rakes, Under gear and upper gear, maintenance of bio-toilets, air brake testing, upkeepment of materials, etc.
- ix. Restricted working hours may be introduced with only 02 shifts at coaching depots, yards and 3 shifts at stations/platforms with reduced rosters.

- x. Booking of some maintenance staff to upkeep the stabled rakes/trains for watering, cleaning, disinfection, etc.
- xi. Procedure of working of supervisors and staff to be issued on wearing of masks/shields, to maintain physical and social distancing to control communal spread of epidemic diseases.
- xii. Availability of staff who advised to work from home to be available on mobile/telephone in case of emergent requirement
- xiii. Sanitization and house keeping with hygiene at work places, depots/yards.
- xiv. Mandatory thermal screening at entrance of the work place.
- xv. Provision of hand soaps/sanitizers at entry and common working area by EnHM wing.
- xvi. Avoid large gatherings or meeting having more than 10 staff in work places and always ensure physical and social distancing.
- xvii. Strict ban on ghutkaa, pan, tobacco and spitting at work places to control the spread of epidemic diseases.
- xviii. Ban on non-essential visitors to work places.
- c. **SOPs on disinfection to rakes at originating, en-route and destination:**
This includes-
 - i. Disinfection of rakes/trains at originating stations, en-route and at destination stations.
 - ii. Ensure usage of PPEs(masks, etc) by the train escorting staff viz., AC attendants, OBHS staff, etc.
 - iii. Detailed guide lines to the train escorting staff viz., AC attendants, OBHS staff, bed roll staff, etc. during epidemic/pandemic diseases period.

20.10 SEURITY DEPARTMENT

- i. In reference to the above, the following action plans are suggested to tackle the Biological hazards;.
- ii. The personnel protection equipments (PPE) should be procured and supplied to the disaster management team to tackle such disasters.

- iii. Quarterly mock drill should be arranged at Zonal & Divisional level for those disaster Management team.
- iv. The RPF disaster management team should assist Railway authority and State authority for evacuation process during such Biological disaster.
- v. Frequent announcements should be made through PA system in the affected areas to alleviate the panic situation.
- vi. Thermal screening.
- vii. Social distancing.
- viii. Wearing of masks.
- ix. Use of hand sanitizers.

20.11 FINANCE DEPARTMENT

A. Responsive Role: Supportive

B. Resource Activation & Mobilization:

- i. Sanitization of office premises.
- ii. Finance / Books Section for prompt disposal of proposal / payment.

C. Standard Operating Protocols (SOPs):

- a. Advising Staff to maintain social distancing and using of masks.
- b. Advising Staff to sanitize their hands with sanitizers / washing hands with soap.
- c. Encouraging Staff to promote paperless working by increasingly relying upon e-mail/e-office and other electronic means for communication in addition to the existing office software already in working.
- d. Advising Staff to report to the State Medical Authorities regarding visit to outside Country / State / District guests of family members during the lock down period.

Any proposal for facilitating prevention of COVID-19 having financial implication will be attended promptly by Finance Department. Any payments for facilitating disaster relief work

will be handled in coordination with executive department and banks.

20.12 ENGINEERING DEPARTMENT

- i. At all the point of time the drinking water supply should be in compliance of the laid down standard confirming to various codal provisions mentioned in the Indian Railway Works Manual and the quality of drinking water should comply to the physical and chemical standards as per IS 10500/ 1991 with upto date correction slips.
- ii. All the water supply installation systems particularly open wells to be disinfected from time to time and proper water treatment to be carried out so that the water is free from pathogenic bacteria,
- iii. Supply of drinking water should be free from any contamination and the treated water should be free from mico-organisms causing diseases before it enters into the distribution system.
- iv. The drinking water should be disinfected with sufficient chlorinators and the residual chlorine available at the farthest end shall be 0.2 mg per liter. However, during monsoon months or incase of specific complaint are there, super chlorine more than 2 ppm of chlorine may be resorted to effectively to get rid of bacteria.
- v. For ensuring disinfection of drinking water, proper mechanism must be in place right from Divisional Engineers to Sectional Engineers to ensure safe, portable, disinfected water free from micro organisms causing diseases.
- vi. The other areas to ensure the effective public health system are availability of well functional sanitation system in the Railway which are to be checked for their efficacy by the Railway Sanitation Committee. This Railway Sanitation Committee will carry out inspections of conservancy system of sanitary condition of stations, colonies and other service building premises as well as outdoor conservancy also and guide the concerned department for taking timely measures. Other sanitation protection measures must be carried out in compliance of various provisions of Indian Railway Works Manual and other instructions issued from time to time by the higher authorities.

20.13 PERSONNEL DEPARTMENT

- i. The hospitals capable of handling such patients of Biological & Chemical Disaster Management should be identified/developed.
- ii. Arrangement of ambulances/Transport services for ferrying of affected persons from colonies to hospitals, hospitals to specialized hospitals should be made.
- iii. Arrangements to be made for telemedicine/video medicine services during the Biological Disaster should be made.
- iv. Arrangements for isolation/quarantine facilities with the arrangement of fooding and medical care to be identified/organised.
- v. Development of mechanism to augment to such capacities in response to mass casualty following biological or chemical disaster.
- vi. Identification and stockpiling of medicines, fooding and consumables for detection and medical management of affected cases.
- vii. Mechanism for educating employees and their families on do & don'ts to avoid effect of biological disaster.
- viii. Post disaster availability of support of physiatrist/ psychologist/ counselor to be arranged.

CHAPTER-21

CRISIS MANAGEMENT

To deal with the crisis situations, the following committees shall be activated:

National Crisis Management Committee (NCMC)

Crisis Management Group (CMG), and

Zonal Management Group (ZMG)

21.1 National Crisis Management Committee (NCMC):

21.2 The NCMC is the apex body comprising senior officials of the Government of India to deliberate on the problems at national level. The following officers will represent the Ministry of Railways (Railway Board) in NCMC for the various crisis situations:

- | | | |
|---|---|---|
| (i) All India Railway Strike | : | Member Staff
Member Mechanical
(Alternate) |
| (ii) Terrorism/Security related Crisis | : | Member Staff
Member Traffic
(Alternate) |
| (iii) Natural Factor(s) related Crisis | : | Member Engineering
Member Traffic
(Alternate) |
| (iv) Major Train Accidents | : | Member Traffic
Member Mechanical
(Alternate) |
| (v) Crisis where railways have to help:
other ministries | : | Member Traffic
Member Staff
(Alternate) |


Names, telephone numbers and addresses of the Members / alternate Members, who will represent the Ministry of Railways in NCMC are contained in Annexure:-

21.3 Crisis 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 and the concerned Zonal Management Group. In

addition to that concerned officers of the Railway Ministry as nodal from the concerned Ministries should be contacted (Annexure-12) and if any help is needed from the other ministries for effectively dealing with the various crisis situation; for example, Ministry of Defense should be contacted for air support and/or expert help like divers, boats etc. However, Control Room of MHA should be kept informed of the developing situation for assistance as warranted. In case of difficulty in getting to the nodal officer of the concerned ministry, Control Room of MHA can be contacted.

21.4 The overall composition of the Crisis Management Group including the names, telephone numbers and address of its members for dealing with various crisis situations are given detailed below:

Convener/ Overall composition of  The 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 Advisory (Safety)
(v)	Crisis where railways have to help other ministries	: Additional Member Traffic/

21.5 The list/names of the Members of the CMG will be updated and circulated by the Safety Directorate of Railway Board every year.

21.6 Members of the CMG will first assemble in Emergency Control Room of Railway Board in Room No. 476 K (Telephone Nos. Railway 43399, 43599; P&T 23382638, which is located on the 4th floor of Railway Bhawan, at Raisina Road, New Delhi - 110 001. Depending upon the type, gravity and duration of the crisis, the convener of the CMG will decide to operate either from the control room of the respective directorate or from the Railway Board Committee Room on the 2nd floor of Rail Bhawan.

21.7 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: Member/Alternate
(Co-ordination) Convenor
- (iii) Pr.Chief Security Commissioner : Member
- (iv) Pr.Chief Personnel Officer : Member
- (v) Pr.Chief Operation Manager : Member
- (vi) Pr.Chief Mechanical Engineer : Member
- (vii) Pr.Chief Electrical Engineer : Member
- (viii) Pr.Chief Signal and Telecommunication: Member
Engineer
- (ix) Pr.Chief Safety Officer : Member
- (x) Chief Public Relations Officer : Member

21.8 The Zonal Management Group will assemble in the Disaster Management / Emergency Control Room of the Zonal Railway Headquarters and will keep in touch with CMG till the termination of the crisis. List of stand by officers of Zonal CMG is annexed as under:

SI No	CMG Member	Stand by
1	AGM (Convener)	PCE as Alternate Convener
2	PCE	CGE
3	PCOM	CPTM
4	PCME	CRSE/ Frt
5	PCEE	CESE
6	PCPO	CPO(Admin)
7	PCSO	Dy.CSO(Traffic)
8	PCSC	CSC
9	PCSTE	CCE
10	CPRO	Sr.PRO

CHAPTER-22

DISASTER IN TUNNELS/ DEEP CUTTINGS OR IN A WATER BODY

22.1 Expertise To handle Rail Disasters in Tunnels etc. :

The Railways have no expertise or infrastructure to handle a train disaster if it occurs in a tunnel or in a deep cutting not approachable by land. No machinery, or earth moving equipment is available on the Indian Railways which could be mobilized for this job.

22.2 Ventilation arrangements in Tunnels:

Adequacy of ventilation arrangement and its efficient operation is always a matter of concern especially in very long tunnels. There are ventilation systems shall be installed along with alarms to warn the control rooms in case of a mishap.

In case a train stalls in long tunnel due to derailment/fire or any unusual condition automatically alarm will be sounded in the control room to alert the Ventilation Operator controller or if Guard / Loco Pilot of a train or any other person gives such call on 'Emergency' Telephone the ventilation operator should act accordingly for ventilation in tunnel as per the procedure given.

22.3 Handling Rail Disasters in a Lake, River, Sea etc. :

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

22.4 Assistance of NDRF and State Governments :

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

CHAPTER-23

CROWD MANAGEMENT

23.1. Guidelines by NDMA.

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

23.2. Salient features of NDMA guidelines.

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

- i. Systematic and complete planning process.
- ii. Clear cut chain of command.
- iii. System of accountability for the incident response team members.
- iv. Well thought out pre-designed roles for each member of the response team.
- v. Effective resource management.
- vi. System for effectively integrating agencies into the planning and command structure without infringing on the independence of the concerned agencies;
- vii. Integration of community resources in the response effect and
- viii. Proper and coordinated communications set up.

23.3 Crowd control and management :

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

Intelligent Video Analytics:

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

Particulars of CCTV, Luggage scanner, Segway on PF, are available in annexure.

We should prescribe preventive protocols, when laid down footfalls defined separately for important stations become extraordinarily high, as during Melas or other exceptional situations. It may not be out of place to ban all commercial vending and parcel handling on such occasions.

It is important to press upon the District Magistrate (Dy. Commissioner) or the Civil Police (Senior Superintendent of Police) to give an approximate indication that the number of persons likely to reach Railway stations in the days when rush is expected. Even more important is the maximum number of persons reaching each Railway station within one to two hour time slots. Unless this

information is given, it would not be possible for Railways to plan for special trains. The Originating & Destination flows of the passengers are very important to plan destination wise running of special trains. It may be kept in mind that often the Inward and outward passenger traffic is not equal and there are wide variations. Further the inward rush comes in a staggered and spaced interval but the outward rush goes back at one go. It would be essential for the Zonal Railway or Division to impress upon the State Government (or the District Magistrate) in writing of their peak capacity to clear rush, as also they can do only direction wise. The District Administration has to regulate and control the entry of more than this number beyond which (in 1-2 hourly slots) the Railway would be unable to evacuate.

23.4 Role of responsibility of Zonal Railways/Divisions :

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

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

23.5 Crowd control and Management of rush at Railway Stations:

Specific defined areas of jurisdiction for crowd control and duties assigned to GRP/RPF and the city Police needs to be placed on record much before the expected days of rush.

Close coordination has to be maintained between the 3 wings of security personnel:

- i. Railway Protection Force,
- ii. Civil Police and
- iii. GRP with well defined areas of responsibilities.

The car and other vehicle parking facility at a station may be discontinued and also Platform Tickets can be banned for short period. RPF and GRP deployed on each platform will monitor for crowds and rush build up in the circulating areas, booking windows, station platforms and also monitored in FOBs. Special teams of commercial staff will liaise with the RPF/GRP and relay 2/4 hourly position to a centralized location viz. commercial control ,which will advise to the need for running of special trains to specified destination and is under knowledge of operating control room.



CHAPTER-24

TRAINING PREPAREDNESS FOR DISASTER MANAGEMENT

Intensified Inspections and precise training keep the working force in alert condition, which will prevent any eventuality of Disaster in the system. However trained manpower is an essential ingredient of any DM system, mere provision of sophisticated equipment without trained manpower is futile. For handling an unforeseen situation like managing a Disaster, training of all Railway personnel concerned is an inevitable input. To acquire necessary knowledge and skill, all relevant officials should be given periodic training regarding their duties and that of their department.

24.1 INSPECTIONS:

Regular Night Footplate Inspection, Ambush checks, Trolley inspections, Tower wagon inspections, Inspection of Bridges, ARTs and night patrolling of tracks in the accident prone, vulnerable sections should be intensified to ensure alertness of the concerned staff to eliminate the chances of Disaster. Constant evaluation of the reports should be done converting it to Safety concern at Division level with information to HQ about action taken report for the purpose.

24.2 TRAINING :

Training should be conducted at the following three levels

i. Individual Training

- a. For enhancing the skill of staff attached to ARMEs & ARTs, etc., supervisors and staff shall be given general training in Disaster Management.
- b. Special training may be arranged in Extrication, Rescue, Medical relief Rolling stock restoration technique and Civil Defense by departments concerned.
- c. Officers and supervisors should be trained to acquire special skill in collection of evidence and preservation of clues. Sr.DSOs are made responsible for collection of evidence, preservation of clues, joint reading and joint findings etc.
- d. The onboard staffs should be provided DM training with fire fighting training for better management of fire on train incident.

- ii. Seminars/Workshops: Seminars should be conducted periodically on DM Plan and Disaster preparedness.

- iii. Joint Exercises: Full scale Disaster Management Mock Drill to be conducted.

24.3 Civil Engineering department:

24.3.1 Identification and retro fitment to major structures of Risk Zones:

3.28 million Kilometers land falls in moderate to high seismic risk Zones. Seismic retro fitment is the modification of existing structures to make them more resistant to seismic activity, ground motion, or soil failure due to earthquake. Seismic performance of structures can be greatly enhanced through proper initial design and subsequent modifications.

A detailed inventory of major infrastructures such as Bridges, high-rise buildings & Telecom towers etc., which may be affected in disaster, shall be prepared for retro fitment. If not possible alternative arrangements shall be made and kept in readiness to establish communication facilities easily and quickly after the disaster.

24.3.2 Installation of Anemometers :

These are the devices used for measuring wind speed at specified height from the ground level. The anemometers should be installed by the Engineering Dept. at strategic stations along the East-Coast route.

24.3.3 Monitoring Quality of constructions:

Engineering department shall monitor the quality of new constructions and repairing works as per the technical guidelines of quality control for all vulnerable areas to natural disasters.

24.4 Mechanical Department:

Mechanical department shall keep ARTs , SPARME, ARMEs always ready for ordering out at any time. Mechanical Department shall also assist in all aspects to Engineering Department for arrangement of drinking water through road water tanks.

24.5 Safety Department:

Disaster Management essentially necessitates a state of preparedness under all circumstances and the efficacy of arrangements therein can be assessed only by conducting periodical full-scale mock drills. Safety Department should ensure regular practice through mock drills and review the calibration of equipments.

24.5.1 Accident Mock Drills for SPARME/ARME/ART:-

Instructions on MockDrill and Full Scale Disaster Management Exercises as per Annexure to RB letter No. 20 10/ Safety (DM)/6/23 dated 09.03.2017 and RB's Lrr. No. 2010/Safety (DM)/6/23 dt.30.01.2020 to be followed:

Mock drills have to be conducted once in every quarter for every location of ARTs/ARMVs/SPARMEs either during day or night. In a division where class A ARTs/Class B AARTs/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 six months evenly spaced out over the period. ART/ARMV turned out on account of accident will qualify as mock drill. Blocks of quarters should be considered from April to June, July to September, October to December, January to March.

- i) Every drill should be made as realistic as possible.
- ii) Arrangement regarding drill should be kept confidential.
- iii) The turnout of relief train should be completed with all equipments and staff of all branches concerned including the medical equipment and staff where provided and be made to proceed to a nearby suitable station and return.
- iv) Railway ambulance should also be turned out.
- v) To have an element of surprise, mock drills shall be ordered by the DRM and drills shall be conducted under the direct supervision of Sr.DSO /DSO. Secrecy and confidentiality shall be maintained to extent possible.
- vi) During this mock drill the following aspects shall be closely watched.
 - a. Turning out of relief trains within prescribed time.
 - b. Speed of relief trains and reaching time to the site.
 - c. Attendance of staff and assembly of all officials of concerned department.
 - d. Whether correct information given to control particularly in respect of nature of assistance required.
 - e. Action taken to stop any approaching train if any.
 - f. Medical assistance available mustered in full strength and calling out of local ambulances.
 - g. Time at which first ambulance reached the spot.
 - h. Response of the local administration like police, fire brigade etc.,
 - i. time taken to set up field telephone.

- j. time taken to set up rescue equipment.
- k. Staff conversant in usage in usage of equipment.
- i. Working of select equipment including generators shall be test checked.
- m. Logging of events.
- n. Mock drill shall be called off by Sr. DSO/DSO after consulting DRM.

VII) the results of mock drill should be maintained in a special register and the report of the drill along with deficiencies and short comings if any should be communicated to the General Manager through PCSO and concerned PHODs at zonal HQ.

24.5.2 Procedure for full scale Disaster Management Exercises

Full scale disaster management exercise is a planned activity to check complete preparedness, response and functioning of all stake holders in case of disaster. Station at which these exercises are planned should be selected in due consultation with DRM and Operating officers to ensure least disturbance to train operations. In these exercises in addition to the activities to be carried out in mock drill indicated in para 5.0 the following shall be carried out.

- Accident like situation has to be created like one coach over another so that rescue operations can be similar to an accident site.
- All the stake holders have to be involved in the rescue and relief operations.
- All the activities prescribed in the Accident Manual/Disaster Management Plan regarding setting up of UCC, LCC, CAC etc., have to be carried out.
- Railway staff can double up as injured passengers with various typed of injuries and handling of such passengers by rescue staff needs to be observed /recorded.
- Time taken to set up rescue equipment and time taken to rescue first person should be recorded.
- All the equipment is ARMV/ ART have to be physically tested for their performance and endurance.
- All the activities need to be video graphed for post analysis and also for training purpose.

24.5.03 : Reporting and follow up action.

Detailed report of the mock drill and full scale disaster management exercise shall be prepared by Sr.DSO /DSO duly indicating attendance of nominated staff from each branch, non-attender to be reported by same, deficiencies in the equipment , gap in the disaster management plan and SOPs etc,. The report should also include

any improvement or otherwise in the deficiencies observed in the previous drills. Sr.DSO/DSO shall monitor the action taken on the deficiencies by the respective departments.

a) Each Division should conduct one full scale disaster management exercise on the similar line as army exercises once in a year.”



CHAPTER - 25

DISASTER COMMUNICATION MANAGEMENT

25.1 Introduction

Immediately after declaration of Disaster:

- a) Headquarter Central Control and JE/SSE (Sig)/HQ control will inform the PCSTE, CSE and CCE.
- b) JE/SSE (Sig)/HQ control (on duty) will also inform all concerned open line S&T Headquarters officers.
- c) SSTE/(Tele Maintenance) shall call for JE/SSE/Tele under his control and start operation of HQ control office at South Block, ECoR Sadan, Ground floor.
- d) GM/Jt.GM/DyGM Railtel Corporation may be informed.

*** Signal & Telecom Control is located at HQ Office, South Block, Rail Sadan, at Bhubaneswar.

25.2 Mobilization Plan of Officers and Staff

- a) PCSTE will immediately proceed to the site of the accident in HOD special. In case PCSTE is not available, CSE/CCE will go to the site of accident. In case CSE/CCE is not available Dy.CSTE/HQ will go to the site of accident. CSE/CCE will remain in HQ when PCSTE proceed to the site of accident.
- b) One JE(Tele), two TCM/WTM's and two Khalasis working under SSTE/TM shall accompany PCSTE with One Satellite phone of HQ and one FAX machine and 4 Walkie-Talkie sets along with chargers in GM's special.
- c) CCE will be in charge of communication at all the locations and monitor the situation from HQ control.
- d) SSTE(TM)/ASTE(TM) shall be in charge of communication arrangement at central control office. One Satellite phone will be made operational at Central Control Office.
- e) For meeting contingencies of cash imprest and movement by road necessary drawl from stations earning can be made by the

officer reaching at site for site, and by Dy. CSTE/HQ for HQ requirement.

- f) Sr. DSTE/DSTE of the affected division will carry the satellite phone, FAX cum printer, two 25W VHF sets along with antenna and battery and 10 numbers 5W walkie-talkie sets to the accident site. He will be accompanied with at least one JE/SSE(Tele) and two TCMs. Four more JE/SSE (Tele)/TCMs and one JE/SSE(Sig) of the section will also go to the site of accident at the earliest.
- g) DSTE of divisions will immediately come to the divisional control office and will ensure setting up of all communication facilities at accident/disaster site.

25.3 CENTRAL CONTROL COMMUNICATION ARRANGEMENTS:

The communication arrangements in central control office, Rail Sadan will be arranged by SSE/ Tele/Exch under supervision of SSTE (TM)/ ASTE(TM)

Central Control office at Ground Floor. South Block, Rail Sadan, Chandrasekharpur, Bhubaneswar

a. Emergency Control

Telephone No.2303564 having ISD/STD facility is already available in the Chief Coaching Controller.

Dynamic locking code of the telephone is available with CHC/Coaching control.

(The dynamic locking code should be kept in a sealed cover in the control office which can be opened during emergency after duly entering in the register in case of non availability of CHC.)

Following telephones are provided in Divisions,HQ,RB and other important services for disaster management purpose.

b. Telephone Numbers of Disaster Management Rooms(Divisional and Zonal Emergency Cell)

	ZonalHQ, ECoR	Waltair Division	Khurda Division	Sambalpur Division
Railway	50525,50625, 50725	83096,82088 82089,82390,	72818, 72819,	62401, 62600

		83082,82265	72820	
BSNL	0674-2301525 0674-2301625	0891- 2746255, 0891- 2746266	0674- 2492374	0663- 2401913 0663- 2532187 0663- 2520926 (ISD)
Intercom	268,378	866,970	778	669
Satellite phone	91- 8991112802 91- 8991112803	-	-	-

c. Commercial control:

	ZonalHQ, ECoR	Waltair Division	Khurda Division	Sambalpur Division
Railway	51333	82415,83014 82734(RlyFAX)	72334	62332, 62334
BSNL	0674- 2303110	138	138 2492411, 2492511	138 FAX: 240093
Intercom	326	Nil		629
CUG	-	898080999		8455886999

d. Railway Board :

	Disaster Management Cell	Safety Cell Room No.341-C	Emergency Control/ Punctuality Room No.476D
Railway	41550,41551,41555	43399,47423	43859,43600, 43528,44500
BSNL	011-23041555 011-23074419	011-23382638(FAX)	011-23388230 011-23388503(FAX)
IP Phone	8551-41550 8552-41555		

e. Other Important Number:

National Emergency Number	112
Police	100
Fire	101
Ambulance (Delivery and below 1	102

year child)	
Ambulance (Accident)	108
Women Help Line	1091
Women Helpline (Domestic Abuse)	181
Air Ambulance	
Disaster Management(N.D.M.A)	1078
Earthquake/Flood/Disaster (NDRFHQ)	011-24363260 9711077372
Rail Madad	139
Road Accident Emergency Service On National Highway For Private Operators	1033
Kissan Call Centre	1551
Relief Commissioner For Natural Calamities	1070
All India Institute Of Medical Sciences(AIIMS), Poison Control(24*7)	011-26593677 26589391
Tourist Help Line	1366 1800111363
LPG Leak Helpline	1906
Kiran Mental Health Helpline	18005990019

25.3.1 Satellite Phones provided over East Coast Railway

Sr.No.	INMARSAT No.	Location of use
1	08991112802	HQ/Railsadan
2	08991112803	HQ/Railsadan
3	08991112804	KUR ART
4	08991112805	BHC ART
5	08991112806	WAT ART
6	08991112807	KORAPUT ART
7	08991112808	KBJ ART
8	08991112809	SBP ART

25.3.2 Help Line Booths at Important stations :

Unified help line number -139.

Other temporary numbers opened at stations to be announced in Media.

Sr.DSO and On duty Station Master is authorized to hire 10 cell phones on spot in compliance to recommendation No.(44) of High Level Committee on Disaster Management and DOP Srl.No. 13(b). Total cell phones hired by all officials shall not exceed 10 in total per accident.

As per Rly. Bd's letter 2004/Tele/TN/2 dt.29.06.2006;, 4 nos of mobile cell phone to be kept by Sr.DSTE at location, preferably of different service providers, which are provided in ART.

25.4 COMMUNICATION ARRANGEMENTS AT ACCIDENT SITE

25.4.1 Site Control Office

1. The Engineering Department shall set up a control office in a waterproof tent. A prominently visible "**UNIFIED COMMAND CENTRE**" banner shall be displayed on the tent and shall provide sufficient number of tables and chairs for keeping the communication equipment.
2. Arrangement for 220V, 5KVA stabilized power supply shall be made by Electrical department for the communications equipment. In the railway control office, satellite phone with the FAX machine shall be installed for providing communication between the accident site, divisional control office and the emergency control office at Chandrasakherpur.
3. One 25 W VHF sets shall also be provided in the Railway site Control Office and one 25 W VHF set shall be installed in a road vehicle so that a mobile communication can be set up to a range of about 15-20 Km. This will help in providing communication between hospital and the Railway Control Office at accident site.
4. V-SAT equipment to be installed at site, after arrival of Divisional ART.
5. Three site offices shall be set up as follows :
 - a) Site Control Office-1 Medical/Commercial/RPF to be manned by Commercial staff.
 - b) Site Control Office-2 Control office to be manned by Telecom staff.
 - c) Site Control Office-3 CPRO-cum-Public Phone Office Manned by CPRO staff.

Note :

- i. **All 3 control office at site shall be opened only for passenger train accident otherwise only (3) shall be opened.**
- ii. **All above shall be provided with communication facility after arrival of ART at site.**
- iii. Site Control Office will be provided with FAX, Control phone, one BSNL phones and Two Railway phone (subject to technical feasibility). Where BSNL phone are not available, satellite phone will be provided.
- iv. One FAX Machine and at least two telephones (one BSNL & one Railway) should be kept free at site, receive only INCOMING calls.
- v. Provision of communication to be made by S&T staff at site, the telephones will be operated and manned by respective user departments.

25.4.2 BSNL/Railway Telephones

- a) Subject to availability and feasibility BSNL/Railway Telephones available at adjoining Stations/ Cabins/Gates shall be extended to the accident site. PCO telephones and other BSNL phone in the nearby localities/villages /Towns shall also be extended to the accident site by persuading the owners of these phones. Payments for such telephone connections will be made from the Station Earnings.
- b) In RE area emergency sockets will be utilized for extending the communication to the accident site and in non-RE area where 6 Quad cable is available the same will be utilized for providing the communication.

25.4.3 Satellite Phones

- a) Satellite Phone and FAX machine shall be kept in the Divisional Control Test Room under the charge of a telecommunication supervisor who shall be responsible for keeping this equipment in good fettle. Whenever any serious accident takes place, the nominated supervisor will rush this equipment to accident site and make these functional at the earliest.

- b) Adjoining divisions shall also rush their satellite phones through fastest means to accident site through their nominated supervisors. Minimum two telecom staff will carry the satellite phone and FAX machine to the accident site. Total 2 Satellite phones shall be available at accident site.
- c) Nominated telecom supervisor trained in setting up, handling and troubleshooting the satellite phones at accident site should be able to use the satellite phone for setting up internet connection through 'Laptop' carried by the DRM. All S&T officers & Telecom Supervisors attending accident site shall be able to operate satellite phones independently.
- d) HQ telecom control has to be informed regarding inter divisional movements and telephone numbers installed at site.

25.4.4 Dialing Procedure for Satellite Phone:

Dialling International Access Code (00) followed by Country Code (91) then area code (i.e. City Code e.g. 674 for Bhubaneswar) and finally the subscriber number of the wanted subscriber.

Responsibility: Primary: SSE/(Tele), Stand by: JE(Tele), DSTE/ASTE to ensure that staff specially trained and nominated to operate Satellite phones are deputed.

- 25.5** Movement Plan of Satellite Phone: In case of an accident on any division, two satellite phones kept with SSTE/TM shall be moved to accident site. One additional Satellite Phones of adjacent divisions should also be as per plan given below.

Sl No.	Division/Section of Accident	Division/HQ from where additional satellite phone to be moved
1	KUR : KUR-BHC, CTC-HND, KUR-PUI, KUR-BALU	KUR-I and KUR-II
2	KUR : HND-ANGL	KUR and SBP
3	SBP : ANGL-SBP	SBP and KUR

4	SBP : JSG-SBP	SBP and TIG
5	SBP : SBP-SPRD, TIG-KBJ	SBP and TIG
6	SBP : KBJ-R	SBP and TIG
7	WAT : VZM-SPRD	WAT and KRPU
8	WAT : PSA-VZM	WAT and KUR
9	WAT : VZM-WAT-DVD	WAT and KUR
10	WAT : K-K and K-R	KRPU and WAT

NOTE: Additional set shall be sent to SBP and WAT divisional HQ from BBS depending upon the requirement.

Two satellite phones of the division where accident has taken place shall also be moved to the accident site, with two telecom staff. Thus total No. of Satellite phones available at any accident site shall be 2 (Two).

25.6 Wireless Communication

25.6.1 Walkie - Talkie Sets

- a) Walkie –talkie sets provided in ART/ARME as per extent rule, need to be provided by S&T staff at site after arrival of ART/ARME.
- b) The charging facility for the walkie-talkie sets shall be provided in the ART/ARME so that these sets are kept in fully charged condition at all the times. It must also be ensured that sufficient spare batteries are made available at the site in fully charged condition for changing the working batteries.
- c) Electrical charging facility in tents at site to be provided by Electrical department.

25.6.2 25 Watt V.H.F. Sets

Two numbers of 25 watt VHF sets are kept in each ART in compliance to recommendation No. (96) of High Level Committee on Disaster Management. There are to be installed at site control office in tents after arrival of ART at site.

25.6.3 Public Address System and Mega Mikes

- a. Public address system must be made functional at accident site - both for communication with passengers/public and also to give directions to railway staff regarding relief operations. For this purpose, additional P.A. systems may become necessary depending upon the requirements at accident site.
- b. In addition, mega mikes available in accident relief train will also be utilized. P.A. systems & mega mikes shall be under charge of the nominated supervisor.

25.7 Staff to be deployed at the Site

A roster shall be prepared by Sr. DSTE for the staff to proceed to the site of accident for operating nominated equipment, and Standby staff shall also be notified. Arrangements of Road Vehicles to proceed to accident site, and also indicating alternative vehicles, shall be notified. Arrangements of vehicle drivers shall also be notified as per local conditions.

25.8 Duties of Railway Officers at the time of accident:

CCE shall be the in charge of all communication arrangements at all locations. Dy.CSTE/HQ/ SSTE/HQ shall be responsible for making necessary arrangements in Emergency Control Office at South Block, ECoR Sadan.

HQ Telecom control shall monitor installation of various telecom gadgets at site.

SSE/JE/Sig./HQ in shift duty shall inform PCSTE, CCE, CSE, Dy. CSTE(HQ), SSTE/Tele, SSTE/ Sig, ASTE/Tele, SSTE/TM and shall arrange the S&T vehicle on emergency duty in HQ control.

Office to the residence of the officers deputed for emergency control duty so that these officers can reach the emergency control room within 15 - 20 minutes on the first information.

Simultaneously CSTE/Con and Dy.CSTE/Con of the concerned division shall be alerted with advice to keep their stores open and

vehicles in readiness for movement of men and material to site if so ordered by PCSTE.

25.9 HIRING OF PRIVATE TV CHANNELS:

Hiring of private TV channels for transmission, video conference during accident & disaster may be followed as done for video linking in case of Railway functions. Alternately, webcast on Railway website can be arranged by concerned Departments.



CHAPTER-26**Assistance from NON - RAILWAY RESOURCES****Important Telephone Numbers of NDMA**

S.No.	Name & Designation	Office Phone No.	Mobile	Email ID
1.	Secretary,	011-26701710	---	secretary@ndma.gov.in
2.	Joint Secretary(Admn)	011-26701780	---	jsadm@ndma.gov.in b.pradhan@nic.in
3.	Joint Adviser	011-26701743	---	narshad@ndma.gov.in
4.	Control Room	011-26701728 011-1078 011-26701729(Fax)	controlroom@ndma.gov.in, ndmacontrolroom@gmail.com, 09868891801, 09868101885	

NDRF HEADQUARTERS**NDRF Battalions:**

DG/NDRF	IG/NDRF	DIG/NDRF
Mob. - +919818564455	Mob. +919540610101	Mob. +919968262466
Off: 011-24369278,	Off: 011-24363268	Off: 011-24363267
011-24369280,	Fax : 011-24363261	Fax : 011-24363261
Fax : 011-24363261	Email ID: ig.ndrf@nic.in	Email ID: dig.ndrf@nic.in
Email ID: dg.ndrf@nic.in		

NDRF Control Room Tel: 011-24363260, 011-24363266, Fax: 011-24363261, email: hq.ndrf@nic.in

Details of NDRF Battalions are as under within the reach of ECoR:

Sl. No.	div.	COMDT NDRF Bn	LOCATION	MOB NO.	TEL NO.	FAX NO./Email

S.No.	Div.	COMDT NDRF Bn	LOCATION	MOB. NO.	TEL NO.	FAX NO./Email
1.	KUR &	Commandant	Mundali, Cuttack,	09437964570	0671-2879711(Ori03-ndrf@nic.in

	SBP (Odisha+ Chhatisgar ha)	3rd Bn NDRF (Jacob Kispatta)	Odisha, Pin- 754013	09437964571	control) 09437581614(Contr ol) 0671-2879710 (O)	
2.	WAT (Andhrap radesh)	Commandant 10th Bn NDRF (Md. Zahid Khan)	ANU Campus , Nagarjuna Nagar Guntur (AP) Pin-522510	7382299621	0863-2293178 (O) 08632293050(FAX), 0863-2293050 (Control) 08333068559 (control)	Ap10ndrf@nic.in

CHAPTER-27**MULTI-DISASTER RESISTANT CONTROL ROOM****10.Provision of specific assets in Multi-Disaster Resistant Control Room.**

Department to provide	Nos.	Items required at Multi-Disaster Resistant Control Room.
Operating	1.	The entire conference-cum-DM room is under the PCOM's establishment including its maintenance, up keeping etc.
	2.	The Pantry shall be equipped with a 300 ltr. Freeze, Micro Oven, Induction Plate, Electric Kettle, Hot boxes, Crockeries & Cutlery as required to be arranged by Operation Department.
S&T	1	Wall mounted Colour T.V with cable connection preferably LCD plasma TV to have update news.
	2	DOT Telephone with STD facility bearing the allotted emergency number.
	3	A FAX machine with separate DOT and Railway telephone connection to communicate with messages to divisions and adjacent Railway.
	4	Two Railway Auto telephone bearing the allotted emergency numbers
	5	One satellite phone bearing the allotted number to have communication with the site.
	6	Mobile charging facility for all types of mobile phones.
	7	Hot line telephone should be provided.
Electrical	1	Power: The room should have uninterrupted power supply through local/DG/Solar system with auto main failure to take care the entire lighting load including air conditioning and other electrical gadgets.
	2	Refrigerator: There should be provision of a refrigerator to store some dry ration, eatables, water, some refreshment, snacks etc.
	3	An electrical induction heater or micro oven to prepare tea, instant food etc.
	4	The wall mounted ECoR system map should be well illuminated for better view.
Mechanical	1	Four numbers of 5 kg DCP type fire extinguishers should be kept in suitable place.

Engineering	1	Provision of an oval shape table so as to accommodate at least 10 chairs.
	2	10 VIP chairs for sitting of officers and 10 other chairs for sitting of accompanying officials.
	3	Provision of a rack with front glass doors with four shelves to keep different manuals, rules, books, registers etc, of all departments.
	4	Provision of an Almirah to keep store items, towels, sanitary items, raw materials to prepare instant food etc.
	5	Provision of a platform for preparation of instant food and tea.
	6	Provision of wall mounted A ₀ size of ECoR system map (Latest).
	7	Provision of a compact modular pantry along with selves to accommodate cookeries near to disaster control room.
Safety	1	Safety Department to ensure that soft copies of all codes and manuals of all departments are kept in the disaster control rooms downloaded from Railway Board websites along with important circulars and correction slips. Information pertaining to section, level crossing, bridges etc and SWR of all stations etc. should also be kept in the control room (soft copies).
		The respective PHODs shall entrust their secretaries to send the above soft copies of their departments so as to keep in the desktop of the disaster control room.
Accounts	1	Cash imprest of Rs 5000/- should be created under the charge of Safety Cell (Operating) for maintenance and use at the time of the disaster.

(2) Communicating telephone numbers in Multi-Disaster Resistant Control Room

Sl. No	Particulars	Railway Telephone / remark
1	Railway Telephone	50525 / 50625 / 50725
2	BSNL number	0674-2303060 (only incoming) 0674-2301525 / 0674-2301526
3	Railway Intercom Number	268 / 378
4	Cisco phone IP	0462219999
5	Inmarsat-1	91-8991112802
		Available at exchange/ C.S.PUR
6	Inmarsat-1	91-8991112803
7	Mail ID Password :	emergencycontrolecor@gmail.com crisis@12345
8	Wi-Fi password:	Emergency control 1234512345

Commercial Control: 0674-2303110

_CHAPTER - 28

DO's AND DON'Ts FOR FRONT LINE STAFF

28.01 Divisional Control

DO'S

- Stop movement of trains into the affected section.
- Arrange for dispatch of medical vans and accident relief trains to the site. In case casualties are more than fifty, ARMEs of the adjoining divisions have to be called for. As a rough thumb rule, the scale of such assistance required would be one from a division for every additional 50 injuries. In addition medical assistance should be sent by road also.
- Inform divisional officers, central control and controlling SM, Civil Authorities concerned.
- Collect and record systematically all the events related to accident by deputing a Chief Controller/DTI for the purpose.
- Advise Civil, Military, public and private hospitals in the nearby areas to rush doctors, medical aid to the site if casualties are more.
- Arrange for rushing the required Relief & Rescue equipments to the site.
- Inform NGO's and solicit their help.
- Arrange for regulating traffic by diverting or canceling trains.
- Arrange for running duplicate/relief trains for clearing stranded passengers with overriding priority.
- Advise the stations about the changes in the train timings, train diversions etc. so that timely information is given to the public.
- Ensure that list of the injured and the dead is obtained as quickly as possible from the site and relayed to the Zonal Headquarters, concerned stations, officer in charge of publicity, etc.
- Liaison with Commercial department's emergency team and ensure that information counters are opened at the accident site and at important stations en-route for giving up-to-date information to the public.
- Guide the station staff on the correct method of train working.

DON'TS

- Charge the OHE in haste
- Lose patience.

- Ignore the safety aspects.
- Manipulate the control charts.
- Argue with the station staff.

28.02 Guard

DO'S

- Arrange to protect the adjacent line/lines and then the affected line.
- Send information through the quickest means to the Control/SMs on either side.
- Take action to save lives/render first-aid.
- Call for doctors and volunteers on the train, seek their assistance.
- Seek assistance of Railway men on the train for attending to the injured and for other relief operations.
- Post a railway employee to man the field telephone to ensure regular flow of information to control.
- Make a quick assessment of the assistance needed and advice control or nearest Station Master.
- Arrange protection of belongings of the passengers and railway property through RPF, GRP and other railway staff.

DON'TS

- Forget to note down the time of accident.
- Forget to preserve and safeguard all clues of possible cause of accident.
- Leave the site until permitted to do so by a competent authority.

28.03 Station Manager/Station Master

DO'S

- Ensure that no other train enter the affected section and take other necessary measures for protecting the site.
- Advise the control about the gravity of the accident, and type of medical and other assistance required. Also advise the local civil authorities.

- Call for assistance locally from nearby hospitals, dispensaries and medical practitioners.
- Inform controlling station master to proceed to site along with adequate number of railway staff to the accident site.
- Call all the off-duty staff including Engineering and S&T staff available in nearby areas and allot them specific duties for relief and rescue.
- Inform to Railway Rescue Volunteers Registered at the Station giving preference to doctor and other medical staff. Also to make arrangement for their transportation to site of accident. Arrange to provide all sort of assistance to the affected passengers such as catering, drinking water and issue of complimentary passes, arranging free messages to relatives etc.
- Arrange for protection of both belongings of the passengers and Railway Property.
- Open information counters/helplines and booths for giving information to the public regarding names of the injured, dead etc. and about regulation, diversion of trains etc.

DON'TS

- Permit any train to enter in the affected section except ART/ARME.
- Manipulate/ Destroy railway records and clues of possible cause of accident.
- Lose patience.
- Argue or misbehave with the victims and other passengers.
- Give any statement to media and press.
- Use shortcuts and unsafe methods in further relief train operation.

28 .04 Loco Pilot/Assistant

Loco Pilot DO'S

- Switch on Flasher Light of Loco and switch off head lights.
- Note down the date & time and also hectometer Number.
- Sound short whistle frequently to want the Loco Pilot of the approaching train.
- Arrange to protect adjacent line/multiple lines and the same line in accordance with GR/SR 6.03(I & II).
- Inform Control in consultation with Guard about the condition of the site.
- Secure the Loco properly.

- ALP should assist the Guard in assessing the damage to Loco, Rolling Stock and P.Way and the nature of assistance required.

DON'TS

- Leave Loco unmanned.
- Interfere with any gadgets including speedometer chart.

28.05 Permanent Way Staff

DO'S

- Inspect the site and secure all clues related to the cause of accident.
- Take track readings as prescribed along with other Sr.subordinates.
- Sketch of the accident site is made and jointly signed with other Supervisors.
- Seize gang diaries, charts, curve registers, LC gate PN exchanged register and obtain statement of concerned staff.
- Shall assess the damage to P.Way sleepers and fittings.
- Condition of track including infringement to the adjacent line(s) if any shall be noticed and give fitness of adjacent line accordingly.
- In case of Level Crossing accident any damage to gate equipments and infringement to LC/ track shall be noted. The condition of road surface and overhauling if done any may be noted.
- He shall advise BT control about assistance/material required for restoration.
- Render all assistance as required by 'Site Officer'

DON'TS

- Attend the affected track without clearance from competent authority.

28.06 S&T Staff

DO'S

- Inspect points, crossings and S&T gears and assist for ascertaining cause of accident and securing of clues of the accident.
- Arrange for communication at the accident spot and manning the same.
- Render all assistance as required by 'Site Officer'.

DON'TS

- Attend or disconnect any S&T gear without getting clearance from competent authority.

28.07Electrical

DO'S

- Arrange to provide additional lightings if required at the accident site.
- Preservation of clues in case of fire in coaches. Any statement from passengers should also be recorded with their names and addresses.
- Adequate number of breakdown staff/tower wagons.
- Alert the tower car/road vehicle with staff to move for site from both directions
- De-energizing and slewing the OHE, as required for ground/crane operations by getting OHE dead from TPC.
- Restoration of OHE expeditiously.
- Supervise restoration operation.
- Ensure joint observation and measurement of the electric loco involved in the accident, in the prescribed format.
- Render all assistance as required by 'Site Officer'.

DON'TS

- Leave the accident spot till the restoration is completed and first train passes the site of accident.
- Attend the restoration work without permission from competent authority.

CHAPTER - 29

EAST COAST RAILWAY **SCHEDULE OF POWERS (DISASTER MANAGEMENT)**

S.No	Nature of Powers	PHOD/HOD	DRM/ADR M/CWM/ SAG Officers in Field Units	Divisional Officers, Extra Divisional Officers & Officers in Headquarters	REMARKS
97 *	Disaster Management				
	(A) Procurement of additional lifesaving drugs from the market by Medical Officers at the site.	Full Powers	Full Powers	Full Powers	1. Full Powers if he is the only Medical Officer available on site. 2. Medical Officers to draw money from station collection. 3. Finance concurrence not required <i>Authority: Recommendation of High Level Committee on Disaster Management Item No.31.</i>
	(B) On the Spot payment to private Hospitals for treatment of injured.	Full Powers	Full Powers	Full Powers	1. Full Powers if he is the only Medical Officer available on site. 2. Medical Officers to draw money from station collection. 3. Finance concurrence not required <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.32.
	(C) Cash imprest for ARMV in charges – for expeditious procurement of small items like fuel, food materials etc. at accident site.	Full Powers	Full Powers	Full Powers	1. Full Powers if he is the only Medical Officer available on site. 2. This power to be implemented when the ARMV has to remain at the accident site for a longer period during exigencies. 3. Up to Rs. 5,000/- for food materials, fuel etc., <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.41
	(D) Purchase of items for ARME including First Aid Articles.	Full Powers	Full Powers	Full Powers	1. Only for emergency purchases and not for normal day to day requirements. <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.36
	(E) ART Equipment (HRE, HRD & 140 T cranes and other related equipment). (Authority: Recommendation of High Level Committee on Disaster Management Item No.36)				
	(i) For planned procurement of the spares, consumables, and small tools.	PCME / PHOD/ CHOD Above Rs.25 Lakhs and up to Rs.2.5 Crores CMPE : above Rs.8 Lakhs and up to Rs. 25 lakhs	Nil	SG/JAG above Rs.1.5 Lakhs and up to Rs.8 Lakhs. Sr Scale up to Rs. 1.5 lakhs	1. Finance concurrence is necessary 2. Constitution of Tender committee and acceptance as per Stores/Works powers as applicable

	(ii) for emergency repairs and purchase of spares incidental to such repairs.	PCME/ CMPE Up to Rs. 1 Lakh per break down	Up to Rs. 1 Lakh per break down	Sr DME/ In charge of ARTs Up to Rs. 20,000/- per break down without finance concurrence	1. Finance concurrence is not necessary up to Rs. 50,000/- 2. Single quotation can be resorted to in case of Repair/ Spare from OEM/Authorised dealer 3. SrDME/In Charge of ART shall certify the emergency. 4. A register showing the details of expenditure incurred on each break down should be maintained. The overall ceiling limit for emergency repairs/purchases of spares should not exceed Rs.20 lakhs per annum
	(iii) Scheduled overhauling/reconditioning repairs to machines (Schedules not covered under Annual Maintenance contract) and for purchase of spare parts for this equipment.	PCME Full powers CMPE Up to Rs. 50,000/- at a time.	Nil	Sr. DMEs/ In charge/ART Up to Rs. 30,000/- at a time. DME/In charge of ART Up to Rs. 10,000/- at a time.	1. Finance concurrence is necessary. 2. Subject to usual procedure of calling of tender/Quotation etc., being followed as per extant orders.
	(F) Hiring of vehicles for rescue and relief operations.	Nil	DRM/ADR M Full powers during accidents	Branch Officers of Medical, Mechanical, Operating, Safety and Commercial departments Full Powers.	1. The expenditure can be met from cash imprest/Station earnings without any limitation. 2. Efforts may be made to pool the utilization wherever possible. 3. Finance concurrence not required <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.30
	(G) Sanction of expenditure incurred during relief and rescue operations.	All Mechanical, Medical, Commercial, Operating Safety, Officers at the site of accident	Full powers	All Mechanical, Medical, Commercial, Safety, Operating Safety and Electrical Officers at the site of accident Full powers	1. Vouchers/Bills should be submitted within a Week's time 2. Finance concurrence required at the time of post facto sanction <i>Authority:</i>
		Full powers			1. Recommendation of High Level Committee on Disaster Management Item No.35
	(H) Procurement of ART/ ARMV equipment.	PCME – Full Powers -	--	--	1. No item/equipment shall be banned while being purchased for ART/ARMV/Break down Crane. No circulars/orders restricting the purchase procedures/powers for ART/ARMV/Crane equipment shall be applicable unless issued by Railway Board (MM&FC). <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.37
	(I) Sanction of cash imprest for maintaining ART/ARMVs/Cranes .	PCME – Full Powers.	Nil	Nil	1. Finance concurrence is necessary <i>Authority:</i> 1. Recommendation of High Level Committee on Disaster Management Item No.39.

	(J) Purchase of ART/ ARMV/Crane material through imprest cash.	--	--	JAG/Sr. Scale/Jr. Scale in Divisions Full powers to ART In-charge officer up to Rs. 10,000/- per item	1. Finance concurrence not required
	(K) (i) Requisition of Helicopter / Airplane to reach the site of serious accident or to evacuate injured and dead in the event of serious accident. (ii) Requisition of Air support to dispatch the rescue teams to the site of accident.				1. These powers are left to the discretion of GM. The circumstances under which GM exercise these powers, broadly cover the following types of cases: (i) Where more than 10 casualties (death-cum-serious injuries) are feared and it is difficult for these officers to reach the site within reasonable time. (ii) Where heavy damage is caused to Railway installations in sensitive and tension filled areas (e.g. wreckage of track, bridges etc. through bomb blast, other means of sabotage, etc.) (iii) Where public reaction in case of late arrival of senior officers at site is likely to be highly adverse. (iv) Normally, in case of an accident, only one helicopter should be requisitioned by a Zonal Railway, except when there is a serious passenger train accident involving several casualties when it is essential for both the General Manager and the Divisional Railway Manager to reach the site at once to satisfy the public and the Press. However, for dispatching the rescue teams to the site of the accident, separate helicopter/ airplane may be requisitioned, if so needed. <i>Authority:</i> 1. Railway Board's letter No.2002/Safety-1/6/6 dated 13.06.2004.
10 *	Expenditure at accident site or damages due to floods, breaches cyclones earth quakes, bandh/hartal/strike etc.				
	(A) Providing food, drinks, and transport of injured passengers to hospitals and to stranded passengers.	Full Powers	DRM / ADRM Full Powers	Divl. Officers Full Powers	1. Finance concurrence is not necessary. 2. The cases in which the Asst. Officers exercise these powers should be put up to DRM for ratification.
	(B) Food and drinks for staff attending to breakdown duties.	Full Powers	DRM / ADRM Full Powers	Divl. Officers Full Powers	3. The Officers who are empowered to incur expenditure for supply of food to persons in emergent cases are authorized to utilize station earnings as per codal provisions, without prior finance concurrence in cases where it is not possible to meet the expenditure in the normal manner (Board's letter No. F(X)I-64PW4/6 dt.12.6.1967)
	(C) Sanction of expenditure to supply food to labour temporarily employed in accidents/breaches for transshipment.	Full Powers	Full Powers	Divl. Officers Full Powers	4. In respect of Item 10(c) categories to whom cash-in-lieu of food supply given has to be excluded.
	(D) To incur expenditure on setting up Camp, lighting, and	Full Powers	Full Powers	Divl. Officers Full Powers	5. Accounts should be rendered

	transshipment arrangements on breaches and accidents.				<p>within 2 weeks.</p> <p>6. A nodal officer at the level of SAG shall be nominated by GM/AGM to approve drawl of station earning in case of a disaster. Necessary procedure may be framed by the individual Railways in this regard.</p> <p><i>Authority:</i></p> <p>1. Rule 1420 of Indian Railway Establishment Code (IREC) – Vol. II (1987)</p>
	(E) Hiring of road mobile, restoration machinery like Bulldozers, road cranes etc. from outside agencies.	Full powers	Full powers	JAG/SG Officers Full powers	<p>1. Finance concurrence is not necessary.</p> <p>2. The cases in which the Assistant Officers exercise these powers should be put up DRM for ratification.</p> <p>3. Accounts should be rendered within two weeks.</p>

***Item No. 97 & 10 of Misc. Matter of MSOP-2018**

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CHAPTER-30

MEDICAL PREPAREDNESS and HOSPITAL DISASTER MANAGEMENT

Network of Mobile Medical Infrastructure:

The Indian Railways has an established network system capable of handling train accidents along with emergency medical response and casualty evacuation. The system is based on an infrastructure consisting of 161 Accident Relief medical Vans (ARME) - Scale I (Unit of accident relief trains situated at an average distance of every 300kms on main lines and 400 km on branch lines), 320 Accident Relief Medical Equipment (ARME) - Scale II consisting of three sets of Portable Medical Kit for Accidents (POMKA). POMKAs are also available at all health units, sub-divisional and divisional/zonal hospitals. Trained manpower of medical and all other departments of the Indian Railways provide first aid, immediate and necessary emergency medical treatment to save the life and limbs of persons involved in train accidents and arrange rapid evacuation to the nearest government/private hospital by the first available means of transport. There is a well-rehearsed action plan to handle railway accidents.

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

Responsibility of Stake Holders:

Medical Response :

Medical Response has to be quick and effective. The execution of medical response plans and deployment of medical resources warrant special attention at the State and District level in most of the situations. The voluntary deployment of the nearest medical resources to the disaster site, irrespective of the administrative boundaries, will be emphasized. Mobile medical hospitals and other resources available with the centre will also be provided to the States/UTs in a proactive manner. Post-disaster management of health, sanitation and hygiene services is crucial to prevent an outbreak of epidemics. Therefore a constant monitoring of any such possibilities will be necessary.

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

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

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

A review of the existing health framework, preparedness of the Ministry of Health and Family Welfare, Ministry of Defence, Ministry of Railways and Ministry of Labour and Employment in relation to their capacity for handling casualties caused by various disasters is to be done so as to share each other's strengths and capabilities. Ministry of Health and Family Welfare is assigned with legislative capacity for a number of subjects including all matters relating to the medical, dental, nursing and pharmacy professions and education; mental health; standards for drugs; prevention of food adulteration; and prevention and control of epidemics.

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

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

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

- Preventive measures like strengthening of epidemic control programmes, immunization, HIV control etc., development of minimum standards of food and water; IDSP and its integration at all levels converged to develop an effective Early Warning System (EWS) operable at all levels.
- The Medical First Responders (MFRs) of mobile medical teams will be fully trained in triage and resuscitation; well-equipped and supported by all emergency services and material logistics.
- Emergency medical evacuation requires development of an Integrated Ambulance Network (IAN) including road, aerial and water ambulance networks integrated with special trains for MCE and not only self-propelled Accident Relief medical Vans (SP- ARMVs) of the railways as mentioned in the guidelines. As the evacuation of large number of casualties cannot be done by an ARME (or SP-ARMEs) the Railways have adopted the concept of mobilization of special train for MCE when required. It will work in conjunction with Emergency Response Centres (ERCs), ESIC medical services and related emergency functionaries with laid down Standard Operative Procedures (SOPs) for all stakeholders.
- Full-fledged containerised mobile hospitals will be acquired and attached with hospitals earmarked by states/districts.
- Capacity development will include training of all stakeholders including doctors, nurses, paramedics and other resource persons in triage and Basic Life Support (BLS), and development of specialists.
- Hospital preparedness should aim at planning the use of hospital resources in a well coordinated and simple way with defined roles for all medical personnel.

Railways have to arrange special trains consisting of AC and/or non-AC coaches to run from the nearest coaching terminal to the site for evacuation especially for large scale casualties. Railway and non-Railway Medical Teams may be deployed in these special trains along with a portable kit of medicines, etc. (POMKA) to attend to the injured during the process of evacuation. In these special trains casualties even in hundreds can be evacuated; the medical attention, however, would be limited vis-à-vis what can be provided in the ARMVs.

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

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

The medical and para medical staff of Railways need to be imparted training for management of CBRN disasters, till the specialist force arrives at the disaster site. As an alternative zonal railways must cater in their own plans to arrange special trains consists of AC and non AC coaches for the purpose of evacuation of large number of casualties in a mass casualty event whenever the railways may be called upon to help the district and state authorities. Railways may not be the main stakeholder in disaster management for CBRN disasters but railways should also train their Para medics, Medical First Responders and Quick Medical Reaction Teams (QMRTS) and train them to provide pre hospital care in case of CBRN attack within the trains or platforms and should be able to respond till such time specialized teams of NDRF/SDRF mobilized to reach the site. Therefore, it is essential to provide personal protection equipment and other equipment, training to Para medics and Medical officers for the limited role for your own set up.

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

Aim of Hospital Disaster Management Plan:

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

Hospital DM Plan:

"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 Govt. agency declares a major incident a Disaster, and where the Medical facility of the Railways shall be required to give assistance."

Objective and Goals of a Hospital Disaster Management Plan:

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

The role of the Railway Hospital will be of a general hospital only. After assessment of the hospital resources, treatment capacity and surgical capacity (refer Annex-1 of Chap 4, Page 105 of NDMA Guidelines on Medical Preparedness and Mass Casualty Management), its Hospital Disaster Management Plan should be available to the Divisional /Zonal Railway Administration and also to the district administration.

Disaster Drills:

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

Continuous revisions should be made in the hospital disaster management plan taking leads from the regular disaster drills in the hospitals. In these drills it should be tested if the Hospital is equipped to respond effectively to the disposal of a large no. of dead etc i.e, role of mortuary services and forensic departments. Hospital Disaster Management Plan should be tested once a year by mock drills for updation.

Training of Health Care Personnel of Indian Railways:

It is desired by the National Plan that the Railways should train their Doctors in the treatment of specific injury from CBRN disasters as also keep medicines, the vaccines, equipment and disposables etc for the same in their hospitals. Railways may alternatively get the Training for Trainers of Medical department so that this could be proliferated to other Doctors and other Para Medical Personnel on all Indian Railways in nominated Railway Training Institute/s.

Detailed guide lines issued by MoH&FW on COVID-19, the pandemic declared as Medical Disaster by GoI are enclosed below.

Ministry of Health and Family Welfare**Directorate General of Health Services****[Emergency Medical Relief]****Novel Coronavirus Disease 2019 (COVID-19): Guidelines on rational use of Personal Protective Equipment****MM About this guideline**

This guideline is for health care workers and others working in points of entries (POEs), quarantine centers, hospital, laboratory and primary health care / community settings. The guideline uses setting approach to guide on the type of personal protective equipment to be used in different settings.

NN Introduction

Corona viruses are a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats and bats. Rarely, animal coronaviruses can evolve and infect people and then spread between people such as has been seen with MERS and SARS.

The outbreak of Novel coronavirus disease (now named COVID-19) was initially noticed from a seafood market in Wuhan city in Hubei Province of China in mid-December, 2019, has spread to more than 185 countries/territories worldwide including India. The causative agent for COVID-19, earlier termed provisionally as novel Coronavirus has been officially named as SARS-CoV-2.

OO Mode of transmission

There is clear evidence of human-to-human transmission of SARS-CoV-2. It is thought to be transmitted mainly through respiratory droplets that get generated when people cough, sneeze, or exhale. SARS-CoV-2 also gets transmitted by touching, by direct touch and through contaminated surfaces or objects and then touching their own mouth, nose, or possibly their eyes. Healthcare associated infection by SARS-CoV-2 virus has been documented among healthcare workers in many countries. The people most at risk of COVID-19 infection are those who are in close contact with a suspect/confirmed COVID-19 patient or who care for such patients.

MMM Personal Protective Equipment (PPE)

Personal Protective Equipments (PPEs) are protective gears designed to safeguard the health of workers by minimizing the exposure to a biological agent.

4.1 Components of PPE

Components of PPE are goggles, face-shield, mask, gloves, coverall/gowns (with or without aprons), head cover and shoe cover. Each component and rationale for its use is given in the following paragraphs:

4.1.1 Face shield and goggles

Contamination of mucous membranes of the eyes, nose and mouth is likely in a scenario of droplets generated by cough, sneeze of an infected person or during aerosol generating procedures carried out in a clinical setting. Inadvertently touching the eyes/nose/mouth with a contaminated hand is another likely scenario. Hence protection of the mucous membranes of the eyes/nose/mouth by using face shields/ goggles is an integral part of standard and contact precautions. The flexible frame of goggles should provide good seal with the skin of the face, covering the eyes and the surrounding areas and even accommodating for prescription glasses.

4.1.2 Masks

Respiratory viruses that includes Corona viruses target mainly the upper and lower respiratory tracts. Hence protecting the airway from the particulate matter generated by droplets / aerosols prevents human infection. Contamination of mucous membranes of the mouth and nose by infective droplets or through a contaminated hand also allows the virus to enter the host. Hence the droplet precautions/airborne precautions using masks are crucial while dealing with a suspect or confirmed case of COVID-19/performing aerosol generating procedures. Masks are of different types. The type of mask to be used is related to particular risk profile of the category of personnel and his/her work. There are two types of masks which are recommended for various categories of personnel working in hospital or community settings, depending upon the work environment:

JJ Triple layer medical mask

KK Respirator mask

4.1.2.1 Triple layer medical mask

A triple layer medical mask is a disposable mask, fluid-resistant, provide protection to the wearer from droplets of infectious material emitted during coughing/sneezing/talking.

4.1.2.2. Respirator mask

An respirator mask is a respiratory protective device with high filtration efficiency to airborne particles. To provide the requisite air seal to the wearer, such masks are designed to achieve a very close facial fit.

Such mask should have high fluid resistance, good breathability (preferably with an expiratory valve), clearly identifiable internal and external faces, duckbill/cup-shaped structured design that does not collapse against the mouth.

If correctly worn, the filtration capacity of these masks exceeds those of triple layer medical masks. Since these provide a much tighter air seal than triple layer medical masks, they are designed to protect the wearer from inhaling airborne particles.

4.1.3 Gloves

When a person touches an object/surface contaminated by COVID-19 infected person, and then touches his own eyes, nose, or mouth, he may get exposed to the virus. Although this is not thought to be a predominant mode of transmission, care should be exercised while handling objects/ surface potentially contaminated by suspect/confirmed cases of COVID-19.

Nitrile gloves are preferred over latex gloves because they resist chemicals, including certain disinfectants such as chlorine. There is a high rate of allergies to latex and contact allergic dermatitis among health workers. However, if nitrile gloves are not available, latex gloves can be used. Non-powdered gloves are preferred to powdered gloves.

4.1.4 Coverall/Gowns

Coverall/gowns are designed to protect torso of healthcare providers from exposure to virus. Although coveralls typically provide 360-degree protection because they are designed to cover the whole body, including back and lower legs and sometimes head and feet as well, the design of medical/ isolation gowns do not provide continuous whole-body protection (e.g., possible openings in the back, coverage to the mid-calf only).

By using appropriate protective clothing, it is possible to create a barrier to eliminate or reduce contact and droplet exposure, both known to transmit COVID-19, thus protecting healthcare workers working in close proximity (within 1 meter) of suspect/confirmed COVID-19 cases or their secretions.

Coveralls and gowns are deemed equally acceptable as there is a lack of comparative evidence to show whether one is more effective than the other in reducing transmission to health workers. Gowns are considerably easier to put on and for removal. An apron can also be worn over the gown for the entire time the health worker is in the treatment area. Coveralls/gowns have stringent standards that extend from preventing exposure to biologically contaminated solid particles to protecting from chemical hazards.

4.1.5 Shoe covers

Shoe covers should be made up of impermeable fabric to be used over shoes to facilitate personal protection and decontamination.

4.1.6. Head covers

Coveralls usually cover the head. Those using gowns, should use a head cover that covers the head and neck while providing clinical care for patients. Hair and hair extensions should fit inside the head cover.

The specifications for all the PPEs are at Annexure-A.

JJJ. Rational use of PPE

The PPEs are to be used based on the risk profile of the health care worker. The document describes the PPEs to be used in different settings.

5.1. Point of Entry					
Sl. No	Setting	Activity	Risk	Recommended PPE	Remarks
1	Health Desk	Provide information to travelers	Low risk	Triple layer medical Mask Gloves	Minimum distance of one meter needs to be maintained. Minimum distance
2	Immigration counters, customs and airport security	Provide services to the passengers	Low risk	Triple layer medical mask Gloves	of one meter needs to be maintained.
3	Temperature recording station	Record Temperature with hand held thermal Recorder.	Low risk	Triple layer medical mask Gloves	
4	Holding area/ Isolation facility of APHO/ PHO	Interview & Clinical examination by doctors/ nurses	Moderate Risk	Respirator masks Gloves	
5	Isolation facility of APHO	Clinical management (doctors, nurses)	Moderate Risk	Respirator masks	

				Gloves	
		Attending to severely ill passenger	High risk	Full complement of PPE	When aerosol generating procedures are anticipated
6	Sanitary staff	Cleaning frequently touched surfaces/ Floor/ cleaning linen	Moderate risk	Respirator mask Gloves	
7	Administrative staff	Providing administrative support	No risk	No PPE	No contact with patients of COVID-19. They should not venture into areas where suspect COVID-19 cases are being managed.

5.2. Hospital Setting

5.2.1. Out Patient Department (Respiratory Clinic / Separate screening area)#

Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks
1	Triage area	Triaging patients Provide triple layer mask to patient.	Moderate risk	Respirator mask Gloves	Patients get masked.
2	Screening area help desk / Registration counter	Provide information to patients	Moderate risk	Respirator mask Gloves	
3	Temperature recording station	Record temperature with hand held	Moderate Risk	Respirator mask Gloves	

		thermal recorder			
4	Holding area/ waiting area	Nurses / paramedic interacting with patients	Moderate	Respirator mask Gloves	Minimum distance of one meter needs to be maintained.
5	Doctors chamber	Clinical management (doctors, nurses)	Moderate Risk	Respirator mask Gloves	No aerosol generating procedures should be allowed.
6	Sanitary staff	Cleaning frequently touched surfaces / Floor/ cleaning linen	Moderate risk	Respirator mask Gloves	
7	Visitors accompanying young children and elderly	Support in navigating various service areas	Low risk	Triple layer medical mask	No other visitors should be allowed to accompany patients in OPD settings. The visitors thus allowed should practice hand hygiene

4) All hospitals should identify a separate triage and holding area for patients with Influenza like illness. If there is no triage area / holding area for patients due to resource constraints, such hospitals will follow the above guidance for general OPD.

5.2.2	In-patient Services				
Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks
1	Individual isolation rooms/ cohorted isolation rooms	Clinical management	Moderate risk	Respirator mask Gloves	Patient masked. Patients stable. No aerosol generating activity.

2	ICU/ Critical care	Critical care manage ment	High risk	Full complement of PPE	Aerosol generating activities performed.
3	ICU /critical care	Dead body packing	High risk	Full complement of PPE	
4	ICU/ Critical care	Dead body transport to mortuary	Low Risk	Triple Layer medical mask Gloves	
5	Sanitation	Cleaning frequently touched surfaces/f loor /changing linen	Moderate risk	Respirator mask Gloves	
6	Other Non- COVID treatment areas of hospital	Attending to infectious assessed non-infectious profile of patients	Risk as per and patients	PPE as per hospital infection prevention control practices.	No possibility of exposure to COVID patients. They should not venture into COVID-19 treatment areas.
7	Caretaker accompan ying the admitted patient	Taking care of the admitted patient	Low risk	Triple layer medical mask	The caretaker thus allowed should practice hand hygiene, maintain a distance of 1 meter
5.2.3. Emergency Department					
Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks
1	Emergency	Attending emergency	Moderate risk	Respirator mask Gloves	When aerosol generating

		cases			procedures are anticipated
2		Attending to severely ill patients of SARI	High risk	Full complement of PPE	Aerosol generating activities performed.

5.2.4. Pre-hospital (Ambulance) Services

Sl. No. Setting		Activity	Risk	Recommended PPE	Remarks
1	Ambulance Transfer to designated hospital	Transporting patients not on any assisted ventilation	Moderate risk	Respirator mask Gloves	
		Management of SARI patient while transporting	High risk	Full complement of PPE procedures are	When aerosol generating anticipated
		Driving the ambulance	Low risk	Triple layer medical mask Gloves	Driver helps in shifting patients to the emergency

5.2.5. Other Supportive/ Ancillary Services

Sl. No. Setting		Activity	Risk	Recommended PPE	Remarks
1.	Laboratory	Sample collection and transportation Sample testing	High risk High risk	Full complement of PPE Full complement of PPE	
2	Mortuary	Dead body handling	Moderate Risk	Respirator mask Gloves	No aerosol generating procedures should be allowed. No embalming.
		While	High	Full complement	No post-mortem

		performing autopsy	Risk	of PPE	unless until specified.
3	Sanitation	Cleaning frequently touched surfaces/ Floor/ cleaning linen in COVID treatment areas	Moderate risk	Respirator mask Gloves	
4	CSSD/ Laundry	Handling linen of COVID patients	Moderate risk	Respirator mask Gloves	
5	Other supportive services	Administrative Financial Engineering Security, etc.	No risk	No PPE	No possibility of exposure to COVID patients. They should not venture into COVID-19 treatment areas.

5.3. Health Workers in Community Setting

Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks
1	ASHAs/ Anganwadi and other field staff	Field Surveillance	Low Risk	Triple layer mask Gloves	Maintain distance of one meter. Surveillance team to carry adequate triple layer masks to distribute to suspect cases detected on field surveillance
2	Doctors at supervisory level conducting field investigation	Field surveillance Clinical examination.	Medium risk Gloves.	Respirator mask	

5.4 Quarantine facility

Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks
1	Persons being		Low Risk	Triple layer mask	

	quarantined					
2	Healthcare staff working at quarantine facility	Health monitoring and temperature recording	Low Risk	Triple layer mask Gloves		
		Clinical examination of symptomatic persons	Moderate Risk	Respirator masks		
				Gloves		
3	Support staff		Low Risk	Triple layer mask		
				Gloves		
5.5	Home Quarantine					
Sl. No.	Setting	Activity	Risk	Recommended PPE	Remarks	
1	Persons being quarantined		Low Risk	Triple layer mask		
2	Designated family member	Taking care of person being quarantined	Low Risk	Gloves	While cleaning commonly touched surfaces or handling soiled linen	
3	Other family		No Risk	No PPE required	Maintain a distance of at least 1 meter from person under home quarantine. Senior citizens in the household should stay away from such persons under home quarantine.	

Points to remember while using PPE

- i) PPEs are not alternative to basic preventive public health measures such as hand hygiene, respiratory etiquettes which must be followed at all times.
- j) Always (if possible) maintain a distance of at least 1 meter from contacts/suspect/confirmed COVID-19 cases
- k) Always follow the laid down protocol for disposing off PPEs as detailed in infection prevention and control guideline available on website of MoHFW.

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ANNEXURE – 01**TELEPHONE NUMBERS OF RAILWAY BOARD & OTHER ZONES**
(Quick Response Team)**NEW DELHI (MTNL) STD CODE – 011****NEW DELHI RLY STD CODE – 030**

SN	Designation	Office		Residence		Mobile
		Railway	MTNL	Railway	MTNL	
1	Safety Cell	98100-17905				
2	Dir. Safety/II	43446	2338-9987		0120-4548501	09810017905
3	Dir. Safety/I	43667	2338-7009			09910487477
4	Dir. Safety/III	43239	2338-5047			09910487542
5	Dy Dir/Safety	43998	2330-3998			09958293571
6	Dir/Chg – I	43578	2338-9764		2336-8702	09910487468
7	Dy.Dir./Chg.	43795	2338-3795			09717647516
8	Dir./TT(POL)	43659	2338-4641		23363868	09910487527
9	Dir/TT(G)	43521	2338-4744		26114171	09910487526
10	ED/Chg.	43892	2338-3624		2467-8085	09810197415
11	Adv./Safety	43302	2338-1344		23210429	09910487525

QUICK RESPONSE TEAM (QRT) AT OTHER RAILWAY ZONES

Postal Address	Phones with STD code/e-mail
Additional General Manager, Eastern Railway, Kolkata.	033-22304950(O) / 033-24791407 ® / 033-22319290 (Fax) 9002020001(Mob), E-mail : agm@er.railnet.gov.in
Additional General Manager, S. E. Railway, Kolkata.	033-24391114 (O) / 033-24390439 ® / 033-24397813 (Fax) 9002080001 (Mob), E-mail : agm@ser.railnet.gov.in
Additional General Manager, S. C. Railway, Secunderbad.	040-27824216 (O) / 040-27014423 / 040-27824216 (Fax) 9701370004 (Mob), E-mail : agm@scr.railnet.gov.in
Additional General Manager, South East Central Railway. Bilaspur	07752-247175(o) / 07752-247176 (O) FAX-07752-247196 MOB-09752475002 agm@secl.railnet.gov.in

QUICK RESPONSE TEAM (QRT) AT THE MINISTRY OF RAILWAY

Name/Designation/Office Address/Residential Address	Phones with STD code/e-mail
Team Leader - Additional Member(Traffic) Room No.264, Railway Board, Rail Bhavan, New Delhi-01	011-23382427 (O) / 011-24103255 (R) / 011-23303990 (Fax) 9717600119 (Mob) / E-Mail : amt@rb.railnet.gov.in (e-mail)
Alternate Team Leader & Member – 1 Additional Member(Commercial), Room No.473, Railway Board, Rail Bhavan, New Delhi-01	011-23382112 (O) / 011-24675006 (R) / 011-23303973 (Fax) 9818798394 (Mob) / E-Mail : amc@rb.railnet.gov.in (e-mail)
Member – 2 - Additional Member(Mech Engg.), Room No.319, Railway Board, Rail Bhavan, New Delhi – 01.	011-23382975 (O) / 011-23362644 (R) / 011-23303977 (Fax) 9818798388 (Mob) / E-Mail : amm@rb.railnet.gov.in (e-mail)
Member – 3 - Additional Member(Civil Engg.), Room No.125, Railway Board, Rail Bhavan, New Delhi – 01.	011-23382607 (O) / 011-24678603 (R) / 011-23304875 (Fax) 9818798381 (Mob) / E-Mail : amce@rb.railnet.gov.in (e-mail)
Member – 4 - Additional Member(Electrical), Room No.115, Railway Board, Rail Bhavan, New Delhi – 01.	011-23381227 (O) / 011-23361425 (R) / 011-23304692 (Fax) 9818798383 (Mob) / E-Mail : aml@rb.railnet.gov.in (e-mail)
Member – 5 - Additional Member(Telecom), Room No.152, Railway Board, Rail Bhavan, New Delhi – 01.	011-23383815 (O) / 011-25559607 (R) / 011-23304686 (Fax) 9810048970 (Mob) / E-Mail : amtele@rb.railnet.gov.in (e-mail)

Member – 6 – Inspector General (RPF), Room No.437, Railway Board, Rail Bhavan, New Delhi – 01.	011-23385188 (O) / 011-23366637 (R) / 011-23385188 (Fax) 9810337619 (Mob) / E-Mail : ighq@rb.railnet.gov.in (e-mail)
Member – 7 – Advisor Safety , Room No.353, Railway Board, Rail Bhavan, New Delhi – 01.	011-23381344 (O) / 011-26111211 (R) / 011-23382638 (Fax) 9818798390 (Mob)
Member – 8 – Director, Public Relations, R.No.302, Railway Board, Rail Bhavan, New Delhi–01	011-23381332 (O) / 011-23342085 (R) / 011-23385215 (Fax) 9810046241 (Mob)

Annexure-2**TELEPHONE NUMBERS :- CRS , ECoR-HQ & DIVISIONAL OFFICERS ,HOSPITALS****TELEPHONE NUMBER OF COMMISSION OF RAILWAY SAFETY**

	COMMISSIONER OF RAILWAY SAFETY					
Designation	Name	Rly Office	Resi	BSNL Office	BSNL Resi	Mobile no. CUG
CCRS	Sailesh Kumar Pathak	032-31140	-	0522-2233108	0522-2237702	09450931330 9794842049
CRS/NR	R K Kardan	030-54752 030-54753	26886589	-	22743345	9717630004
CRS/CR	Chetan Bakshi	010-54950	010-54951	22056058	22824367	9821081597
CRS/WR	Chetan Bakshi	090-22694	010-54951	22034351	22824367	9987640290
CRS/NE/ Circle	Prabhat Vajpayee	23291(NR) 31141 (NER)	-	2234515(NR)	2235232	9794842050
CRS/SE Circle (for ECoR)	A.K.Rai	080-27062, 44604 FAX-08042221	-	22484858 22227062	24483530	9002080850
CRS/SC/Circle	D K Singh	86980 86979	-	27820104 27786980	27003363	9849495073
CRS/ER	R P Yadav	020-27061	-	22483945	-	9002020991
CRS/SR	J S Naidu	060-53200	060-53201	22260650	22265926	9731666003
CRS/NFR	Balbir Singh	27060	-	22481493	-	9830111493

Dy.CRS(T)	B.S.K.Subudhi	44604(SER)				9002080862
SE Circle		27064(ER)				
PS to CRS (SE circle)				033-22484858 033- 22627724(Fax		

IMPORTANT TELEPHONE NOS OF E.Co.R ZONAL HQ OFFICERS AND DIVISIONS

Sn	Designation	Railway	BSNL (CODE – 0674)	Mobile	Fax	
					Rly(085)	0674BSNL
1	General Manager	50000 (O) 50001 (R)	2300773 (O) / 2302773(R)	8455880000	50700	2300196
2	Secy to GM	50002 (O) 50003 (R)	2300029 (O) / 2303814 (R)	8455885000	50701	2303587
3	Chief Safety Officer	50560 (O)	2300957 (O) / 2725091 (R)	8455885940	50766	2302758
4	Chief Mechanical Engineer	50050 (O) / 50051 (R)	2303370 (O) / 2301957 (R)	8455885400	50750	2303530
5	Chief Electrical Engineer	50040 (O) / 50041 (R)	2303515 (O) / 2301582 (R)	8455885300	50740	2302524
6	Chief Engineer	50020 (O) / 50021 (R)	2300571 (O) / 2303544 (R)	8455885200	50720	2301887
7	Chief Operations Manager	50060 (O) / 50061 (R)	2303122 (O) / 2303955 (R)	8455885900	50760	2300313
8	Chief Medical Director	50550 (O)	2302041 (O) / 2744390 (R)	8455885500	50756	2303052
9	Chief Signal & Telecom Engineer	50080 (O) 50081(R)	2301891 (O) / 2303681 (R)	8455885800	50780	2303508
10	Chief Security Commissioner	50590 (O) 50591	2303509 (O) / 2301109(R)	8455885700	50790	2302830
11	Chief Commercial Manager	50030 (O) / 50031 (R)	2300375 (O) / 2300993 (R)	8455885950	50731	2302272
12	HQ Control	51662, 51660, 51664	2303564	-	-	-
13	Dy CHC (Disaster)	51064	2303110	8455885939	-	-
14	Commercial Control	51333,	=	8455885999	-	-
15	Security Control	51696,51896	2301813	8455885777	51696	2301813-

IMPORTANT TELEPHONE NOS OF DIVISIONAL OFFICIALS RELATED TO DISASTER

Sn	Designation	Railway	BSNL	Mobile	FAX
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KHURDA ROAD (BSNL STD CODE-0674)					RLY(085)	0674BSNL	
1	Divisional Manager	Railway	72200 (O) / 72201 (R)	2490567 O) / 2490568 (R)	8455887000	72100	2492568
2	Addl. Divisional Manager	Railway	72202 (O) / 72203 (R)	2490264 O) / 2490364 (R)	8455887001	72902	2490264
3	Sr. Divisional Officer	Safety	72266 (O) / 72267 (R)	2491404 O) / 2491403 (R)	8455887940	-	-
4	Chief Controller		72360 (O) / 72361 (R)	2490391(O)	8455887928	72347	2372347
5	Dy CHC (Disaster)		72819, 72820, 72818, 72816	2492374	8455887939	-	-
6	Commercial Control		72334, 72755	[On Board Help Line-138, 2492411, 2492511, 2492611	8455887999	-	-
7	Security Control		72154, 72554	-2492229,	8455887777	72554	2492229

WALTAIR (BSNL STD CODE-0891)						Code085	0891
1	Divisional Manager	Railway	82200 (O) / 82201 (R)	2746200 O) / 2762000 (R)	08978080000	82404	2728832
2	Addl. Divisional Manager	Railway	82202 (O) / 82203 (R)	2746202(O) / 2746203 (R)	08978080001	82404	2728832
3	Sr. Divisional Officer	Safety	82460 (O) / 83593 (R)	2591033O)	08978080940	82562	2796708
4	Chief Controller		82466 (O) / 82467 (R)	2746255(O)	-08978080914	82562	28425663
5	Conference Hall		82088, 82089, 83096, 82265	2746255, 2746266	-	-	-
6	Dy CHC (Disaster)		-82664, 82539, 82060	-	8978080939	-	-
7	Commercial Control		-82415	-2748641	8978080966	-	-
8	Security Control		-82016,82817	-2501184	8978080777	82016	2501184

SAMBALPUR (BSNL STD CODE-0663)							
1	Divisional Manager	Railway	62200 (O) / 62201 (R)	2401331(O) / 2400498 (R)	8455886000	62343	2401331
2	Addl. Divisional Manager	Railway	62202 (O) / 62203 (R)	2405312 O) / 2404872 (R)	8555886001	62402	2405312
3	Sr. Divisional Officer	Safety	62460 (O) / 62263 (R)	2533097 O) / 2533096 (R)	8455885940	62514625 38	2533097
4	Chief Controller		62330 (O) / 62675 (R) 62639 (O) / 62369 (R)	2401913	8455886940	62522	2533169

5	Dy CHC (Disaster)	62319, 62619, 62401	2401913, 2532187, 2520916.	8455886939	-	-
6	Commercial Control	62332	[On Board Help Line-138, 2532230, 2532302] [Disaster Management- 1072, 2533037, 2531191]	8455886999	-	-
7	Security Control	62471, 62637	25211179	8455886777	62637	2521179

HOSPITALS in ECoR

Division	Name	location	Beds available	In-charge doctor
WAT	Divisional Rly Hospital	Visakhapatnam	154	CMS-8978080500
KUR	Divisional Rly Hospital	Khurda Road, Jatani	80	CMS 8455887500
SBP	Divisional Rly Hospital	Sambalpur	35	CMS-8455886500
HQ/ BBS	Central Hospital	Mancheswar/ BBS	70	MD- 8455885550
Total beds			339	
				CMD -8455885500

Health units in ECoR.

WAT	Station code	location	Rly telephone	CUG telephone
1	DLS	Diesel Loco shed	85472	8978080523,9392150163
2		Steel plant Vadlapudi	85156	8978080523
3		Marripalem	85470	9642196995,9490836476
4	VZM	Vizianagaram	83278, 83279(R)	ACMS 9515260664, PHS-8978281060
5	CHE	Shrikakulam	85970,85971	ADMO-8978080512, PHS- 8978281069
6	NWP (HU)	Naupada		ADMO/CHE looking after NWP
7	ARK	Aruku	84167, 86168 (R)	ADMO-8985359132
8	KRPU	Koraput	84350, 84355	Sr.DMO- 8455893670, 7022366876

9	JDB	Jagadapur	84650, 84651(R)	Sr.DMO-9752413911
10	BCHL	Bachheli	84840	97524413912
11	KRDL	Kirandul	84926	9310472029
12	RGDA	Rayagada	85678,85679(R)	ADMO-8455893671, 8455893675
13	LKMR	Laxmipur	85850	ADMO-6301533682
14		BNITN		

KUR	Station code	location	Rly telephone	CUG telephone
1		Loco Colony, KUR	72278, 72279	8457013002
2		Retang Colony , KUR	72482	Pharmacist-8249102916
3	BHC	Bhadrak	74070, 74072	7978985998, Pharmacist-8455887581
4	CTC	Cuttack	74470, 74471	8455887509,8455887585
5	PRDP	Paradeep	75510	8455887527
6	TLHR	Talcher	75312	8455887506
7	PUI	Puri	75790, 75790	8455887508
8	BAM	Brahmapur	76070	Pharmacist-8455887529, 8456823207
9	PSA	Palas, (AP)	77370 ,77376	8455887511, 8455887530
10	KDJR	Keonjhar	74778	8455887523, 9938833024

SBP	Station code	location	Rly telephone	CUG telephone
1	MSMD	Mahasamund	-	Pharmacist-(B.Singh)9009832447
2	KBJ	Kantabanji	67240	ADMO- 9937724947, CMP-9749810052 PHS-8455886513
3	TIG	Titilagarh	68340	ADMO-8455886507, PHS-8455886520
4	BLGR	Bolangir	64252	ADMO- 8455886502, PHS-8455886521

Head Quarter	CSPur		MD- 8455885550	CMD -8455885500
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Annexure - 3**SATELITE TELEPHONE NUMBERS (INMARSAT)**

Location	Voice No. ISD Code-00870
ART/KUR	08991112804
ART/Bhadrak	08991112805
ART/ SBP	08991112809
ART/KBJ	08991112808
ART/WAT	08991112806
ART/KRPU	08991112807
HQ/BBS	08991112802
HQ/BBS	08991112803

Annexure - 4**NDRF
FORCE HEAD QUARTERS**

Name	Designation	Telephone No.	Fax No.	Mobile No	E-Mail
Shri Sanjay Kumar(IPS)	Director General	011-23438020, 011-23438119	011- 23438091	9816617 895	dg.ndrf@nic.in
Shri Ravi Joseph Lokku (IPS)	Inspector General	011-23438021	011- 23438091	9013882 417	ig.ndrf@nic.in
Ms NishthaUpadhaya	Financial Advisor	011-24368148	011- 23438091		--
Shri. J. K. S. Rawat	Deputy Inspector General (ADM / PROC / PROV)	011-23438022	011- 23438091	9968262 466	dig.ndrf@nic.in
Shri Manoj Kumar Yadav	Deputy Inspector General (Trg /Academy/NCDC/East & North East Sector)	011-23438140	011- 23438091		dig.es.ndrf@nic.in
ShriRandeep Kumar Rana	Deputy Inspector General (Ops / North West Sector)	011-23438023	011- 23438091	9999513 134	dig.ns.ndrf@nic.in
Shri K K Singh	Deputy Inspector General (Works/PRO/South Sector)	011-24654994	011- 24611519	9489615 801	dig.ss.ndrf@nic.in

Sh. A K Tiwari	Commandant (NDRR)	--	011-		
Shri Rajesh Negi	Second in Command (Trg.)	011-23438138	011-23438091	7840037770	rajeshnegi30s@gmail.com
ShriMuneesh Kumar	Deputy Commandant (Works &Proc)	--	011-23438091	7840010509	--
ShriRakeshRanjan	Deputy Commandant (OPS)	011-23438024	011-23438091	9810657405	rakeshr76@rediffmail.com
ShriSureendar Kumar	Dy. Commandant (Engineer)	--	011-23438091		--
ShriKrishan Kumar	AC (IT/COMN/PRO)	011-24363263	011-23438091	8505833411	krishan.0405@gov.in
Shri M Natarajan	AC(JAO)	011-23438093	011-23438091	9968352181	ac.hq.ndrf@nic.in
ShriBhawani Singh	AC(ADM)	011-23438118	011-23438091	9868816674	dc.adm.ndrf@nic.in
Shri P K Sharma	AC (NCDC&PROV)	011-24629279	011-	9868574	-
Shri S Raghavindra	AC/MIN	011-23438091	011-23438091		hq.ndrf@nic.in
Control Room	--	011-23438091	011-23438091		hq.ndrf@nic.in
Exchange	--	011-24611518	011-23438091		-

NDRF UNITS

Name	Address	Telephone No.	Fax No.	Mobile No.	Unit Room No.	Control	E-Mail
Sh. S. K. Shastri	1st BN NDRF, Patgaon PO - Azara, Distt. Kamrup Metro, Guwahati-781017	0361-2840027	0361-2849080	9401307887	0361-2840284 09401048790 09435117246		assam01-ndrf[at]nic[dot]in
Sh. NitishUpadhyay	2nd BN NDRF, Near RRI Camp. Haringhata, Mohanpur, Nadia, (West Bengal) Pin - 741246	033-25875032	033-25875032	9434742836	033-25875032 09474061104 09474116775		wb02-ndrf[at]nic[dot]in
Sh. Jacob Kispotta	3rd BN NDRF, PO-Mundali, Cuttack - Odisha Pin - 754013	0671-2879710	0671-2879711	9437964571	0671-2879711 09437581614		ori03-ndrf[at]nic[dot]in
Ms.RekhaNambiyar	4th Bn NDRF, PO - SurakshaCampus ,Arrakonam , Distt. Vellore Tamilnadu-631152	04177-246269	04177-246594	9442105169	04177-246594 09442140269		tn04-ndrf[at]nic[dot]in
Sh. AnupamSrivastava	5th Bn NDRF, SudumbareTaluka, Distt - Maval Pune (Maharashtra) Pin - 412109	02114-247010	02114-247008	9423506765	02114-247000 09422315628		mah05-ndrf[at]nic[dot]in
Sh.R.SJoon	6th Bn NDRF, Chilora Road , Gandhinagar, Pin - 382042	079-23202540	079-23201551	9428826445	079-23201551 09723632166		guj06-ndrf[at]nic[dot]in
Sh. Ravi Kumar Pandita	7th Bn NDRF, Bibiwala Road, Bhatinda (Punjab) Pin 151001	0164-2246193	0164-2246570	9417802032	0164-2246193 0164-2246570		pun07-ndrf[at]nic[dot]in
Sh. P.K.Srivastava	8th Bn NDRF, Kamla Nehru Nagar, Ghaziabad (UP) Pin - 201002	0120-2766013	0120-27666012	9968610014	0120-2766618 09412221035		up08-ndrf[at]nic[dot]in
Sh. Vijay Sinha	9th Bn NDRF, Bihata Patna, Bihar Pin - 801103	06115-253942	06115-253939	7762884444	06115-253939 08544415050 09525752125		patna-ndrf[at]nic[dot]in
Mr.Zahid Khan	10th Bn NDRF, ANU Campus, Nagarjuna Nagar, Guntur (AP) Pin	0863-2293178	0863-2293050	7382299621	0863-2293050 08333068559		ap10-ndrf[at]nic[dot]in

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Sh. A.K.Singh	11 th Bn NDRF, SanskritikS ankul, MaqboolAlam Road, Varanasi, UP - 221002	0542- 2501201	0542 - 2501101	9455511107	0542-2501101 08004931410	up- 11ndrf[at]gov [dot]in
Sh. U K Thapliyal	12 th Bn NDRF, Itanagar, Arunach al Pardesh791112	0360- 2277109	0360- 2277106	9485236141	0360-2277104 09485235464	bn12[dot]ndrf [at]gov[dot]in

NDRF RRCs

Name of RRC	Landline Number	Mobile Number
NDRF RRC, Port Blair, Andaman	03192289174	09442112269
NDRF RRC, Adayar, Chennai	04424420269	09442112269
NDRF RRC, Vizag Steel -- Plant, Vishakhapatnam, Andhra Pradesh		08333068565 08333068560
NDRF RRC, Fire Station -- Mahadevapura, Bengluru, Karnatka		09482978719 09482978715
NDRF RRC, Shaikpet Sport Complex, Hyderabad, Telangana	04023565666	08333068536 08333068547

IMPORTANT CONTACT NUMBERS OF 03 BN. NDRF (Mundali)/ CUTTACK

SL.	RANK	NAME	MOBILE No.	ALTERNAT NO	Sec
1.	COMDT	SH. JACOB KISPOTTA	9437964571	9470587743	BN. COMMANDER
2.	DC/ADM	SH. B K DAS	9437964574	9437964574	DC/ ADM
3.	AC/EXE	SH. A K PATNAIK	9437964570	9437516227	OPS & TRG
4.	AC/EXE	SH. G S PATEL	9438882009	9439385431	ESTATE
5.	AC/EXE	SH. B K SAHOO	9437581613	9438108230	D COY
6.	INSP/EXE	SUBHASH CHANDER	9438882019	7894123150	RI/DOG SQD
7.	INSP/EXE	SUNIL RAJWAR	9438882013	7205572458	OPERATION

8.	RRC BALASORE	9437964575	
9.	COMMANDANT OFFICE	06712879710	
10.	BN CONTROL ROOM	06712879711	9437581614
			9937187222
11.	BN. EMAIL ID	<u>ori03-ndrf@nic.in</u>	

IMPORTANT TELEPHONE NUMBER NDRF**1ST BN NDRF (128 B.N B.S.F) PATGAON PO-AZARA, DISTT-KAMRUP METRO, GUWAHATI -781017**

SL/NO	NAME	RANK	MOB NO	TELEPHONE NO	EMAIL
1	SH.S.K.SHASTRI	CO	9401307887	0361-2840027	
2	SH.R.S.GILL	2I/C	9435117167		
3	C/ROOM		9401048790	0361-2840284	assam01-ndrf@nic.in

2ND BN NDRF(106 BN B.S.F) NEAR RRI CAMP. HARIGHATA, MOHANPUR , NADIA (WEST BENGAL) PIN-741246

1	SH. NITISH UPADHAYAY	CO	9434742836	033-25875032	
2		2i/c	9474050421		
3	C/ROOM		9474061104	033-25875032	wb02-ndrf@nic.in

3RD BN NDRF MUNDALI, CUTTACK- ODISHA -754013

1	SH. JACOB KISPOTTA	CO	9437964571	0671-2879710	
2	SH.B.K.DAS	DC	9437964574		
3	C/ROOM		9437581614		ori03-ndrf@nic.in

4TH BN NDRF , SURAKSHA CAMPUS, ARRAKONAM, DIST-VELLORE T.N - 631152

1	MS. REKHA NAMBIYAR	CO	9442105169	04177-246269	
2	SH.G. VIJAYAN	DC	9489615800		
3	C/ROOM		9442140269	04177-246594	tn04-ndrf@nic.in

5TH BN NDRF (145 BN CRPF) SUDUMBARE TALUKA, DIST- MAVAL, PUNE MAHARASHTRA -412109

1	SH. ANUPAM SRIVASTAVA	CO	9423506765	02114247010	
	SH. SANTOSH DHAKA	2I/C	9422315974		

C/ROOM	9422315628	0211-4247000	mah05-ndrf@nic.in
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6TH BN NDRF(146 BN CRPF) CHILORA ROAD GANDHINAGAR, GUJARAT-382042

1	SH. R. JOON	CO	9428826445	079-23202540
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2	SH. N.K.K PRASAD	2I/C	9427304217	
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	CONTROL ROOM		9723632166	079-23201551	guj06-ndrf@nic.in
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7TH BN NDRF(27 BN ITBP) BIBIWALA ROAD BHATINDA (PUNJAB)-151001

1	SH. RAVI KUMAR	CO	9417802032	0164-2246030
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2		2I/C	9417802031	
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3	C/ROOM		9465884344	0164-2246570	pun07-ndrf@nic.in
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8TH BN NDRF(6TH BN ITBP) KAMLA NEHRU NAGAR, GHAZIABAD (U.P)-201002

1	SH. P.K. SRIVASTAVA	CO	9968610014	0120-2766013
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2	SH. ROSHAN SINGH ASWAL	2I/C	9968610012	
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3	C/ROOM		9412221035	0120-2766012	up08 –ndrf@nic.in
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9TH BN NDRF(146 BN BSF) BIHATA PATNA, BIHAR-801103

1	SH. VIJAY SINHA	CO	7762884444	0611-253942
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2	SH. RAVI KANT	2I/C	8544415021	
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3	C/ROOM		8544415050	0611-253939	patna-ndrf@nic.in
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10TH BN NDRF(125 BN CRPF) ANU CAMPUS , NAGARJUNA NAGAR, GUNTUR (AP)-522510

1	<u>SH. ZAHID KHAN</u>	<u>CO</u>	<u>7382299621</u>	0863-2293178
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2	<u>SH. B.V.RAO</u>	<u>CMO</u>	<u>8333021960</u>	
		<u>(SG)</u>		

3	<u>SH. LOVE KUMAR</u>	<u>2IC</u>	<u>8731889477</u>	
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4	<u>SH. KULDEEP SINGH</u>	<u>2I/C</u>	<u>8333068570</u>	9440998619
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5	<u>SH.SANTOSH KR</u>	<u>2I/C</u>	<u>9492303043</u>	
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6	<u>SH. M.S. REEDY</u>	<u>DC</u>	<u>8333068573</u>	8555908893
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7	<u>SH. D.N SINGH</u>	<u>AC</u>	<u>8333068565</u>	9849958168
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8	<u>SH. SUBHEESH K.S</u>	<u>AC</u>	<u>9482978719</u>	9490196470
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9 SH. J SENTHIL AC 8333068548 7995497907

10 SH.VENU GOPAL NAYAR AC/M 9032476662

C/ROOM 8333068559 0863-2293050 ap10-ndrf@nic.in

11 BN NDRF(58 BN SSB) SANSKRITIK SANKUL MAQBOOL ALAM ROAD , VARANASI (UP)-221002

1 SH. ALOK KR. SINGH CO 9455511107 0542-2501102

2 SH.KOUSHLESH RAI 2I/C 8004931401

3 C/ROOM 8004931410 0542-2501101 up11-ndrf@nic.in

12TH BN NDRF(60 BN SSB) VILL- EMCHI,PO-DOIMUKK, DIST-PAPUMPARE ITANAGAR (A.P)

1 SH. UMESH KUMAR CO 9485236141 03621-242940

CHATNIYAL

2 SH. ARUN DEOGAM 2I/C 9485235469

3 C/ROOM 9485235464 0360- bn12.ndrf@gov.in
2277106/4

LIST OF MOBILE AND LANDLINE NUMBER OF 03 BN NDRF MUNDALI

S SL	Mobile & Landline Number	Rank	User Name	
01	9437964571	Comdt.	Shri Jacob Kispotta	Bn Comdr.
03	9438882009	Asstt.Comdt.	Shri G S Patel	“ C” Coy Comdr
04	9437964570	Asstt.Comdt.	Shri A K Patnayak	“B” Coy Comdr
06	9437025155	Asstt.Comdt.	Shri Surjit Singh	“E” Coy Comdr
07	9437581601	Insp/Exe	M K Choudhary	Team Comdr-3A
08	9437581602	Insp/Exe	Amarnath Singh	Team Comdr-3B
09	9438882027	Insp/Exe	D K Singh	Team Comdr-3C
10	9438882015	Insp/Exe	D K Pandey	Coy 2 I/C A Coy
11	9437581604	Insp/Exe	Chandeswar Prasad	Team Comdr-3D
12	9438882014	Insp/Exe	M R Mohanty	Team Comdr-3E
13	9437581606	Insp/Exe	U S Prasad	Team Comdr-3F
14	9438882028	Insp/Exe	S S Suman	B-Coy 2 I/C
15	9437581607	Insp/Exe	S K Singh	Team Comdr-3G
16	9438882029	Insp/Exe	Manoranjan Prasad	Team Comdr-3H

17	9437581609	Insp/Exe	Amit Gupta	Team Comdr-3I
18	9437581613	Insp/GD	Sunil Kumar Shanti	C-Coy
19	9438882091	Insp/Exe	Narender Kumar	Team Comdr-3J
20	9438882012	Insp/Exe	B Choudhary	Team Comdr-3K
21	9438882018	Insp/Exe	C K Sah	Team Comdr-3L
22	9438882030	Insp/Exe	S K Bhoi	“D” Coy 2 I/C
23	9437581603	Insp/Exe	Arvind Gajraj	Team Comdr-3M
24	9437581612	Insp/Exe	Vinit Prabhakar	Team Comdr-3N
26	9437964573	Insp/Exe	Shailendra Kumar	I/C QM & E-Coy 2 I/C
27	9437581605	Insp/Exe	D Panda	Team Comdr-3P
28	9438882017	Insp/Exe	S K Prasad	Team Comdr-3Q
29	9438882016	Insp/Exe	T H Chouba	Team Comdr-3R
30	9438882011	Insp/Exe	Rajeev Ranjan	Int Section
32	9438882010	Insp/Exe	P K Mishra	Reserve Inspector
33	9438882008	Insp/Exe	P K Yadav	Canine I/C

34	9437581614	Bn Control Room (Mobile)
35	9437581608	RRC DURG
36	9437964575	RRC BALASORE
37	9438882090	Wireless section
38	9937187222	Bn Control Room (Airtel WLL)

10 BN NDRF IMPORTANT NUMBERS

Sl No	Mobile & Landline Number	Rank	User Name
1.	9424410138	Commandant	Shri Zahid Khan
2.	8333021960	CMO (SG)	Shri B V Rao
3.	8731889477	2 I/C	Shri Love Kumar
4.	9440998619	2 I/C (MTO)	Shri Kuldeep Singh
5.	9492303043	2 I/C (ADJT)	Shri Santosh Kumar
6.	9849958168	AC	Shri D N singh
7.	9490196470	AC	Shri Subheesh K S
8.	7995497907	AC	Shri J Senthil
9.	8555921108	Inspector	Shri Sateesh
10.	04023565655	RRC Hyderabad	
11.	8912518380	RRC Visakhapatnam	

Annexure - 5

STATE GOVT. EMERGENCY & OSDMA TELEPHONE NUMBERS

Telephone No. of the officers & Staff of OSDMA

PABX-0674-2395398/2396901, FAX- 0674-2391871

E-mail: osdma@osdma.org, Website: www.osdma.org

Contact Numbers of all Officers and Staffs of SRC Office

Tel. No (Control Room) – 0674-2534177, Fax- 0674-2534176 Email id- srcodishagov@gamil.com

S.I no	Name	Designation	Office	Mobile Number
1	Shri Bishnupada Sethi (IAS).	SRC	2534180/2536721	9437022776

Sl. No	Name of officers	Designation	Telephone No.	E-mail address
1.	OSDMA office		0674-2395531 06742395398	
2.	Shri BishnupadaSethi, IAS	Managing Director	9437022776,	md@osdma.org
3.	Sri Pradeep. Kumar Nayak, OAS	Chief General Manager-I	9438504319	pradeepoas@gmail.com
4.	Sri Subhendra Kumar Nayak, OAS	Chief General Manager-II	9437281061	cgm2@osdma.org
5.	Dr.Rajanikanta Biswal, OAS	General Manager (P&A)	9437305454	rajanibiswal62@gmail.com
6.	Sri Prasanta Kumar Nayak	General Manager (T&C)	9437170179	nayak.prasanta5@gmail.com
7.	Sri Arabinda Ray	System Expert & MIS Specialist	9437106252	aray@osdma.org
8.	Sri Krushna Chandra Bisoi	Shelter Coordinator & Social Management Specialist	9437179693	krushna.bisoi@gmail.com
9.	Sri Bholanath Mishra	GIS Expert & Environment Specialist 357	9437106251	bnmishra.osdma@gmail.com

2	Shri Bishnupada Sethi (IAS).	Commissioner- Cum- SEY.(RD)	2536740/2698	9437022776 QTR.NO-2 Type VIII Unit-3,BBSR
3	Sri Mihir Chand Mallick OAS(SAG)	ACR	2394320 2356688(R)	9437240958
4	Sri Pravat Ranjan Mohapatra	DRC	2391601 (O) 2563237 (R)	9437306659
5	Sri Bikramaditya Barik	Joint Secretary	2395527	9938489674
6	Sri Una suryanarayan	S.P.E	2396527	9437075956
7	Bijay Kumar Das	AME	2510070 (cuttack)	9178584803
8	Rabinarayan Barik	OSD		9437230326
9	Biswanath Nayak	OSD		9438120069
10	Sri Shyamal Kumar Das	OSD		9437111705
11	Biswanath Sahoo	OSD		9439487066
12	Dwijabar Mallick	Desk officer		9668244107
13	Lalalendu Tripathy	ASO		9778363818 X
14	Ranjeet Nayak	ASO		9439688987
15	Manorama Madam	P.S		8895624239
16	Sri Bidyadhar Ghadai	P.S	2536721/2534180	9777157589

Annexure-6

Telephone Directory of Deputy Collectors, Emergency Up to 21.12.2018

	District	Name of Emergency Officer	Mobile No	Office No	Fax No.
1	Angul	Baitura Deep, OAS Lambodara Behera Sr. Clerk	9437193651 9437182539	06764-230980	06764-230685
2	Balasore	Kamalakanta Panda, ORS Subrat Ku. Ghosh Sr. Clerk	7008582029 9040647125	06782-262286 262647	06782-262208 241434
3	Baragarh	Dasarathi Bhoi, OAS Balmukunda Dip Sr. Clerk	9437417534 9861848043	06646-232112	06646-232840
4	Bhadrak	Jayashree Senapati Narayan Ch. Jena Sr. Clerk	8249948252 9938761971	06784-251881	06784-250880
5	Bolangir	Sankarsan Pradhan, ORS Ashok Kumar Mishra Sr.Clerk	9438286132 9853134697	06652-232452 230969	06652-233082
6	Boudh	Santisudha Patra, OAS Chita Ranjan Mishra Sr. Clerk	7894539422 9938380463	06841-222023	06841-222204
7	Cuttack	Prabodh Kumar Rout,ORS Subash Ch. Mishra Sr.Clerk (In Ch	8280079982 9439900953	0671-2507842 9337419494	0671-2301103
8	Deogarh	Susanta Kumar Nayak, ORS Khireswar Sahoo Sr. Clerk	7077318522 9437356471	06641-226843	06641-226301
9	Dhenkanal	Sasanka Sekhar Mishra, ORS Banaja Parida Jr. Clerk	9439073392 7540814924	06762-226507 221376	06762-225717
10	Gajapati	Satya Samparna Rout, ORS Bijay Kumar Patnayak Sr. Clerk Susil Kumar kara Jr. Clerk	9108392198 9439132722 9437139943	06815-222943	06815-222464
11	Ganjam	Pragyan Parimita Thatoi,ORS Nrusingha Mohapatra Sr. Clerk Murali Mohan Redi Jr. Clerk	9937396145/ 7008029258 8895583905 9437593522	06811-263978	06811-263344
12	Jagatsinghpur	Manorama Jali, OAS Prasant Kumar Mohapatra Sr.Clerk	9438045687 9438271305	06724-220368	06724-220299
13	Jajpur	Umesh Chandra Lenka Nakul Ch. Mallik Sr. Clerk	9437196191 9556998489	06728-222648	06728-222087
14	Jharsuguda	Sonasis Kisan, OAS	9438852757	06645-272902	06645-270868

		Chita Ranjan Sahoo Sr. Clerk	8908066957	271692	
15	Kalahandi	Surendra Tripathy Bishnu Charan Patra Sr. Clerk	9437044318 9438312572	06670-230455	06670-230303
16	Kandhamal	Pradyumn Mandal, ORS Abinash Mukhi, Jr. Clerk Santosh Patnayak Sr. Clerk	8249226874 9439176434 9438129910	06842-253650 -255602	06842-253905/ 253645
17	Kendrapara	Sambeet Kumar Satpathy (OAS) Raghu Das Sr.Clerk	7978648478 9178624842	06727-232803	06727-221603
18	Keonjhar	Suranjika Behera, ORS Prados Kumar satpathi (DPO) Minati Sahoo Sr. Clerk Pravat Ranjan Nayak Sr. Clerk	8895214073 (W) 9438676721 9895543979 8249852214	06766-255437	06766-254298
19	Khurda	Sandhya Rani Guru, ORS Nihar Ranjan Samal Sr. Clerk	9438619673 9040244151	06755-220002	06755-221003
20	Koraput	Debabrata Karathi, ORS Prakash Kumar Samal Sr. Clerk	8763290103 9437337842	06852-251381	06852-250466
21	Malkangiri	Pramod Kumar Behera, ORS Satya Narayan (Dealing Asst.)	9438028430 (W) 9437820232	06861-230442 06861-231372	06861-230356 231565
22	Mayurbhanj	Sujay Kumar Pati, ORS Girish Chandra Das, Sr. Clerk	8249298409 9437967757	06792-252759	06792-252221
23	Nawarangpur	Bikash Sethy, (ORS) Susanta Nayak Jr. Clerk Jotrimai Patra (DPO)	9078923498 7008390889 9437373001	06858-222434	06858-222344
24	Nayagarh	Dhoba Nayak, ORS Kailash Chandr Ojha Sr. Clerk	9776632323 7978776238 (w) 9437629046	06753-252978	06753-252566
25	Nuapada	Surendra Sahoo Smt. Reshma Devi, Sr. Clerk	9437188373 9938095539	06678-225357	06678-225465
26	Puri	Eitishree Nayak, OAS Ramesh Chandra Behera, Jr. Clerk	9937636910 7978395624 9861260956	06752-223237	06752-223939
27	Rayagada	Subrat Panigrahi Subash Ch. Bauri Jr. Clerk	8763243678 9124401828	06856-224062 224082	06856-222770
28	Sambalpur	Dharma Ranjan Panda Prashant Kumar Nayak Sr. Clerk	8093606032 7377130737	0663-2412407	0663-2404006
29	Subarnapur	Mukteswer Panigrahi Dinesh Ranjan Mishra, Sr. Clerk	9437921670 9437562469	06654-220362	06654-220345/ 220362
30	Sundargarh	Manaranjan Choudhary Biswa Ranjan Sahoo Sr. Clerk	8763099040 7008534383 9124029910	06622-272233	06622-273166/ 312766

Telephone Numbers of All Collectors of the State 15.12.2018

Sl. No	Name of the District	Name	STD Code	Office	Residence	FAX	Mobile
1	2	3	4	5	6	7	8
1	Angul	Shri Anil kumar Samal, IAS	06764	230567	230234	230685	94370-31784
2	Balasore	Ramesh Chandra Rout, IAS	06782	262001	262003	262208	99378-20076
3	Bargarh	Shri Indramani Tripathy, OAS (SG)	06646	232340	230041	230041(O) 231300(R)	94380-00044
4	Bhadrak	Shri Gyanaranjan Das, IAS	06784	250436	240220 240100	240800	94370-61000
5	Bolangir	Sri Arindam Dakua, IAS	06652	232223	232001	233082	88957-68995
6	Boudh	Shri Sitansu Kumar Rout, OAS (S)	06841	222203	222334	222204	9777809138
7	Cuttack	Sri Aravind Agarawal, IAS	0671	2508100	2301001	2301103	94375-72567
8	Deogarh	Sri Sudhansu Mohan Samal, IAS	06641	226354	226353	226301	99372-89529
9	Dhenkanal	Sri Nikhil Pavan Kalyan, IAS	06762	225602	225601 226500	225717	82800-66828

10	Gajapati	Sri Anupam Saha, IAS	06815	222397	222396	222464	94375-61919
11	Ganjam	Sri Vijaya Amruta Kulange, IAS	06811	263700	263800	263344	8280343075
12	Jagatsinghpur	Mrs. Yamini Sarangi, IAS	06724	220379	220199	220299	94370-48177
13	Jajpur	Ranjan Kumar Das, IAS	06728	222001	222330	222087	88951-66500 94372-86512
14	Jharsuguda	Sri Bibhuti Bhusan Pattanaik, IAS	06645	270070	270868	270868	94371-70868
15	Kalahandi	Dr. Gavali Parag Harshad , IAS	06670	230201	230233	230303	96683-03456
16	Kandhamal	Dr. Brundha D, IAS	06842	253602	253601	253905	94370-59960
17	Kendrapara	Sri Dasarathi Satapathy, IAS	06727	232602	232802 232002	232602 221603	94398-83093 94380-81713 94371-98636
18	Keonjhar	Sri Ashis Thakare, IAS	06766	255482	255401	254298 255474	87630-90000
19	Khordha	Sri Nirmal Chandra Mishra, IAS	06755	220001	2536949 224000	221567 2536949	94371-24029 94399-60560
20	Koraput	Sri K.Sudarshan Chakravarthy, IAS	06852	250700	250255 250477	250466	9439033567 76550-83469
21	Malkanagiri	Sri Manish Agrawal, IAS	06861	230323	230232 230345	230356	94370-30223
22	Mayurbhanj	Shri Vineet Bhardwaj, IAS	06792	252606	252601	252221	82800-66861
23	Nuapara	Dr. Ms. Poma Tudu, IAS	06678	225463	225464	225465	88959-85872
24	Nawarangpur	Sri Ajit Kumar Mishra, IAS	06858	222034	222345	222344	94372-03707
25	Nayagarh	Dr. N. Thirumala Naik, IAS	06753	252333	252240	252566	94370-23381
26	Puri	Sri Jyoti Prakash Das, OAS	06752	222034	222033 224257	223939	9937169310
27	Rayagada	Smt. Guha Poonam Tapas Kumar, IAS	06856	222354	222345	222770	8763-004567
28	Sambalpur	Sri Samarth Verma, IAS	0663	2411022	2411001	2412116	94392-77733
29	Sonepur	Shri Madhusudan Mishra, IAS	06654	220201	220353	220345	94371-98636
30	Sundergarh	Sri Surendra Kumar Meena, IAS	06622	272265	272225	273166	82800-66858
01	IMD	Habibur Rahaman Biswas	0674	2596116	2596129	2596116 2596010	09433125951
02	R.D.C (CD) Cuttack	Shri Dodda Venkata Swamy, IAS	0671	2508362		2607906	9437330551
03	R.D.C (ND) Sambalpur	Shri Dodda Venkata Swamy, IAS	0663	2411537	2410975	2411537	9437330551
04	R.D.C (SD) Beherhampur	Shri Temjenwpang Ao, IAS	0680	2281456	2292755	2292750	9437183200

Telephone Numbers of All A.D.M of the State 15.12.2018.

Sl. No	Name of the District	Name of Additional District Magistrates	Mobile No.	Office No.
1	Angul	Shri Tapan Kumar Satapathy	7978920105 9437332013	06764-230491
2	Balasore	Shri Manas Ranjan padhy	9439344322	06782-262120

3	Baragarh	Shri Tapiram Majhi	9439943838 9937630010	06646-235040
4	Bhadrak	Shri Shyama Bhakta Mishra	94379-33766	06784-251888
5	Bolangir	Shri Laxmikant Pyarelal Pradhan	9437165171	06652-232943
6	Boudh	Shri Ramakant Sethi	9437306002	06841-222144
7	Cuttack	Shri Raghuram R. Iyer Shri Bijay Khandayat Ray	9437273547 9437325464	0671-2508265
8	Deogarh	Shri Dharam Hansdah	9437247527	06641-226358
9	Dhenkanal	Shri Purna Chandra Mishra	9438290100	06762-225700
10	Gajapati	Shri Laxmikanta Sethi	9437147962	06815-223333
11	Ganjam	Shri Bijaya Kumar Das Shri Kabindra Kumar Sahoo	94398-50771 (Revenue) 94370-84525 (General)	06811-263927
12	Jagatsinghpur	Shri Sachida Nanda Sahoo	9437388776	06724-220147
13	Jajpur	Shri Mihir Prasad Mohany	9437276663	06728-222479
14	Jharsuguda	Shri Trilochan Majhi	9437667270	06645-272802
15	Kalahandi	Sri Sarat Chandra Srichandan	9438414888	06670-230464
16	Kandhamal	Shri Basant Kumar Sahoo	9439255208	06842-253604
17	Kendrapara	Shri Basant kumar Rout	9437239562	06727-232601
18	Keonjhar	Shri Bhakta Charan Pradhan	9437131485	06766-255408
19	Khurda	Shri Manoranjan Mallick	9437386765	06755-221755
	Bhubaneswar	Arun Kumar Behera	9437417761	0674-2393440 2536949
20	Koraput	Shri Deben Kumar Pradhan	9438782856	06852-251212
21	Malkangiri	Shri Lingaraj Panda (PD) In-Charge	9437180098	06861-230388
22	Mayurbhanj	Shri Brajabandhu Bhola Aboli Sunil Naravane, IAS	9437289777 9960228216	06792-252646 06792-259005
23	Nawarangapur	Sri Parikhita Sathy	9437222114 7077404536	06858-222040
24	Nayagarh	Shri Prasan Kumar Das	94375-29318	06753-252980
25	Nuapada	Shri Sitaram Patel	8895444824	06678-223352
26	Puri	Shri Binay Kumar Dash	9437286649	06752-222061
27	Rayagada	Shri Sudhakar Sabar	9438686351	06856-222353
28	Sambalpur	Shri Ajaya Kumar Jena	9937348506	0663-2410386
29	Subarnapur	Shri Sarat Chandra Panda	9437276455	06654-220090
30	Sundargarh	Shri Bhaskar Chndra Turak	9437188555	06622-273889

Contact Details of SPs of the State Odisha Dt. 16.05.2018

SI	Name of the	Name of the Officer	STD	Office	Residenc	Mobile	Email
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	District		Code		e		
1	2	3	4	5	6	7	8
1	Angul	Sri Mitrabhanu Mohapatra, IPS	06764	230316	237500	9438916430	spang.odpol@nic.in
2	Balasore	Banoth Jugala Kishor Kumar, IPS	06782	262004	262005	8763459726	spbls.orphol@nic.in
3	Baragarh	Sri Mukesh Kumar Bhamoo, IPS	06646	234480	234343	9461138300	spbgr.odpol@nic.in
4	Bhadrak	Sri B. Gangadhar, IPS	06784	240120	240120	8763459547	bhpul@ori.nic.in
5	Bolangir	Sri K. S. Subramani. IPS	06652	232020	233063	8763865027	spblgr.orphol@nic.in
6	Boudh	Sri S. S. Sekhar, IPS	06841	222205	222206	9438916690	spbdh.orphol@nic.in
7	Cuttack	Madhaba Charana Sahoo, OPS-1	0671	2428116 2368116	2503301	9438916200	spctc.orphol@nic.in
8	Deogarh	Ms. Anupama James	06641	226100	226281	9438916460	spdgr.orphol@nic.in
9	Dhenkanal	Sri Santosh Kumar Nayak , OPS	06762	225777	225010	9437106171	dhepola@nic.in
10	Gajapati	Sri Amulya Kumar Das, OPS	06815	222533	222566	9438916700	spgjp.olpol@nic.in
11	Ganjam	Brijesh Kumar Roy, IPS	06811	263366	263266	8763294346	spgjm@odpol.nic.in
	Berhampur	Pinaki Mishra, IPS	0680	2291000	2291100	8895944944	Spbpr.odpol@nic.in
12	Jagatsinghpur	Sri Prakash R, IPS	06724	220115	220015	9439876581	spjsp.orphol@nic.in
13	Jajpur	C. S. Meena, IPS	06726	240112	240110	8763294357	spjip.orphol@nic.in
14	Jharsuguda	Aswin Kumar Mohanty	06645	270808	270999	9438916530	spjds.odpol@nic.in
15	Kalahandi	Sri M.S. Sampat, IPS	06670		232333	9438001323 7682833100	spkld.odpol@nic.in
16	Kandhamal	Sri Pradeep Singh, IPS	06842	253610	253611	7655083376	spkdml.odpol@nic.in
17	Kendrapara	Sri Niti Sekhar, IPS	06727	274700	221096	9438916260	Spkdp.orphol@nic.in
18	Keonjhar	Sri Jay Narayan Pankaj, IPS	06766	254106	254286	9437052115	spknj.odpol@nicv.in
19	Khurda	Shri Diptiranjana Ray, OPS	06755	220535	220113	9437041583	spkda.orphol@nic.in
20	Koraput	Sri K. V. Singh IPS	06852	250901	250900	9437378000	spkpt.odpol@nic.in
21	Malkangir	Sri. Jagamohan Meena, IPS	06861	230325	230370	8763004117	spmkg.orphol@nic.in
22	Mayurbhanj	Sri Awinash Kumar,	06792	252647	278232	9438153308	spmbj.orphol@nic.in

		IPS					
23	Nawarangapur	Sri Bibekananda Sharama	06858	222302	222301	9438916840	spngpr.orpol@nic.in
24	Nayagarh	Sri Ashis Kumar Singh, IPS	06753	252088	252188	9438916290 8895046814	spngr.orpol@nic.in
25	Nuapada	Shri Parmar Smit Parshottamdas, IPS	06678	225478	225226	8763004107	spnprorval@nic.in
26	Puri	Dr. Sarthak Sarangi, IPS	06752	225400	223280	8280382804	Sppri.orpol@nic.in
27	Rayagada	Sri Rahul P. R., IPS	06856	222304	222323	7382491864	sprgda.odpol@nic.in
28	Sambalpur	Sri Sanjeev Arora, IPS	0663	2412330	2411002	9438054259	spsbp.odpol@nic.in
29	Subarnapur	Sri Prafulla kumar Patra, OPS	06654	220349	220351	9437188399	spsnp.orpol@nic.in
30	Sundargarh	Smt. Soumya Mishra, IPS	06622	273324	272218	9438916650	spsngodpol.nic.in

Important Contact Details 2020

Sl. No.	Organization	Name	Designation	Office	Mobile
1	Fire Service	Sukant Sethi B.V. Tudu	Chief Fire Officer	0671-2306409	9437394201 9437935991
2	NDRF 3rd BN NDRF, PO-Mundali, Cuttack	Sh. Jacob Kispotta	Commandant	0671-1879710	09470587743 09437964571
3	ODRAF, Cuttack	Sri Lingaraj Parida, OPS	Commandant	0671-2442148	9861039267
	ODRAF	P.V. Rout Nath Sanjay Mohanty Dr.Sapani Sahoo T.B.Rout-	Commandant		9438800008 73772 87571 94375 11336 94370 75468 93378 91171
4	NDMA	Control Room	In charge	011-26701728	9868891801

				9868101885
5	NDRF 3rd BN NDRF, J.K Tiwari PO-Mundali, Cuttack		Dy. Commandant	9437964702
6	NDRF Control Room	0671-2879711		9937581614
				9937187222
	Coast Guard			9938516085
7	Headquarters Coast Guard)	06722 220174	06722 223359	441907710
	Badapadia,			641901710
8	Gopalpur Headquarters Coast Guard	06811-260175		9662263836

TELEPHONE NUMBERS OF SENIOR STATE GOVT OFFICERS OF ODISHA

Sn	DESIGNATION	OFFICE	RESIDENCE	FAX
1	Chief Secretary	2534300 / 2322196 / 2536700	2534400 / 2595485	2536660
2	Secretary to CM (CM's Secretariate)	2536682 / 2322164	2596935	2535100
3	Spl. Secretary to CM	2596470		
4	Principal Secretary (Home)	2531515 / 2322461	2533722	2402115
5	Director General Police, cuttack-9438916666	2304451	0674-2555500	2304354
6	Inspector General Police, (Rly), Cuttack	0671-2306615	2307500,2306355	2306615
7	Commissioner-cum-Secy. (Inf. and Public Relation)	2536736	2556588	
8	Commissioner-cum-Secy. (FP. Medical/Health)	2536632	2392507	2395235
9	Commissioner-cum-Secy. (Revenue)	2322658,2539023	2553654	2393832
10	Special Relief Commissioner	2536721 / 2607346	2535232 / 9437005121	2415292
11	Managing Director (OSDMA) (OSDHA@OSDHA.ORG) G)osdma@osdma.org	2395398-/ 2395531		2391871 / 2396681
	SPECIAL RELIEF COMMISSIONER CONTROL ROOM	2534177 / 25347180		
STD CODE : BHUBANESWAR – 0674, CUTTACK – 0671				

Special Relief Commissioner Control Room/ Bhubaneswar- 0674-2534177. 2534180

Annexure - 7

TELEPHONE NUMBERS OF SENIOR STATE GOVT OFFICERS OF ANDHRA PRADESH

STD CODE : 040				
Sn	DESIGNATION	OFFICE	RESIDENCE	FAX
1	Chief Secretary		23416060	23453700
2	Principal Secretary to CM (CM Secretariat)	23454664	23412663	23454828
3	Special Secretary to CM	23453856,23452421,		FAX-23450270
4	Principal Secretary (Home)	23452143	23555376	23450175
5	Director General(Police)	23235170,23232831,,23235770-	23244333	23296565
6	Addl. Director General Police (Railway)	23231242. 23235498	23896727	27852301,mobile-9908017309.
7	Commissioner (INF and PR)	23394038	23350258	2395187
8	Commissioner (Family Welfare Medical/Health)	24650365	55776441	24652267
9	Special Chief Secretary (Revenue)	23450443,23450831	23548004	23452835
10	Commissioner Disaster Management	23450779,23452768	9908132008	23451836
11	Managing Director APSRTC		23542334	27617135
12	SPECIAL COMMISSIONER DISASTER MNAGEMENT	070-93896990	23452768	23451836

Annexure - 8

TELEPHONE NUMBERS OF SENIOR STATE GOVT OFFICERS OF CHATTISGARH

STD CODE : 0771			
Sn	DESIGNATION	OFFICE	RESIDENCE
1	Chief Secretary	2221207 / 2221208	4267109 FAX-2220206
2	Joint Secretary (CM & GA)	2535434	2882350
3	Dy. Chief Secretary to CM	2510308	4282096
4	Secretary (Home)	2510390 / 2221331	23221255
5	Director General	2221100 / 2211201	2331255 /9479190000
6	ADD DIR GENERAL RAILWAY	2511198	2241077 / 9479190097
7	Secretary (Information)	2444151/4024406	2411910
8	Joint Secretary (Health)	2510948	9425253237
9	Secretary to Governor	2331102 FAX-2331104	9425203199
	PRINCIPAL SECRETARY HEALTH	2510269	7898450000

Annexure - 9**TELEPHONE NOS OF FLOOD CONTROL CENTRES OF ODISHA**

Designation	Office	Res/Mobile	FAX
Flood Control Room	0674-2395951	-	2395953
EIC water Resources	0674-2390180	2565378	2392486
CE & BML, Mahanadi Basin	0674-2390185		2395953
CE & BMU, Mahanadi Basin SAMBALPUR	0663-2430866	2430899	2430877
Flood Control Room MUNDALI	0671-2381966	0663-2430292	-
CE & BM Rushikulya	0680-2281144 9438792671	2202366	2207933
CE & BM Bramhani Rt Basin IRRIGATION	0676-2223264		2223264
CE & BM Bramhani Lt Basin SAMAL	9937821866 /06760266333		
CE & BM Baitarani BARIPADA **			
CE Upper Indravati	06673-252288		252206
CE OHPC Upper Indravati			
COLAB	06854-242035		
SE Hirakud Dam Circle	06632430001	2430002	2430877
Director(O) OHPC	0674-2541315	09432341691	2505732
Director NIC	0674-2508438	2544243	2544132
Director Monitoring	06742544132/62		2544132
DY DIR MONITORING	06742544132/62	2742675	2544132
NIC NETWORK DEPARTMENT	2500980/2511592		

Annexure - 10**IMPORTANT TELEPHONE NUMBERS OF HOME GUARDS AND FIRE SERVICE ESTABLISHMENT:-
ODISHA**

Sn	Officers	Code	Fax	Office	Residence	Mobiles
1	D. G. P. F. S. (O)	0671	2300317	2300317	2307809	9437031695
2	Addl. C. G. HGS & FS / IGPFS	0671		2300584	2556855	9437463322

3	. I. G. F. S. (O)	0671	2300584	2300584		9437085000
4	J. S. O. HGs	0671	2303387	2303387		9437889111
6	C F O(O) CTC	0671	2306409	2306409	2304995	9437394201
7	F. O. (Pr) / BBS	0674		2560784	2561305	9437056220
8	D. F. O. NR / SBP	0663		2546050		9439503165
9	D. F. O. SR / BPR	0680	2220028	2220050		9437276545
10	D. F. O. HQ / CTC	0671	2307969	2307969		9040217094
12	DIR. F. O. FPW / BBSR	0674				9437271739

Annexure – 11

TELEPHONE NUMBERS OF FIRE STATIONS IN A P & C G PORTION OF ECOR

Andhra Pradesh (A P)			Chattishgarh (C G) *****		
Srikakulam Dist.			Mahasamund Dist.		
Srikakulam	08942	222099	Mahasamund	07723-222090	9826662967
Narasennapeta	08942	276777	Bagbahar	09926162114	
Ichhapuram	08947	231101	Bastar Dist.		
Palasa	08945	241101	Jagdalpur	07782-222899	9425266828
Sompeta	08947	234101	Dantewara Dist.		
Tekkali	08945	244277	Dantewara		9406083938
Vizag Dist.			Banheli	07857-230349	7857230261
Kotavalasa	08966	263101	Raipur Dist.		
Vishakhapatnam	0891	2536582	Raipur	0771-2274101	9109953001
GAJUWAKA	0891	2517780			
MARRIPALEM	0891	2558470			

Annexure – 12

Details of Indian Metrological Department (Cyclone Detection & Warning center) are as under:

Sl No	Name of Officers/Designation and Location of Deployment	STD Code	Telephone no (O)	Mobile No.	Fax Nos.
1	Sri K RAMCHANDRA RAO Director, CYCLONE Vishakhapatnam	0891	2543031/2543032/2543034 2543041 (R)	9490753428	2543033
2	DR. SARAT CHANDRA SAHOO Director, IMD, Bhubaneswar	0674	2596116	9437085328	2596010
3	Director, Cyclone Detection Center, Bhubaneswar	0674	2534627/ 2534737		

4	Doppler weather Raddar Cyclone Detection Center, Paradeep	06722	220100		
	Rohit Shukla, Scientist "B"	06722	223330 (O)	09711677557	
	Tapan Kumar Das, Asst. Metrologist	06722	220100 (O)	09437003170	
5	Cyclone Detection Center, Bhubaneswar	0674	2596093, 2596214		2596010 2596093 2596116
6	DUTY OFFICER IMD BBSR	0674	2596093 (24*7)		

Annexure - 13

TELEPHONE NUMBERS OF ARMY, NAVY, AIR FORCE OFFICIALS

Unit	Name & Address	Phone Number
Nodal Officer (Air Force, Navy & Army)	Director (Operational logistics), HQ Integrated Defence Staff, Ministry of Defence	011-23005126(O) / FAX-011-23005226
Navy	Naval HQ (War Room, Director of Naval Operation)	Extn through exchange No. 011-23014167
Navy	Duty Officer (Maritime Operations Centre), HQ WNC, Mumbai	022-24316558, Extn. Through Exch. No. 022-22663030
Navy	Duty Officer (Maritime Operations Centre), HQ ENC, Visakhapatnam	Extn through exchange No. 0891-2578000
Navy	Duty Officer (Maritime Operations Centre), HQ SNC, Kochi	0484-2872372 FAX 2872390
Coast Guard	Operations Officer/Indian Coast Guard / HLZ	03224-263217
Coast Guard	Communication Centre/Indian Coast Guard/ HALDIA	03224-263407 FAX-264541
Army	Station HQ / Jamshedpur	0657-2431633
Army	Station HQ / Kolkata	033-24980579
Army	Commandant / Chandipur / Balasore	06782-262031 (R)
Air Force	Eastern Command SHILLONG	0364-2561461/ 2/3/4/5/6/7 FAX 2560777
Air Force	Chief Operations Officer. Midnapur	03222-277240/296641 Extn. Through exchange
Air Force	Air Force Station / Kolaiakunda	03222-232081 Extn. Through exchange
	Chief Administrative Officer	03222-232081 Extn. Through exchange
	Sr. Medical Officer	03222-232081 Extn. Through exchange
Air Force	Chief Operations Officer / Barrackpur	033-25921251

		Extn. Through exchange
MIDNAPUR AIRFORCE EXCHANGE	03222-277240/296641	
KOCHI NAVAL TELEPHONE EXCHANGE	0484-2879999	
VSKP NAVAL TELEPHONE EXCHANGE	0891-2578000	
DELHI NAVAL TELEPHONE EXCHANGE	011-23014167	
MUMBAI NAVAL TELEPHONE EXCHANGE	022-22663030	
Air Force	Radar Station / Salua / Paschim Midnapur	03222-277240/296641 AIR FORCE TELEPHONE EXCHANGE

Anneture-14

TELEPHONE NUMBERS OF PARA MILITARY ESTABLISHMENTS

Unit	Name & Adress	Phone Number
CISF Unit	Libiyan Tee Ware House (LTW)	033-24492046
CISF Unit	CISF Unit, CPT, Kolkata, New Traffic Buildng, 40 CGR Road, Kolkata-43, NEZ / Kasba Control Room	033-24431241 033-24430685
BSF	DIG Office, South 2B Lord Sinha Road, Kolkata-71	033-2577887
BSF Unit	BSF Control Room	033-25778872
CISF Unit	Haldia CPT (wireless section)	03224-252222
CISF Haldia	Commandant, CISF / Haldia	03224-252229 (O) / 263335 (R) MOB-9434052230
EFR TELEPHONE EXCHANGE	03222-277238	
EFR	Commandant, EFR Salua, Kharagpur	FAX -03222-296667 MOB-9038887650

Annexure – 15**TELEPHONE NUMBERS OF TV CHANNELS & AIR STATIONS over ECoR**

STATE	SN	Name of station	Telephone TV center	Air stations
O R I S S A	1	Bhubaneswar	0674-2301048	2511350
	2	Cuttack	0671-2315600	2301438
	3	Sambalpur	0663-2404868	2410507
	4	Bhawanipatna	06670-230911	230911
	5	OTV	0674-7117300	-
	6	ZEE Kaling	07377657017	-
	7	MBC	06746664444,Fax-2586791	-
	8	Kaling TV news	06746633011	-
	9	News-7	06746613333	-
	10	KANAK news	06742585351 /5355/6550/6051	
	11	ETV (Odia)	06742506207,2506208.	
	12	Naxatra news	06742553033, 2551665	
	13	DD	9437160390	
A P	1	VISHAKHAPATNAM	0891-2549109	0891-2564260
	2	ETv (telugu)	8415-246555	
	3	TV-9 telugu	9948290901, 914023352336	Fax- 914023351553/22
C G	1	RAIPUR	0771-2283852	0771-2423520
	2	Prompttime	91-771-6501234	
	3	Savdhan- ch-3	91-771-4011120	
	4	Savdhan	91-771-4011102	
	5	Etv news	91-771-4073396	
	6	Pearl news	91-9826679701	
	7	Sadhna news	91-9039365846	
National	1	ZEE NEWS Mumbai	91(22) 56971234	
	2	AAJ TAK	91-113684888/78	
	3	DD/NDLS	01123352558	Fax-91113684895
	4	CNBC(NDLS)	91-11-41506112/14	Fax- 911141506115
	5	CNBC/Mumbai	91-2256509598	

	6	BBC/india	91-22-22816590/94	
	7	CNN	2256607430	
		NEWS AGENCIES		
		UNI	2536776	
		PTI	2530535 / 2530602	
		PIB	2411360	

Annexure - 16**NAME OF THE AIR STRIPS MAINTAINED BY STATE GOVERNMENT**

SN	Name of the Airstrip	District	Coordinates	Elevation in feet	Runway Direction	Length & Breadth	Type of surface	Distance in N.M
1	2	3	4	5	6	7	8	09
1	Barbil	Keonjhar	2207 N / 8524 E	1000	18/36	3000 X 150	Kuchha	113
2	VSKP	VSKP						
3	Birasal	DNKL	2059 N / 8541 E	260	09/27	3000 X 150	Kuchha	42
4	Hirakud (Jamadarpalli)	SBP	2135 N / 8400 E	681	15/33	3600 X 150	Tarma-Cadam	130
5	Jaypore	Koraput	1852 N / 8233 E	1950	16/34	3000 X 50	-do-	201
6	Raisuan	Keonjhar	2140 N / 8535 E	1500	18/36	3000 X 150	-do-	87
7	Nawapada (Gotma)	Nawapada	2052 N / 8230 E	1058	18/36	3286 X 600	Kuchha	191
8	Padmapur (Sativata)	Bargarh	2102 N / 8302 E	650	11/29	3500 X 180	-do-	165
9	Phulbani (Gudari)	Kandhamal	2027 N / 8416 E	1734	18/36	3500 X 150	Tarma-Cadam	90
10	Rairangpur (Dandbose)	Mayurbhanj	2218 N / 8607 E	950	18/36	4000 X 100	Kuchha	126
11	Rangeilunda (Gopalpur)	Ganjam	1918 N / 8452 E	100	18/36	3442 X 200	Tarma-Cadam	76
12	Tusra	Bolangir	2030 N / 8326 E	550	06/24	4000 X 150	-do-	135
13	Utkela	Kalahandi	2005 N / 8310 E	750	04/22	3000 X 150	-do-	152

NAME OF THE AIRSTRIPS MAINTAINED BY OTHER AGENCIES

1	Rourkela	Sundergarh	2216 N / 8449 E	655	09/27	4000 X 100	Tarma - Cadam	139
2	Therubali	Koraput	1920 N / 8325 E	785	03/21	4000 X 200	-do-	140
4	Sukinda	Jaipur	2101 N / 8545 E	400	06/24	2925 X 130	-do-	48

List of Airports in Odisha

The airport list includes commercially used (domestic and international), privately used, military and flying schools.

Airport Name	City Served	Category
Savitri Jindal Airport	Angul	Private
Rasgovindpur Airstrip	Balasore	Domestic
Barbil Tonto Aerodrome	Barbil	Private
Biju Patnaik International Airport	Bhubaneswar	International
Berhampur Airport	Brahmapur	Domestic
Charbatia Air Base	Cuttack	Defence
Hirakud Airstrip	Hirakud / Sambalpur	Domestic
Jaipur Airstrip	Jaipur	Private
Jeypore Airport	Jeypore	Domestic
Jharsuguda Airport	Jharsuguda	Domestic
Kendujhar Airstrip	Kendujhar	Private
Lanjigarh Airstrip	Lanjigarh	Private
Phulbani Airstrip	Phulbani	Private
Rourkela Airport	Rourkela	Private
Nawapara Airport	Nandapur	Domestic
Nuagaon Airport	Balangir	Domestic
Utkela Airstrip	Bhawanipatna	Domestic

List of Airports in Chhattisgarh

Airport Name	City Served	Category
Bilaspur Airport	Bilaspur	Flying School
Raigarh Airport	Raigarh	Domestic
OP Jindal Airport	Raigarh	Private
Jagdalpur Airport	Jagdalpur	Domestic

<u>Swami Vivekananda Airport</u>	<u>Raipur</u>	Domestic
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List of Airports in Andhra Pradesh

Airport Name	City Served	Category
<u>Sri Sathya Sai Airport</u>	<u>Puttaparthi</u>	Private
<u>Rajahmundry Airport</u>	<u>Rajahmundry</u>	Domestic
<u>Visakhapatnam Airport</u>	<u>Visakhapatnam</u>	International
<u>Nagarjuna Sagar Airport</u>	<u>Nagarjuna</u>	Flying School
<u>Kadapa Airport</u>	<u>Kadapa</u>	Domestic
<u>Tirupati Airport</u>	<u>Tirupati</u>	Domestic
<u>Vijayawada Airport</u>	<u>Vijayawada</u>	Domestic

List of Airports in West Bengal

Airport Name	City Served	Category
<u>Balurghat Airport</u>	<u>Balurghat</u>	Domestic
<u>Barrackpore Air Force Station</u>	<u>Barrackpore</u>	Defence
<u>Behala Airport</u>	Behala	Domestic / Flying School
<u>Cooch Behar Airport</u>	<u>Cooch Behar</u>	Domestic
<u>Kazi Nazrul Islam Airport</u>	<u>Asansol / Durgapur</u>	Domestic
<u>Hasimara Air Force Station</u>	Hasimara	Defence
<u>Kalaikunda Air Force Station</u>	Kalaikunda	Defence
<u>Netaji Subhash Chandra Bose International Airport</u>	<u>Kolkata</u>	International
<u>Malda Airport</u>	<u>Malda</u>	Domestic
<u>Panagarh Airport</u>	<u>Panagarh</u>	Defence
<u>Bagdogra Airport</u>	<u>Siliguri</u>	International

HELICOPTER CHARTER SERVICE IN ODISHA , ANDHRA PRADESH & CHHATISGARH

Sl .no	Name of service provider	Address	telephone number
1	Aurea Aviation PVT.Ltd	Raipur , BBS	91-9987341111
2	Whistler Aviation	NDLS, BBS	91-11-25672437
3	Gachopers.com	Gurgaon, BBS, Raipur & VSKP	91-124-4816114

4	Jet service Aviation	Gurgaon, BBS, Raipur & VSKP	91-124-2214022
5	F4S Aviation PVT.LTD	NDLS, BBS, Raipur & VSKP	91-11-65388861
6	Atom Aviation service pvt.	DLI, BBS, Raipur & VSKP	91-1125673726
7	Anket Air service	ADI, BBS, Raipur & VSKP	91-79-26859345
8	Pataliputra Air Charter	DLI, BBS, Raipur & VSKP	91-11-64601699
9	SAR Aviation service Pvt.	DLI, BBS, Raipur & VSKP	91-11-42460691
10	Aureu Aviation service	DLI, BBS, Raipur & VSKP	91-11-42460691
11	Arsi Aviation & consultan	ADI, BBS, Raipur & VSKP	91-7925710938
12	CareMytrip	Haridwar, BBS, Raipur & VSKP	91-1334-260080
13	Pro –Aero Modelling	ADI, BBS, Raipur & VSKP	91-79-65226300
14	DP Enterprise	ADI, BBS, Raipur & VSKP	91-9978831661

Additional Helicopter services.

Sl.	Odisha	Address	telephone
1	Air Ambulance Aviation	Plot-209 (A), Palaspali/ BBS	09540161344
2	Air Odisha Aviation	MIG-9 , Aiginia	0674-2470747
3	Air Odisha Aviation	Plot-353/2324 /BBI Air port	0674-3277747
4	Air Charter service by Vyaapak Aviation	Jagatsinghpur, Odisha	08882717501
5	Biju pattanaik Inter national Air port	BBS	0674-2596305

Sl.	Andhra Pradesh	Address	telephone
1	Mannu Tour & Travel service	Ludhiana & VSKP	91-921671027
2	Easy Travels	Ludhiana & VSKP	91-161-2440882
3	Dhenoo Aviation	Ludhiana ,VSKP, Raipur	91-79-27622424

Sl.	Chhatigarha	Address	telephone
1	Air Charter Service ltd	Raipur	91-9998111179
2	Whistler Aviation	Raipur	91-9999496669
3	Fly Air Charters	Raipur	91-771-4277232
4	Dhenoo Aviation	Ggandhinagar, VSKP & Raipur	91-79-27622424

5	Raja Bhoj air Service	Raipur	91-7746869999
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Air Ambulance control Room-

91-9845446634

91-9540161344 (NDLS)

Multi-speciality flying ICU on air- Hot line call-91-9845446634, 91-9540161344,

91-9645744117.

WEB-www.airambulanceaviation.com

E.Mail airambulance@airambulanceaviation.com

Worldwide contact centres – <http://goo.gl/fbRSjm>

Annexure – 17

TELEPHONE NOS OF VOLUNTEER ORGANISATIONS & NGOS

Action aid India, Regional Office Orissa, Plot No. 331/A, Sahid Nagar Bhubaneswar-751007, Orissa Tel/Fax: 0674-2544503/ 2544224/2502279 www.actionaidindia.org

DFID, 17 Forest Park, Bhubaneshwar - 751 009 Telephone : (+91) (674) 2533 359 / 2530 512

Fax : (+91) (674) 2530 228 www.dfidindia.org

State NGO Coordinator, Deptt. Of Health & FW Government of Orissa Bhubaneswar (Orissa)

Telephone: (0674) 2322411, Email : manu2orissa @ yahoo .com

Pragati Samaj

AT/PO-Dalakasoti , Via-Balipatana Pin-752102 , email:pragatisamaj@gmail.com

Centre for Health And Social Development" (CHSD)

At/Po: Rajiv Nagar, Plot No Mig-95, Aiginia, Khandagiri, Bhubaneswar,

E-mail-chsdorissa@gmail.com

Nilakantha Yubaka Sangha, AT/PO-Dalakasoti Via-Balipatana, Khurda, Pin-752102 email:nilakantha.ys@gmail.com, Phone: 09937936565

Centre for Environmental Studies (CES), N2/150, Nayapalli Government of Orissa. Bhubaneswar - 751 015,Tel : 0674-2551853 Fax : 0674-2400681 Website : <http://www.cesorissa>

Centre of Youth and Social Development,

E-1, Institutional Area, Bhubaneswar Orissa, India - 751 013, Tel # + 91-674-2301725 / 2300774, E-mail : cysdbbsr@sancharnet.in , www.cysd.org

UNDP , Orissa 256 Forest Park, Bhubaneswar-9, Orissa Ph: 2534755,534850,534851,

Fax: 534754 , www.undp.org

Ruchika Social Service Organization, G-6, Ganganagar, Unit-VI, Bhubaneswar, Pin :751001, Orissa, India Office: 91 . 674 . 2532611 Home: 91 . 674-2432956 Fax: 0674-2535214, Emails: rssobbs@hotmail.com info@ruchika.org www.ruchika.org

RESO:- Rural Educated Student Organisation , Sananuagan, Retang Rly Staion, Dist- Khurda. Secy-919438186412. (Social works)

Orissa Khadi And Village Industries Association, Plot No.805 &823(P), At Jaidev Vihar P.O. RRL, Bhubneshwar-751013,

Shanta Memorial Rehabilitation Centre, 108 - D, Master Canteen Bldg Station

Unit-III, Bhubaneswar - 751 001 Orissa, Phone: 0674 - 2506234

HELPAge INDIA, Plot No. 1488/2536 N-4 Area IRC Village,Nayapalli-1374 AT P.O. Bhubaneswar (Orissa) – 751015, Tel.No.: 0674-2559644, www.helpageindia.org

People's Rural Education Movement, Marella Gardens Berhampur - 760 005 Ganjam, Orissa

Phone : 0680 - 204338, 200111, 242401

Nigamananda Education Centre, AT/PO Bhajannagar Defence Colony P.O. Baunsalundi Bhanjanagar Ganjam – 761126 Orissa, Phone : 06821 – 43040

Lower Income People's Involvement for Community Action, Ambapua At post.Engineering School Behrampur -10 Ganjam, Phone : 0680 - 202753, 270001, 270306 Fax : 0680 – 202753

United Artist Association, AT/ PO Ganjam, Ganjam - 761 026 Orissa,

Phone : 06811- 64314 Fax : 06811 - 64314, 64255

Gram Vikas, Mohuda Village Via. Berhampur - 760 002 Dist. Ganjam Orissa Phone : 0680 - 220 9755 / 220 9757 / 222 2756 / 222 2758 / 222 2759 / 222 1760 / 222 2761 / 222 1763 Fax : 0680 - 220 9754.

SAHAYA, At. Matala Bur PO Kasabenty Brahmagiri - 752 011, PURI, Orissa,

Tel : 6752- 235881

Dahikhai Jubak Sangha, AT PO Lodhachua Nayagarh- 752 026, Puri, Orissa

Tel : 06755-28243 Fax : 06755-28243

Committee for Legal Aid to Poor (CLAP). Address: 367, Markat Nagar, Sector-6, Cuttack- 753014, Orissa, India. Phone: 0671-2363980, 2365680, Fax: 0671- 2363980

WWF-INDIA, BDA Market Complex, Tankapani Road, Bhubaneswar – 751018

Director Phone : 0674 – 2434750

YOJANA, Youth On Justice and National Actions 41, Ekamra Villa Jaydev Vihar

Bhubaneswar - 751 015, Orissa , Phone : (0674) 555823, 557824

Gania Unnyan Committee, at/P.O. Belapadapatna, Dist. Nayagarh, Orissa, Pin - 752 085 Tel/Fax: 06757-226022, E-mail - gucorissa@yahoo.com.

Bal Jagruti Association, 462- Sabar sahi,Nayapalli,Near new AG colony,

Bhubaneswar, Contact - Ranjan Kumar Biswal, Joint secreatry

M 9337106883,9337113458,Telefax-011-26045638,Ph-01155969453,(M) 9810153006

Committee for Legal Aid to Poor (CLAP), Address: 367, Markat Nagar, Sector-6, Cuttack,

Phone: 0671-2363980, 2365680 , Fax: 0671- 2363980,

ADHAR, At/P.O. Loisingha Dist. Bolangir - 767 020 Orissa, Phone: 06653 274525/125, E-mail: info@adharvo.org ; adharbolangir@gmail.com <http://www.adharvo.org>

Nature and Wildlife Conservation Society of Orissa, Mayur Bhavan Janpath Saheed Nagar Bhubaneswar – 751007 , Phone : 0674-253840

Akhil Bharat Anusuchit Jati Parishad, Orissa State Branch D S 11 / 19, Unit 4, Bhubaneswar

Phone : 06655 – 20567 .

Gobind Bhavan, Suryvihar, Link Road, Badambadi, Cuttack. sumanta.swain@gmail.com priyabratamajhi@yahoo.co.in O-9437110714

Home and Hope, A school for the mentally retarded, Sector-17, Rourkela- 769003

Ph-0661-2642140

Parents Association for the Welfare of the Mentally Retarded, Rourkela, C/O Home and Hope, Sector-17, Rourkela- 769003, Phone-0661-2475393,

SURAVI - Sustainable Rural Actions thru Voluntary Initiatives, Estd. : 1993, Address: HIG-138, Sailashree Vihar, Bhubaneswar-751021 (Orissa), India URL : www.suravi.org ; Phone: 91-94371-90444, 91-0674-2532646 e mail: suraviteam@yahoo.com

FXB India Society, At- Res No C-1, Lingaraj Vihar Market Complex Pokhariput, Bhubaneswar Orissa. Pin - 751020 Tel: (+91) 0674 238 2287 (www.fxb.org)

Smt.Nandini Satpathy Memorial Trust, 107,Surya Nagar, Bhubaneswar,Orissa,India

Telephone : +91.674.253.6444, F: +91.674.253.6262, web site: www.snsmt.org

SUPRATIVA, Fakirpada, Biribati, Cuttack-754100, Orissa, India, Phone: 91 671 2445251, & Fax 2115699, Email: suprativa@sify.com, Website: www.suprativa.org

A E R W D – 25, Budheswari Colony, Bhubaneswar, Khurda, 09437325024.

Agency for Backward Community Development – Bhubanpur, Puri – 752011, Tele-06752213121.

Academy Of Bioresource Development – Acharya Vihar, BBSR, 0674-6538664, Bhubaneswar

Adarsh Charitable Trust – Khalikot, Ganjam-761030, 06810-256648,

Agricultural And Rural Development Consultancy Society – N6/322, Jaydev vihar, 751015, Bhubaneswar, 0674-553062, 552468.

Akss – Sevanchal, Kanas, Puri-752017, 0674 – 3268020.

Anchalika Sarvodaya Seva Pratisthan – Mandosil, Bargarh-768050, 0668-4232313

Anu Shanti – Hil Patna, Berhampur, Ganjam-760005, 06812-202036.

Arun Institute Of Rural Affairs – Karmala, Mahimagadi, Dhenkanal-759014, 0672-289809.

Asardi – Nayapalli, Bhubaneswar-751012, 094379 22499.

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Asets Pipili, At, PO-Pipili, Puri-754104, 09861127075.

Asha – Sirtol, Behind Kendu leaf Godown, Nuapada-766107, 06678-223118.

Asian Foundation – Aradhana Building, Giri Road, Berhampur-760005, 09861007344.

Association For Human Rights Education And Development – Khariar , Nuapada, 766107, 06671-232862.

Association For Neglected Group And Evangelical Leadership – By pass Road, GOVT. Hospital, Sambalpur, 094375 34752, 09937606561.

Association For Social Transformation In Human Action – Sikharapur, College Square, Cuttack-753003, 06711-2641284.

Astha – Bhubaneswar, 0674-2371073.

Asylum To Indigent Masses Of The Society – Jagannath Lane, Badambadi, Cuttack-753012, Tele no - 094379 85888.

Awareness – F-16, BJB Nagar, Bhubaneswar, 0674-2433493.

Bassanta – Bairagipalli, Kabaripalli, Sambalpur, 0663-284076

Basundhara – Bidanashi, Cuttack-753014, 0671-2603178

Centre For World Education Services – Convent School Road, Rayagada-765001, Tele no - 09437095990.

Community Action For Rural Development – Sikhyakapada, Angul-759122, Tele no – 06764-230640.

Council For Awareness And Rural Development – At/PO- Susua, Via- Agnapal, Bhadrak-756116, Tele no – 06784-266616.

Dove – Bazarpada, Angul, Tele no – 06764-237306.

Ekta – 1st lane, Koraput- 764020, Tele No- 06852-250842.

Evangelical Hospital Khariar – At/PO: Khariar, Nuapara-766107, Telephone –06671-32282.

Fellowship – Women’s College Road, Bhadrak-756100, Tele no- 06784-250189.

Friends Association For Rural Reconstruction – At/PO: Muniguda, Pin – 765020, Tele no- 06863-25235, 06670-230105.

Gajapati Vikas Manch – At: Erdola Street, Paralakhemundi-761200, Tele no- 06815-222921.

Good Samaritan Charitable Trust – 3rd lane, R. K. Nagar, Rayagada-765001, Tele no- 06856-236448.

Independent Initiatives – At: Jaraka. Dharmasala, Jajpur-755050, Tele no - 099373 83052.

Manab Seva Sadan – At: Saranga; Talcher-759146, Tele no- 06768-267035.

Marr Munning Ashram – Aurobind Nagar, Koraput-764001, Tele no- 06854-251556.

AERWD- Bhubaneswar- 09437325024, 09861575549, 09776351581.

ABCD (agency for Backward Community development) :- 916752213121.

Action for better living & envornment – Kendrapada Odisha- 9167278296.

Gunupur, Odisha:- Action for Social & Humans- 91685720276 (A.K.dash)

Khalikota , Odisha:- Adarsh Charitable trust- 916810256648 (Tapan Prasad Acharrya)

Loisingha, Balangir/Odisha:- ADHAR- 91665374125.

Cuttack, Nuasahi/Odisha:- a gopal Seva Samiti -09432099383.

Kanas, PURI / Odisaha- Sevanchal 916743268020.

Baragarh, Odisha (Mandosil) :- 916684232313- contact person Girish Kumar.

Berhampur, Ganjam/ Odisha(Hilpatana):- 916812202036.

Pipil, Puri/ odisha (asets):- 9109861127075. (Priyabrata Sahoo).

Dhenkanal , Mahimagadi/ odisha:- 91672289809. (S.K.Panda).

Cuttack, sikharpur , 9106712641284. (P.K.Ray).

Cuttack, Badambadi-9109438287144,9109437985888. (R.M.Chaudhury).

Bhubaneswar, BJB Nagar:- 916742433493. (B. Das).

Dhenkanal, Kamakhya nagar;- 916769270225 (P.K.Tripathy).

Cuttack, Banki- 916723240748(Kesab Behera).

Bhubaneswar , Baramunda for Womans issues;- 916742550867(Basanti Nanda).

Academy of Bioreserach development:- Bhubaneswar:- 916746538664.

Annexure – 18

DISASTER RELATED WEBSITES

www.eastcoastrailway.gov.in	East Coast Railway, Bhubaneswar (Disaster Management)
www.imd.ernet.in	Indian Metrological Department
www.imd.gov.in	Indian Metrological Department
www.ncmrwf.gov.in	National Centre for Medium Range Weather Forecast department.
http://www.metocph.nmci.navy.mil	United State Navy
www.sal.dundee.ac.uk	Dundee satellite Receiving Station
www.herricanealley.net	Information about tropical cyclone
www.usgs.gov	United States Geological Survey

www.w3.weather.com/safeside	Weather Safety Tips
www.disasternews.net	Disaster Related News Service
www.orissawater.com	Water resources Department.
www.osdma.org	Orissa Disaster Mitigation Authority
www.orissagov.nic.in	Web site of Government of Orissa
www.ndma.gov.in	Website of National Disaster Management Authority
www.nidm.net	Website of National Institute of Disaster Management.
www.idrn.gov.in	Website of Indian Disaster Resource Network.
www.usgs.georell.cos.com	Website of USGS Data Base
www.earthquakenews.com	Earthquake Related Information From World News Services.
www.eqnet.org	Earthquake Related Information
www.gisdevelopment.net	Application of GIS in Disaster Management.
www.fema.gov	Federal Emergency Management Agency.
www.redcross.org	Website of Red Cross
www.esri.com/hazards	Website of Disaster and GIS Related Information.
www.nemaweb.org	Website of National Emergency Management Association of US.
www.laem.com	Website of International Association of Emergency Management.
www.niusr.org	Website of National Institute for Urban Search and Rescue.
www.mipt.org	Website of National Memorial Institute for the Prevention of Terrosim
www.ifrc.org	Website of International Federation of Red Cross.
www.Emergency-management.net	Website of Information about Emergency Planning and Response
www.undo.org	Website of United Nations Development Programme.
www.nrsa.gov.in	Website of National Remote Sensing Agency.

Annexure -19**LIST OF BLOOD BANKS OVER ECoR**

STATE	NAME OF STATION	ADDRESS	TELEPHONE
Odisha	BHUBANESWAR/ KHURDA	1. Capital Hospital	0674-2394985 Officer-9337102693
		2. Kalinga Hospital	0674-2301227
		3. Municipality Hospital	0674-2591206
		4. Red Cross/BBSR	0674-2417955
		5.Odisha Red cross	0674-2591206
		6.DHH Khurda	943728666
		7. Khurda Town	06755-223978
		8.Hi-Tech	91674-2371217,0674-2545205 0674-2370726
		9.Vivekananda /BBS	91674-2565357
	CUTTACK	Orissa Red Cross	0671-2305643
		Central red cross	91671-2302258
		Blood doner counsel	9937388295,9439637796
		Cyndicate Lab	06716450287
		SCB -hospital	9438873459, 9437163566 9937448757
		SDH Athagada	06723-220244
	PURI	DHH /Puri	06752222124 / 31, 9861067545
	DNKL	Dhenkanal	0676-2221311
	Jajapur	DHH/ Jajapur	06728225177
		CHC/ JJKR	9437276928
	Bhadrak	DHH /Bhadrak	9437293899 06784-251817
		SDH /Nilagiri (Balasoe)	06782233237
	Paradeep	DHH /Jagatsinghpur	06724-221808
		Kendrapada	06727-233334

	Keonjhar	DHH/KDJR	06766-254380
		SDH-anandapur	06731-221467,220824
		SDH-Champua	9778131312
	Angul	DHH/ ANGL	06764-230880
		SDH-Athamalik	9438683127
		SDH-TLHR	9439123301 06760-242020
		DHH /DNKL	06762-221388
	SAMBALPUR	VSS Medical college	0663-2431420
		DHH/SBP	9437085706,0663-253374 06632400180
		SDH/RAIR	06644-253031/85
		DHH/ Boudha/ near RAIR	9437495995
		SDH /kuchinda	06642-220309/509
		DHH/JSG	06645-173104, 9861285047 06645-272180
		DHH/ Deogarh	9437523046

Odisha	BARGARH	DHH/Bargarh	066462343140
		SDH/Padampur	06683-223490/7909
	Balangir	DHH	06652230646
	Titilagarh	SDH	9938223122, 06655220318
	Kantabanji	PHS	9853822280
	Bisam Cuttack	Christian Hospital	06863247505
	BERHAMPUR	MKCG Medical Colege	0680-2292534
		SDH-Chhatrapur	9678932487
		SDH-Bhnjangan	9937226206
		DHH/ Paralakhemundi	06815-222222
		DHH/malkangiri	9439482417
		SDH/Gajapati	06815222467
	KORAPUT	District Hospital	068522-252101
	JEYPORE	Sub-Divn Hospital	06854-233600
	RAYAGADA	DHH/RGDA	06856-236465
	BOLANGIR	DHH/BLGR	0665-2230646
		DHH/Sonpur	06654-220150
		SDH/patanagada	06658-222161/229
	TIG- KBJ	SDH/Kantabanjhi	06657-220464

		SDH/TIG	06655-220318
	Nuapada	DHH / Nuapada	9437292867
		DHH/ Nawarangpur	7008562403
<u>odisha</u>	Gajapati/ Paralakhemudi	DHH	06815222381, 06815222787
	Damanjodi	Red cross	06853-255333
	Lamta put	Ashakiran	06868-272322, 272213
A P	VISHAKHAPATNAM	King-George Hospital	0891-2564891
		Seven Hills hospital	919393110401,8916677777,9848139922
		AS Raja	0891-2543436, 5563436, 2702710
		Rotary Blood bank	0891-2506678, 5534635
		AIDS control	8912553114
		Red cross	0891-2703953
		Apollo Hospital	918912727272
		Chiranjib voluntary	918912754787
		City Hospital	09848192898
		Simhadri Hospital	8912784949, 919866150150
	VIZIANAGRAM	Srinivash Nursing	918922-275513
		Red cross 24 hrs	08922-272700,08142578999
		MIMS blood bank	08922-244390, 244334
	NEELIMARLA	Maharaja Dist. Hospital	09440070099. 09346413633
	Srkakulam	DHH/CHE	09912399679
		IRCS	08942-226555
		RIMS hospital	08942-270933 /236,9697961999 9000273960
	RAJAM	GMR V Care hospital	08941-25318485
	RAGOLU	GE Medical School	08942-398398, 7337362542 08642-278301
	Ichhapuram	SDH /IPM	918942-226555
	Bobbili/ VZM district	SDH/bobbili	8922-272700
	Raipur	City blood bank	91-771-4096061
		Bilash group	91-771-4009304
		SSD blood bank	91-771-2432511

C G		Chatisgada Blood bank	91771-2525667
		Thawait blood bank	91-771-2424775 91-771-4031707
		Sai- Sahara	91-771-2551050
		United blood bank	91-771-2426214
		Life Cell International	91-771-2412657
		Day & Night Patho -Lab	91-7712536297
	Mahasamud	DHH/MSMD (24X7)	09926190979, Fax-07713222384,9425212338
			07723222203, 09977220077
	Jagdalpur	UJJWAL Blood bank	09827888944, 9827887788, 9425261337, 07782221441
	BACHELI	NMDC-Apollohospital	07857-230050
	JAGDALPUR	Maharani Hospital	6854-233003

Annexure-20

IMPORTANT BRIDGE LISTS OF KUR DIVISION

SI N o .	SECTN	L I N E	BRNU M	LOC	YOC ONT	STDDR G	TOBR	TOSB	TOFOU ND	STRN SS	DEC K	TO TR AK	TOBR NG	LWL	TOSL	PWI	ADEN
1	BHC- PSA (MZZ- BTV)	U P	391	318/21- 319/13	1899	BA- 11361	TOW G	BM- LM (RCC Jacke ed)	WELL	RBG	UN	FP	ROLR OK	685.8 0	STEEL CHANNEL SLEEPER	BHC	JKR
2	BHC- PSA (MZZ- BTV)	D N	391	319/14- 318/22	1965	BA- 11101	TOW G	MCC	WELL	BGML	UN	FP	ROLR OK	685.8 0	STEEL CHANNEL SLEEPER	BHC	JKR
3	BHC- PSA (JKPR- JEN)	U P	449	348/5- 349/23N	1899	BA- 11361	TOW G	SM- LM(R CC Jacket ed)	WELL	RBG	UN	SW P	ROLR OK	1325. 88	STEEL CHANNEL SLEEPER	JKR	JKR
4	BHC- PSA (JKPR- JEN)	D N	449	349/24- 348/6	1968	BA- 11101	TOW G	MCC	WELL	BGML	UN	FP	ROLR OK	1325. 88	STEEL CHANNEL SLEEPER	JKR	JKR
5	BHC- PSA (NRG-)	U P	539	402/13- 45	2004		PSC BOX GIRD	RCC	WELL	HML	BAL	SW P	ELAS TOM ERIC	492.0 0	PSC	CTC	CTC-I

	KNPR)						ER										
6	BHC-PSA (NRG-KNPR)	D N	539	402/46-14	1899	BA-11341	TOW G	SM-LM(RCC Jackt.)	WELL	RBG	UN	SW P	ROLR OK	488.00	STEEL CHANNEL SLEEPER	CTC	CTC-I
7	BHC-PSA (KNPR-CTC)	U P	544	405/15-407/19	2008	9125/E/DD-301-327	TOW G	RCC	OPEN	HML	UN	SW P	ROLR OK	2107.07	STEEL CHANNEL SLEEPER	CTC	CTC-I
8	BHC-PSA (KNPR-CTC)	D N	544	407/30-405/12	1899	BP-54/74	RIVT PG	SM-LM	WELL	BGML	UN	SW P	BRO NZ	1950.72	STEEL CHANNEL SLEEPER	CTC	CTC-I
9	BHC-PSA (CTC-GBK)	U P	553	411/5-41	2015		TOW G+PSC SLAB	RCC	WELL	MBG	BAL + UN	LW R	POT PTFE	1263.60	STEEL CHANNEL SLEEPER + PSC	CTC	CTC-I
10	BHC-PSA (CTC-GBK)	D N	553	411/42-6	1897	BA-11361	TOW G	SM-CM(RCC Jackt.)	WELL	RBG	UN	SW P	ROLR OK	822.96	STEEL CHANNEL SLEEPER	CTC	CTC-I
11	BHC-PSA (GBK-BRAG)	U P	557	414/3-415/5	2015		PSC BOX GIRD ER	RCC	WELL	MBG	BAL	LW R	POT PTFE	902.00	PSC	CTC	CTC-I
12	BHC-PSA (GBK-BRAG)	D N	557	415/6-414/4	1897	BA-11361	TOW G	SM-LM(RCC Jackt.)	WELL	RBG	UN	SW P	ROLR OK	914.40	STEEL CHANNEL SLEEPER	CTC	CTC-I
13	(BHC-PSA) GAM-CAP	U P	950	572/37-573/17	1895	CE's NO 10409	TOW G	SM-LM(sand)	WELL	BGML	UN	FP	ROLR OK	457.20	STEEL CHANNEL SLEEPER	BAM	BAM
14	(BHC-PSA) GAM-CAP	D N	950	573/18-572/38	1968	BA-11101 ALT-I	TOW G	MCC	WELL	BGML	UN	FP	ROLR OK	457.20	STEEL CHANNEL SLEEPER	BAM	BAM
15	(RJGR-BRAG) GHNH-NQR	S L	22	437/2A-438/4	1964	RDSO/B/025-027 & 70 + RDSO's No. COS/C/3002-3004 + BA-5061-BA-5075	TOW G	MCC	WELL & OPEN	BGML	UN	SW P	ROLR OK	2352.00	STEEL CHANNEL SLEEPER	BRAG	BBS

1 6	TMKAJ RLI (TMKA- TGRL)	S L	390	148.683	2006	MITES/P /S.E.RL Y/ CEB-44	PSC GIRD ER	RCC	PILE	HML	BAL		ELAS TOM ERIC	305.0 0	PSC	KDJR	KDJR
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IMPORTANT BRIDGE LISTS OF WAT DIVISION

SI No.	SECTN	LI NE	Br.No.	Br.cod e	LOC in Km.	YOC NST	STDDR G	TOBR	TOSB	TOFO UND	STRNS S	DEC K	TOTR ACK	TOB RNG	REMA RKS	LW W
1	PSA- VSKP(U LM- CHE)	UP	1354	B/036 9	744/1 0	196 6	16803/1	SEMIT HROU	SM- CM	OPEN	BGML	BAL	LWR	BRO NZ	PERR FLOW	380. 00
2	PSA- VSKP(U LM- CHE)	D N	1354	B/037 0	744/1 3-14	196 7	BA-1058	RIVT PG	RCC	OPEN	BGML	BAL	LWR	OTH ER	PERR FLOW	380. 00
3	PSA- VSKP(D SI-PDU)	UP	1383	B/043 1	755/2 1- 756/1	196 9	15287	TOWG	MCC	OPEN	BGML	NIL	SWP	ROL ROK	PERR FLOW	270. 00
4	PSA- VSKP(D SI-PDU)	D N	1383	B/043 2	755/2 2- 756/2	196 9	BA- 11101to 11117	OTHER (RTG)	MCC	OPEN	BGML	NIL	LWR	ROL ROK	PERR FLOW	270. 00
5	KTV- MVG(P BV- KRPU)	SL	543	B/263 8	186/4- 16	196 4	BA 11101,B A11117	TTG	RCC	WELL	BGML	BAL	LWR	ROL ROK	PERR FLOW	457. 18

IMPORTANT BRIDGE LISTS OF SBP DIVISION

SI. NO.	SECTION	L I N E	BR NU M	LOC	NS 1	YO CNST	STD DRG	TOBR	TOSB	TO FOU ND	STRN SS	TO BRNG	LWW	ADEN
1	(JT)JSG-BXQ	S L	7	522.48 8	8	2003	BA113 70	TOWG	RCC	WEL L	MBG	ROL- ROK	365.60	SBP
2	(JT)SBP-HKG	S L	76	567.21 2	25	1962	BA105 9	RIVT PG	SM- LM	WEL L	BGML	SLD- CEN(PH O-BRO)	762.50	SBP
3	(JT)DJX-KHPL	S L	293	647/3- 18	5	1962	BA 5061	TOWG	RCC	WEL L	BGML	ROLRO K	594.30	BLGR
4	(JT)LSX- BLGR	S L	331	666/1- 8	10	1962	BA105 7	RIVT PG	MCC	WEL L	BGML	ROLRO K	670.90	BLGR
5	(JT)DFR-SFC	S L	406	700/7- 13	10	1962	BA 5061	TOWG	RCC	WEL L	BGML	ROLRO K	305.00	BLGR
6	(JT)SFC- BUDM	S L	438	716/12 -717/6	2	1962	BA 1057	RIVT PG	RCC	WEL L	BGML	SLD- CEN	401.40	BLGR

7	(RV)ANMD-BLSN	S L	77	42/4-17	11	1929	10965	USLUNG	SM-LM	WEL L	ML		712.40	KBJ
8	(RV)TIG-KSNG	S L	343	213/12-214/1	20	1930	CE 10965	SEMI THROU GH	SM-LM	WEL L	BGML	ROL-RCK	610.00	TIG

List of Tunnels in WAT division.

(Lighting provided to all tunnels but automatic alarm not provided)

KK lines									
S. No.	Tunnel No.	Block Section	K.M.		Length (m)	Year of construction	Lined/ Unlined	Track Structure	Ventilation arrangement
1	2	3	4	5	6	7	8	9	10
1	1	BDVR-SLPM	36/5	36/11	149	1967	149/0	60 Kg/ PCS-14	NIL
2	1A	BDVR-SLPM	36/12	36/16	84	1967	84/0	60 Kg/ PCS-14	"
3	2	BDVR-SLPM	36/29	37/9	429	1967	346/83	60 Kg/ PCS-14	"
4	3	BDVR-SLPM	37/31	38/8	330	1967	243/87	60 Kg/ PCS-14	"
5	4	BDVR-SLPM	39/30.5	40/12	370	1967	370/0	60 Kg/ PCS-14	"
6	5	BDVR-SLPM	41/13.5	41/17	198	1967	94/94	60 Kg/ PCS-14	"
7	6	BDVR-SLPM	44/12.5	19/0.5	197	1967	82/115	60 Kg/ PCS-14	"
8	7	BDVR-SLPM	44/33	45/1	127	1967	88/39	60 Kg/ PCS-14	"
9	8	SLPM-TXD	46/20.5	46/25	113	1967	113/0	60 Kg/ PCS-14	"
10	9	SLPM-TXD	46/27.5	47/4	234	1967	68/166	60 Kg/ PCS-14	"
11	10	SLPM-TXD	48/20	49/3	376	1967	159/217	60 Kg/ PCS-14	"
12	11	SLPM-TXD	49/28	50/2	233	1967	76/157	60 Kg/ PCS-14	"
13	12	SLPM-TXD	50/11	50/18	185	1967	77/108	60 Kg/ PCS-14	"
14	13	SLPM-TXD	51/5	51/15	267	1967	137/130	60 Kg/ PCS-14	"
15	14	TXD-CMDP	52/14	52/27	398	1967	116/282	60 Kg/ PCS-14	"

16	15	TXD-CMDP	53/9	53/15	157	1967	46/111	60 Kg/ PCS-14	“
17	16	TXD-CMDP	54/2	54/14	385	1967	385/0	60 Kg/ PCS-14	“
18	17	TXD-CMDP	55/08	55/22	401	1967	121/280	60 Kg/ PCS-14	“
19	18	TXD-CMDP	56/17	56/28	318	1967	146/172	60 Kg/ PCS-14	“
20	19	TXD-CMDP	56/29	57/4	236	1967	91/145	60 Kg/ PCS-14	“
21	20	TXD-CMDP	57/8	57/16	225	1967	225/0	60 Kg/ PCS-14	“
22	21	TXD-CMDP	57/33	58/3	77	1967	77/0	60 Kg/ PCS-14	“
23	22&23	TXD-CMDP	58/9	58/32	701	1967	416/285	60 Kg/ PCS-14	provided
24	23A	TXD-CMDP	59/29	60/11	512	1967	512/0	60 Kg/ PCS-14	NIL
25	23B	TXD-CMDP	59/19	59/23	145	1967	145/0	60 Kg/ PCS-14	“
26	24	TXD-CMDP	59/29	60/11	512	1967	512/0	60 Kg/ PCS-14	“
27	25	TXD-CMDP	60/14	60/30	518	1967	398/120	60 Kg/ PCS-14	“
28	26	TXD-CMDP	61/4	61/10	180	1967	180/0	60 Kg/ PCS-14	“
29	27	TXD-CMDP	61/21	62/2	346	1967	226/120	60 Kg/ PCS-14	“
30	28	TXD-CMDP	62/18	62/26	224	1967	73/151	60 Kg/ PCS-14	“
31	29	CMDP-BGHU	64/18	64/24	185	1967	81/104	60 Kg/ PCS-14	“
32	30	CMDP-BGHU	64/32	65/12	460	1967	107/353	60 Kg/ PCS-14	“
33	31	CMDP-BGHU	65/18	65/24	302	1967	141/161	60 Kg/ PCS-14	provided
34	31A	CMDP-BGHU	66/2	66/4	60	1967	60/0	60 Kg/ PCS-14	Nil
35	31B	CMDP-BGHU	66/8	66/10	74	1967	74/0	60 Kg/ PCS-14	Nil
36	31C	CMDP-BGHU	66/15	66/19	123	1967	123/0	60 Kg/ PCS-14	provided
37	31D	CMDP-BGHU	66/24	66/25	28	1967	28/0	60 Kg/ PCS-14	Nil
38	32	CMDP-BGHU	67/5	67/16	318	1967	136/182	60 Kg/ PCS-14	“
39	33	CMDP-BGHU	67/32	68/1	236	1967	58/178	60 Kg/ PCS-14	“
40	34	CMDP-BGHU	68/2	68/9	214	1967	37/177	60 Kg/ PCS-14	“
41	35&36	CMDP-BGHU	68/13	69/8	900	1967	436/464	60 Kg/ PCS-14	proveded
42	37	CMDP-BGHU	69/35	70/8	244	1967	244/0	60 Kg/ PCS-14	Nil
43	38	CMDP-BGHU	70/18	70/24	194	1967	194/0	60 Kg/ PCS-14	“
44	38A	CMDP-BGHU	71/2	71/3	51	1967	0/51	60 Kg/ PCS-14	“
45	38B	CMDP-BGHU	71/18	71/23	134	1967	134/0	60 Kg/ PCS-14	“
46	39	BGHU-KVLS	76/16	76/27	288	1967	288/0	60 Kg/ PCS-14	“
47	40	BGHU-KVLS	77/22	78/3	255	1967	255/0	60 Kg/ PCS-14	“
48	41	BGHU-KVLS	79/11	79/19	239	1967	239/0	60 Kg/ PCS-14	“

49	41A	BGHU-KVLS	79/22	79/23	38	1967	38/0	60 Kg/ PCS-14	“
50	42	BGHU-KVLS	80/11	80/17	186	1967	186/0	60 Kg/ PCS-14	“
51	43	BGHU-KVLS	80/19	81/0	341	1967	341/0	60 Kg/ PCS-14	“
52	44	BGHU-KVLS	81/17	81/25	224	1967	224/0	60 Kg/ PCS-14	“
53	44A	GPJ-DPC	118/5	118/8	67	1967	67/0	60 Kg/ PCS-14	“
54	45	JRT-MVG	207/22	207/29	177	1967	177/0	60 Kg/ PCS-14	“
55	45A	JRT-MVG	209/10	209/18	213	1967	213/0	60 Kg/ PCS-14	“
56	45B	JRT-MVG	211/11	211/14	107	1967	107/0	60 Kg/ PCS-14	“
57	45C	JRT-MVG	212/11	212/15	85	1967	85/0	60 Kg/ PCS-14	“
58	46	JRT-MVG	216/8	216/16	216	1967	216/0	60 Kg/ PCS-14	“
KR line									
59	1	BGUA-KKGM	40.578	41.065	487	1995	223/264	52Kg/ PSC-14	Nil
60	2	KKGM-LKMR	50.85	51.565	715	1995	160/555	52Kg/ PSC-14	“
61	3	KKGM-LKMR	52.8	53.113	313	1995	160/153	52Kg/ PSC-14	“
62	4	KKGM-LKMR	57.45	58.384	934	1995	718/216	52Kg/ PSC-14	“
63	5	TKRI-RUL	86.338	86.83	492	1995	85/407	52Kg/ PSC-14	“
64	6	TKRI-RUL	87.053	87.199	146	1995	146/0	52Kg/ PSC-14	“
65	7	TKRI-RUL	88.262	88.715	453	1995	165/288	52Kg/ PSC-14	“
66	8	TKRI-RUL	90.238	90.731	493	1995	493/0	52Kg/ PSC-14	“
67	9	TKRI-RUL	91.726	91.808	82	1995	82/0	52Kg/ PSC-14	“
68	10	TKRI-RUL	92	92.286	286	1995	115/171	52Kg/ PSC-14	“
69	11	TKRI-RUL	93.277	94.124	847	1995	63/784	52Kg/ PSC-14	“
70	12	TKRI-RUL	94.393	94.736	343	1995	112/231	52Kg/ PSC-14	“
71	13	RUL-LLGM	96.121	96.204	83	1995	83/0	52Kg/ PSC-14	“
72	14	RUL-LLGM	97.243	97.491	248	1995	158/90	52Kg/ PSC-14	“
73	15	RUL-LLGM	97.96	98.173	213	1995	213/0	52Kg/ PSC-14	“
74	16	RUL-LLGM	99.606	99.721	115	1995	80/35	52Kg/ PSC-14	“
75	17	RUL-LLGM	104.82	104.93	115	1995	115/0	52Kg/ PSC-14	“
76	18	RUL-LLGM	106.82	107.16	347	1995	347/0	52Kg/ PSC-14	“
77	19	RUL-LLGM	108.28	108.52	239	1995	239/0	52Kg/ PSC-14	“
78	20	RUL-LLGM	109.05	109.23	184	1995	184/0	52Kg/ PSC-14	“
79	21	RUL-LLGM	109.5	109.58	77	1995	77/0	52Kg/ PSC-14	“
80	22	RUL-LLGM	110.46	110.66	198	1995	198/0	52Kg/ PSC-14	“

81	23	LLGM-BLMK	112.68	114.28	1599	1995	1032/567	52Kg/ PSC-14	“
82	24	LLGM-BLMK	115.68	115.93	252	1995	252/0	52Kg/ PSC-14	“
83	25	LLGM-BLMK	118.97	120.26	1287	1995	675/612	52Kg/ PSC-14	“
84	26	BLMK-SKPI	134.19	134.31	124	1995	124/0	52Kg/ PSC-14	“
85	27	BLMK-SKPI	136.98	137.04	63	1995	63/0	52Kg/ PSC-14	“
86	28	BLMK-SKPI	137.27	137.42	159	1995	159/0	52Kg/ PSC-14	“
87	29	SKPI-KTGA	139.59	140.13	547	1995	76/471	52Kg/ PSC-14	“
88	30	SKPI-KTGA	141.16	141.43	270	1995	187/83	52Kg/ PSC-14	“
89	31	SKPI-KTGA	144.42	144.53	106	1995	106/0	52Kg/ PSC-14	“
90	32	SKPI-KTGA	145.39	145.64	251	1995	251/0	52Kg/ PSC-14	“
91	33	SKPI-KTGA	146.3	146.44	140	1995	140/0	52Kg/ PSC-14	“
92	34	SKPI-KTGA	146.53	146.64	111	1995	111/0	52Kg/ PSC-14	“
93	35	SKPI-KTGA	148.82	148.99	173	1995	173/0	52Kg/ PSC-14	“
94	36	KTGA-SPRD	156	156.19	187	1995	187/0	52Kg/ PSC-14	“

Annexure-21

ODRAF Control Room (24x7) Telephone:- 0671-2339555 (Cuttack)					
MOBILE NO OF INCHARGE OF ODRAF UNITS WITH STRENGTH					
Sl No	Locations	I/C NAME	MOBILE NO	UNIT NAME	Capa city
1	Jharsuguda	Dy Sub - M. B. Thapa	9438500678	OSAP2 nd Bn JSG	43
2	Koraput	Dy Sub - S.K.Hota	8249114949	OSAP 3rd Bn KPT	35
3	Rourkela	Dy Sub - S.K R.Tulla	9438503808	OSAP 4th Bn RKL	42
4	Baripada	H.M. - T. K. Rout	9437806782	OSAP 5th Bn BPD	47
5	Cuttack	Dy Sub - S.K.Nayak	9437070279	OSAP 6th Bn CTC	50
6	Bhubaneswar	Dy Sub - B.Mishra	986118013	OSAP 7th Bn. BBSR	41
7	Chatrapur	H.M.- M.K.Rout	9439932505	OSAP 8th Bn Ctr (old)	32
8	Balasore	HavM.- R.Behera	9337105939	Dist. (A.P.R Balasore)	41
9	Jagatsinghpur	R.I - S.N.Jena	9437140482	Dist.(A.P.R Jagatsinghpur)	48
10	Balangir	R.I - A.K.Sahoo	8895475053	(A.P.R Bolangir)	42

11	Dhenkanal	H.M - M.R.Samal	9937949513	1st OSAP Bn, DKL	32
12	Chatrapur	H.M. - B.S.Padhi	9437034939	OSAP 8th Bn CTR (new)	39
13	Koraput)	Dy Sub- S.S.Sabar	9438017229	1st IR Bn, KPT Upper Kolab	36
14	Rayagada	Dy Sub - P.K.Dora	6371216639	2nd IR. Bn, Rgd	29
15	Jajpur	H.M - B.N.Dash	6370357095	3rd IR.Bn,jjp	30
16	Deogarh	Dy Sub- B.N.Mishra	9437821901	4th IR. Bn, Dgr	48
17	Boudh	Dy Sub- A.K.Minz	9938032790	5 th I.R. Bn, Boudh	43
18	Khurda	Dy Sub - Z.R.Khan	7978980055	6th IR. Bn, KDA	44
19	Koraput	Sub. - K.M.Pradhan	8455965985	7th SPL.IR. Bn,Kpt	43
20	Bhanjanagar	H.M- .P.K.Setha	9861258832	8th SPL.IR.Bn, Bngr	42

Andhra Pradesh

(APDRAF)

SDRF Control Room- Office Mobile Telephone No- 9440906404.

Office Email: apsdraf@gmail.com

Unit	In Charge	Telephone/ Mobile	Email
Nodal Officer SDRF	S.Devanada Rao Asst. Comm. APSDR, Liaison Officer	08645237347 M- 9440627425	devaacmt@gmail.com
Reserve Inspector SDRF	S . Muniswamy	M- 9440906753	Munuswamy.sunkara@gmail.com
Nodal Officer Disaster	Sanjay Kumar Commandant / VSKP	0891282415 M-7382264169	Noicap_navy@nic.in
CMD / VSKP	H.Y.DORA	0891-2737678 M-9491049816	Cgm_ocs@apeasternpower.com
Director Disaster	K ramachandra Rao	08912543031 M-9490753428	cwcvsrk@gmail.com
Dy Chief Controller of Explosives/ VSKP	On duty	08912722257	dyccevizag@explosives.gov.in

Disaster Management Directory				
Location	Responsible authority	Land phone	Cell phone	Email ID
NDRF control room 24x 7 Guntur	On duty Controller	8632293050	0402422094 9	(Round the clock)
Liaisoning officer	Asst.commandant APSDRF	08645237347	9440627425	devaacmt@gmail.com
HOD				hod.s@gsi.gov.in
Nodal officer	Duty officer	7678537083	9810340841	
DPM				
	Malleswar Rao	9849814525	9989502361	

	Ms Padmavathi	9100124602		
	Ms SriRanga	9704944466		
	Ashok Kumar	944033688	9398432861	
Srikakkulam	Collectors & DM	08942229906	9849903786	apsrk@ap.nic.in
	Joint Collector		9490612828	Jcsklm20122@gmail.com
	DRO (District Revenue Officer)		9490612829	drosklm2012@gmail.com
	Supdt. D. Diction	08942222555	8333988754	cosklmsupdtd@gmail.com
	Superintendent of Police	08942222556		spskl@appolice.gov.in
Vizianagarm	Joint Collector	08922276658		Jc_vznm@ap.gov.in
	DRO (District Revenue Officer)	9491012012		dro_vznm@ap.gov.in
	Supdt. D. Diction		9440178300	dsuperindent123@gmail.com
	Superintendent of Police	08922276163		spvzm@appolice.gov.in
Vishakhapata nam (VSKP)	Collectors & DM	08912526999		vskp@ap.gov.in
	Joint Collector		9491198733	jcvizag@gmail.com
	DRO (District Revenue Officer)		9849903820	drovsk@gmail.com
	Supdt. D. Diction		9849913705	Email-089-25263121
	Superintendent of Police	08912551104		spvspr@appolice.gov.in

Chhatisgarha

State Fire & emergency Service Control Room- Office Telephone No- 91-7712512331 (24X7)
NDRF HELP line- 919711077372.

Annexure-22**Particulars of Civil Defence in ECoR****A. Khurda Road Division:-**

Total CD strength of the unit: - **75 nos (Seventy Five)**

Sl	Name of Civil Defence Officer/	Official	CD Designation	Mobile No & Land Line	E-mail Id
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No	Unit Head	Design		No.	
1	Shri G.C.Naik	Sr. DSO	Civil Defence Officer	Mob-8455887940 L/Line-72266(Rly) BSNL-06742491404	srdso kur@gmail.com
2	Shri S.Behera	Safety Instructor	Civil Defence Inspector	Mob-8455887944	beherasukendra@gmail.com

B. Sambalpur Division:-Total CD strength of the unit: - **36 nos (Thirty Six)**

Sl No	Name of Civil Defence Officer/ Unit Head	Official Design	CD Designation	Mobile No & Land Line No.	E-mail Id
1	Shri Diptansu Sharma	Sr. DSO	Civil Defence Officer	Mob-8455886940 L/Line-72266(Rly) BSNL-0663-2533096	srdso_sbp@sbp.railnet.gov.in
2	Shri Bibhuti Bhusan Sahu	OS/Mech	Civil Defence Inspector	Mob-9437392457	bibuti75.sbp@gmail.com

C. Waltair Division:-Total CD strength of the unit: - **45 nos (Forty Five)**

Sl No	Name of Civil Defence Officer/ Unit Head	Official Design	CD Designation	Mobile No & Land Line No.	E-mail Id
1		Sr. DSO	Civil Defence Officer	Mob-8978080940 L/Line-82460(Rly) BSNL-0891-2591033 / 0891-2882460	srdso vskp@gmail.com
2	Shri Ch.BU Prasad	Tech-I/ ELS	Civil Defence Inspector	Mob-8978080949	Photoprasad17@gmail.com

Office/Officer	Telephone No.	Email ID
Director General of Police, FS, CG HGs & Director, Civil Defence, Odisha	0671-2300317(O)	dircdodisha@gmail.com
IGP, FS, HGs & CD, Odisha	0671-2300584	dircdodisha@gmail.com
Assistant Director Civil Defence	0671-2306177	dircdodisha@gmail.com
Deputy Controller, Civil Defence, Bhubaneswar.	0674-2394199	civildefencebbsr@gmail.com
Deputy Controller, Civil Defence, Koraput.	06852-250285	dyconcdkoraput@gmail.com
Deputy Controller, Civil Defence, Rourkela.	0661-2500817 0661-2503717	civildefence_rkl@redifimail.com
Sub-Collector –cum- Deputy Controller, Civil Defence, Talcher.	06760-240720	subcolltcr@gmail.com dccdtalcher@gmail.com
AFO-cum- Deputy Controller, Civil Defence, Blasore.	06782-262020	balasorefirestation@gmail.com
AFO-cum- Deputy Controller, Civil Defence, Bhadrak.	06784-231445	afobhadrakfs@gmail.com
AFO-cum- Deputy Controller, Civil Defence, Kendrapada.	06727-230301	kendraparafireststion@gmail.com
AFO-cum- Deputy Controller, Civil Defence, Jagatsinghpur.	06724-220099	jagatsinghpurfirestation2016@gmail.com
AFO-cum- Deputy Controller Civil Defence Dhenkanal	06762-226501	dklfirestation@gmail.com

Annexure-23

LIST OF ELECTRICAL ITEMS
STORAGE LOCATION OF STORES AND EQUIPMENTS WITH QUANTITY

Sl no	Items	KUR									WAT			SBP		
		KUR	PUI	BHC	JKR	CTC	BAM	TLHR	PSA	PRDP	VSKP	VZM	NWP	SBP	TIG	RAIR
1	Generator Car	1									1			1		
2	Portable Generator Set 2 KW	4	2	2	2	2	2	2	2	2	4	2	2	4	2	2
3	500 W Halogen Fittings with Lamps OR 50 W LED out door fitting set.	10	5	5	5	5	5	5	5	5	10	5	5	10	5	5
4	Pendant Holder	100	20	20	20	20	20	20	20	20	50	20	20	50	20	20
5	Lamp 100 W/150 W or 10 W LED bulbs	120	50	40	40	40	40	40	40	40	100	50	30	70	40	40
6	Cable 2.5 Sq. mm (in Mtrs)	5000	2000	2000	2000	2000	2000	1000	1000	2000	5000	1000	1000	3000	2000	1000
7	Cable PVC 2.5 Sq. mm (in Mtrs)	5000	1000	1000	1000	1000	1000	1000	1000	1000	5000	1000	1000	3000	2000	1000
8	3 Core Cab Type Wire (in Mtrs)	1000	500	500	500	500	500	500	500	500	1000	500	500	1000	500	500
9	M Switch 16 Amps	10	5	5	5	5	5	5	5	5	10	5	5	10	5	5
10	Black Tape (in Nos)	20	5	5	5	5	5	5	5	5	20	10	5	10	5	5
11	Telescopic Light Posts	20	10	5	5	5	5	5	5	5	10	5	5	10	5	5
12	Aluminium Ladder 20 ft	5	2	2	2	2	2	2	2	2	5	2	2	5	2	2
13	HSD Oil (in Liters)	200	100	100	100	100	100	100	100	100	200	100	100	200	100	100
14	Walkie-Talkie sets	10	2	2	2	2	2	2	2	2	10	2	2	2	10	2
15	Lorry	1	-	-	-	-	-	-	-	-	1	-	-	1	-	-
16	Dry cell oprated LED emergency	40	10	5	5	5	5	5	5	5	20	10	5	20	5	5

light															
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Annexure-24

Details of Tower Wagons (4-W & 8-W) as on 31.10.2019

Depot	TW Number	Div.	4W/8W	Make	Year of Mfg.	Date of last POH	Next POH on	Remarks
WAT division								
SCMN	6511	WAT	8-W	SAN, DH, US	1998	01/2019	01/2025	Working
S.Kota	6059	WAT	8-W	SAN, DH, US	1999	02/2014	02/2020	Working
RGDA	190001	WAT	8-W	ICF, DE, OB	02/2019	-	-	New TW, got accident at SPRD & burnt.
NWP	4515	WAT	4-W	M-III, JMP, DH, OB	1993	03/2014	03/2020	Working
CHE	710004	WAT	4-W	M-IV, BHEL, DE, US	04/2005	12/2013	12/2019	Working
KRPU	PTL2011040046	WAT	4-W	M-IV, Phooltas, DH, US	04/2011	01/2018	01/2024	Working
VZM	PTL2012020087	WAT	4-W	M-IV, Phooltas, DH, US	05/2012	06/2019	06/2025	Working
JYP	PTL2012020088	WAT	4-W	M-IV, Phooltas, DH, US	05/2012	09/2019	09/2025	Working
DMK	PTL2011040047	WAT	4-W	M-IV, Phooltas, DH, US	04/2011	-	04/2017	Not working
DWZ	6034	WAT	4-W	M-II, JMP	1978	11/2014	11/2018	Not working
VSKP	PTL2012020148	WAT	4-W	M-IV, Phooltas, DH, US	06/2015	-	06/2021	Working
ARK	6057	WAT	4-W	M-III, JMP, DH, OB	1995	07/2013	07/2019	Working
VBL	PTL2012020089	WAT	4-W	M-IV, Phooltas, DH, US	05/2012	-	05/2018	Send to KGP for POH (04.09.19)
-	6063	WAT	4-W	M-III, BEML, DH, US	1999	01/2019	01/2025	Working
-	6036	WAT	4-W	M-II, KPA	1981	07/2014	07/2018	EM/POH spare
KUR division								
IPM	710100	KUR	8-W	ICF, DE, OB	03/2000	04/2014	04/2020	Working
BHC	710200	KUR	8-W	SAN, DH, US	03/1998	06/2016	06/2022	Working
TLHR	710300	KUR	8-W	ICF, DE, OB	09/2004	09/2013	09/2019	Working
KDJR	710400	KUR	8-W	ICF, DE, OB	12/2005	03/2015	03/2021	Working
KUR	710600	KUR	8-W	BEML, DH, US	10/2012	05/2019	05/2025	Working
CTC	710700	KUR	8-W	BEML, DH, US	04/2013	-	04/2019	Working
JJKR	RU-103	KUR	8-W	SAN, DH, US	1989	11/2012	11/2018	Handed over to KPAW for POH on 02.08.19
BBS	710001	KUR	4-W	M-III VENTRA, DH, US	06/1999	-	06/2005	Working
RHMA	710002	KUR	4-W	M-III, VENTRA, DH, US	2003	01/2013	01/2019	Working
SIL	710003	KUR	4-W	M-IV, BHEL, DE, US	09/2004	07/2013	07/2019	Working
TMKA	710005	KUR	4-W	M-IV, BHEL, DE, US	09/2004	03/2013	03/2019	Working
RJGR	2010010005 (710006)	KUR	4-W	M-IV, Phooltas, DH, US	05/2010	-	05/2016	Working
BALU	2010010007 (710007)	KUR	4-W	M-IV, Phooltas, DH, US	05/2010	-	05/2016	Working
CAP	2010030010 (710008)	KUR	4-W	M-IV, Phooltas, DH, US	05/2010	11/2019	11/2025	Working
RHMA	2010080017 (710009)	KUR	4-W	M-IV, Phooltas, DH, US	09/2010	-	09/2016	Working
SBP division								

BONA	6035	SBP	4-W	M-II, JMP, DH	1981	01/2017	01/2021	From KUR
TIG	710800	SBP	8-W	ICF, DE, OB	02/2018	-	02/2024	New TW received.
SBPY	190037	SBP	8-W	ICF, DE, OB	07/2019	-	07/2025	New TW received.
MNGD	190044	SBP	8-W	ICF, DE, OB	08/2019	-	08/2025	New TW received.
SBP	DAHOD 218	SBP	8-W	DAHOD, DE, OB	09/2019	-	09/2025	New TW received.
Details of defective/burnt tower wagons in ECoR								
-	6037	SBP	4-W	M-II, KPA, DH	1982	06/2010	06/2014	To be condemned
-	6029	SBP	4-W	M-II, KPA, DH	1981	04/2008	04/2012	To be condemned

Summary

TW	WAT	KUR	SBP	Total
8 wheeler	3	7	4	14
4 wheeler	12	8	1	21
Defective (to be condemned)	0	0	2	2

Annexure-25**LIST OF STORE ITEMS**

SI No	PI No.	Description of materials	Desirable Quantity
1	92111002	Diesel Oil	12,000 liters
2	80090436	Kerosene Oil	10,000 liters
3	43302506	Torch	90 nos
4	43302002	Torch Cell	7583 nos
5	75104271	Tarpaulin	15 nos
6	79315719	Gum Boot (Size 6, 7 & nos)	48pairs
7	79322580	Umbrella	75 pairs
8	78902320	Stretchers	15 nos
9	42118414	Electric Bulb with holders CFL	1467 nos
10	79030348	Blankets	1377nos
11	79337806	Bed Sheets	27700 nos
12	81030812	Bleaching powder	5340 kgs
13	83055034	General Safety Items (Register)	612 nos.
14	90701008	G I Wire	2.21 MT

15	74267206	Pan motar	58 nos.
16	75208106	Hand Gloves	3000 pairs

Annexure-26**Telephone Numbers of RPF officials****KUR Division.**

SL/No	Post, Coy & Units	Railway		BSNL	CUG & Mobile No.	Available strength of officers & staff at Post & (OP) level.
		Off.	Res.	Off.		
1.	Sr.DSC/RPF/KUR	72250	72251	0674-2490675	8455887700	
2.	ASC/RPF/CTC	72150	-	06742492943	8455887701	
3.	ASC/RPF/KUR	72416	72417		8455887702	
4.	IPF/HQ	72953		-	8455887746	03
5.	IPF/CRIME	72619		-	8455887722	10
6.	IPF/PS	72953		-	8455887725	07
7.	IPF/DQM	72156		-	8455887724	08
8.	IPF/SIB	72556		-	8455887726	-
9.	IPF/CIB	72258		-	8455887727	13
10.	IPF/KUR	72418	72419	06756-2492684	8455887703	97
11.	CC/TE-COY	72740		-	8455887704	100
12.	OC/RPF/PSA	77210	77211	08945-243912	8978280701	28
13.	OC/RPF/BAM	76018	76019	0680-2216602	8455887710	50
14.	OC/RPF/BALU	73326,73321	-	06756-220007	8455887711	28
15.	OC/RPF/PUI	75718/14	75719	06752-224275	8455887716	63
16.	OC/RPF/BBS	59503	-	0674-2575606	8455887705	124

17.	OC/RPF/MCS	58496	58497	0674-2740116	8455887720	32
18.	OC/RPF/CTC	74516/14	74515		8455887706	81
19.	OC/RPF/PRDP	75616	75617	06722-229630	8455887712	30
20.	OC/RPF/JJCR	74323	74215	06726-224964	8455887707	38
21.	OC/RPF/BHC	74014/16	74015	06784-2230865	8455887709	30
22.	OC/RPF/DNKL	75410	-	0676-2211538	8455887713	22
23.	OC/RPF/TLHR	75316	75317	06766-241844	8455887714	36
24.	OC/RPF/ANGL	75150	-	0676-4214150	8455887715	17
25.	OC/RPF/KDJR	74752/74750	74751	06766-258103	8455887708	41
26.	IPF/SCNL/KUR	72154,72554	-	0674-2492229	8455887777	10

SBP Division.

1.	DSC/RPF/SBP	085-62436	62437	0663-2402174(O) 0663-2402875 ®	8455886700	
2.	ASC/RPF/SBP	085-62624	62213	-	8455886701	
3.	RPF Post/ SBP	085-62222		0663-2400903	8455886705	62
4.	RPF/Post/RAIR	085-63250		06644-253239	8455881021	23
5.	RPF/Post/BLGR	085-64250		06652-230669	8455886707	33
6.	RPF/Post/TIG	085-68352		06655-221934	8455886708	47
7.	RPF/Post/KBJ	085-67252		06657-221467	8455886706	23
8.	RPF/Post/MSMD	085-68454		07723-224778	9752410126	33
9.	RPF/Out /Post/ BXQ	085-62769		06645-214552	8455886725	19
10.	RPF/Out/Post/BRGA	085-62636		06646-233122	8455886715	11
11.	RPF/Out/Post/BWIP				9437089569	10
12.	RPF/Out/Post/MNGD	085-68452		06863-245875	8455886716	14
13.	RPF TE/Coy/SBP	085-62448			8455886713	48
14.	Crime Reader /SBP	085-62372			8455886712	04
15.	SIB/Unit/SBP	085-62396		0663-2522085	8455886711	04
16.	SIB/UNIT/TIG	085-68449		06655-220175	8455886778	04
17.	DI/CIB/SBP	085-62592			8455886710	06

18.	DQM/SBP	085-62370			8455886729	04
19.	DOG/SQUARD	085-62722			9348013965	03
20.	SCNL/SBP	085-62471, 085-62630		0663-2521179	8455886777	--

WAT Division:-

1.	Sr.DSC/RPF/WAT	085- 82250	82251	0891-2746254 0891-2746253 [®]	8978080700	
2.	ASC/RPF/WAT	82412	82413	0891-2727060	8978080701	
3.	IPF/TE-Coy	82916		2525810	8978080702	117
4.	IPF/VSKP Post	82818 82924	82819	2525824(O) 2842819 [®]	8978080703	110
5.	IPF/MPM Post	85508	85506	2716412	8978080704	82
6.	IPF/VZM Post	83216	83217	08922-224580	8978080705	47
7.	SI/Kotavalasa OP	85300	-	08966-273088	8978080706	18
8.	ARK Post	84155	-	08936-249898	8978080707	12
9.	IPF/SIB/WAT	82014	82907	2700991	8978080708	06
10.	IPF/CIB/WAT	82012	-	2525872	8978080709	05
11.	IPF/DLS Post/WAT	85501	-	2010743	8978080710	20
12.	DSC/R-Coy/WAT	82904	-	2525836	8978080711	
13.	Crime Reader/WAT	82918	-	2842918	8978080713	10
14.	IPF/HQ/WAT	82715	82923	2842715	8978281331	05
15.	IPF/CHE Post	85916	-	08942-287371	8978281332	33
16.	IPF/DVD Post	83552	85103	2549587	8978281333	29
17.	SI/NWP Out Post	85919	-	08945-249569	8978281334	14
18.	ASI/SUP Out Post	86040	-	08966-200385	8978281335	10
19.	Bobbili Post	83326	-	08944-253744	8978281336	17
20.	IPF/DQM/WAT	83084	-	-	8978281343	05
21.	IPF/RGDA Post	85616	85617	06856-224626	8455893701	47
22.	IPF/LKMR Post	85816	-	06855-268411	8455893702	15
23.	IPF/KRPU Post	84391	-	08652-252682	8455893704	39

24.	SIPF/JYP Out Post	-	-	-	8455893705	09
25.	IPF/JDB Post	84656,84658	86659	07782-226530	9752447152	25
26.	IPF/KRDL Post	84955	-	07857-255192	9752447153	11
27.	SI/BCHL (OP)	-	-	-	9752413916	10
28.	SCLN/WAT	82817 82016		0891-2501184	8978080777	-

Telephone Numbers of GRP officials:-

ODISHA

	Railway		P&T			Mobile No.
	Off.	Res.	STD	Number	Item	
IGP/Rlys/Cuttack, ODISHA	74510	74511	0671	2306615 2306615	Off. Fax	9438915982
SRP DISTRICT (Rourkela)						
SRP/Rourkela	76410		0661	2600216	Off	9437083559
DSRP/Jharsuguda	76041		06645	271801		
IIC/Sambalpur	62329	62487	0663	2521961		9437407117
IIC/Bolangir	64354	64326	06652	234789		9438916901
OIC/Titilagarh	68354	68355	06655	220491		9437371108
OIC/OP/Kantabanji	67254	67255	06657	220367		
DSRP/Rayagada	85612 85618	85613	06856	223744	Off	
OIC/Rayagada	85618	85619	06856	222005		
ASI/OP/Muniguda						9178865005
OIC/Koraput	86394		06852	252046	Off	

SRP DISTRICT (CTC)					
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SRP/Cuttack	74412	74413	0671	2443982 2443983	Off Res	9438916890
DSRP/KUR			0674	2372711		
IIC/KUR/GRPS	72714		0674	2490283	Off	9437791666
ASI/Nirakarpur						
OIC/Puri	75716		06752	222678	Off	9439192718
IIC/Brahmapur	76014		0680	2229528	Off	8328877251
IIC/Bhubaneswar	59608	59609	0674	2531090	Off	9437233928
DSRP/CTC	74414	74415	0671	2445169		
IIC/Cuttack	74418		0671	2549405		9439282144
ASI/Talcher	75318	75319				
OIC/JajpurRoad	74218	74219				8895080480
OIC/Bhadrak	74018	74019	06784	230510	Off	9437423277
OIC/GRPS/Paradeep						
IIC/GRPS/Balasore	64819		06782	262025		

CHHATTISGARH

				P&T	Mob/CUG
SRP/Raipur			0771	2886000 Off	9479191500
DSRP/Raipur				2880003	9479191501
IRP/Raipur					09479191502

ANDHRA PRADESH

	Rly			P&T	Mob/ CUG
SRP/Vijaywada	68635		0866	2576062 Off 2575897 Fax	
DSRP/ Visakhapatnam			0891	2746211 Off 2539149 Res	
IRP/VSKP	82910		0891	2882910 Off	9440627547
GRPOP/Duvada					

SI/Vizianagaram	83218		08922	223743	Off	9490617089
SI/Palasa	77310		08945	241013	Off	
ASI GRPOP Bobbili			08944	252355	Off	
ASI OP/Parvatipuram			08963	221028	Off	
HC/Srikakulam	84861		08942	286228	Off	

Annexure-27

OFFICERS & STAFF TRAINED ON FLOOD RESCUE AND BOAT OPERATION UNDER NDRF, MUNDULI FROM 16.12.2019 TO 18.12.2019

Sl. No	Name	Designation	Place of Posting	Mobile No.
HEADQUARTER/BHUBANESWAR				
1	Sri Anil Kumar	Constable	CIB/HQ/Bhubaneswar	7978506510
2	Sri Hemant Kumar	Constable	-do-	7978603928
3	Sri S.S. Panda	ASIPF	IVG/HQ/Bhubaneswar	8895513001
4	Sri S.K. Paswan	Constable	-do-	9438219164
5	Sri Sahendra Kumar	Constable	-do-	9304365499
6	Sri Prafulla Behera	Constable	CCS/HQ/Bhubaneswar	8249616470
7	Sri S. Pattanayak	Constable	R-Coy/HQ/Bhubaneswar	7908668552
8	Sri Firoj Khan	Constable	-do-	9692797753
9	Sri B. Prajapati	Constable	-do-	7783974007
10	Sri SK Senapati	Constable	-do-	9933777714
11	Sri A.N. Pradhan	Constable	-do-	8249311256
12	Sri Dhaneswar Sahoo	Constable	-do-	8653540498
13	Sri GS Behera	Constable	-do-	9883157507
14	Sri AK Behera	Constable	-do-	9931524357
KHURDA ROAD DIVISION				
1	Sri Amit Kumar	SIPF	RPF Post, Bhubaneswar	9692461510
2	Sri P.K. Roul	SIPF	RPF Post, Puri	9658575824
3	Smt. V. Sharma	L/SIPF	RPF Post, Khurda Road	8908730578
4	Sri R.S. Rana	Constable	-do-	7008019697
5	Sri N. Jena	HC-135	-do-	6370184938
6	Sri Manoranjan Jena	Constable	-do-	9348600297
7	Sri Firoj Khan	Const-920403	-do-	7978003835
8	Sri S. Singh	Const-955207	-do-	8917288265
9	Sri S.P. Dash	Const-946101	-do-	8763862726
10	Sri Prabhakar Nayak	Constable	R-Coy/Khurda Road	7008197894
11	Sri B.C. Bhanja	HC-202	-do-	9439193958
12	Sri T. Sahoo	Constable	-do-	9073918356
13	Sri P. Anil	Constable	-do-	7702927268
14	Sri Bijan Kumar Samal	Const	SIB/Talcher	9078639644

Annexure-28**OFFICERS & STAFF TRAINED ON FIRST AID FIRE FIGHTING RESCUE AT OFDRA, BHUBANESWAR FROM 03.02.2020 TO 03.03.2020**

Sl. No	Name	Designation	Place of Posting	Mobile No.
KHURDA ROAD DIVISION				
1	Sri SK Bagla	HC-171	RPF Post, Puri	8114963497
2	Sri Jitendra Bag	HC-68	-do-	7381646476
3	Smt. V. Sharma	L/SIPF	RPF Post, Khurda Road	8908730578
4	Smt. Haimabati Behera	L/HC	-do-	9437282980
5	Sri N. Jena	HC-135	-do-	6370184938
6	Sri Manoranjan Jena	Constable	-do-	9348600297
7	Sri S. Singh	Const-955207	-do-	8917288265
8	Sri S.P. Dash	Const-946101	-do-	8763862726
9	Smt. Kalpita Samantaray	L/Constable	-do-	9438093708
10	Sri Prabhakar Nayak	Constable	R-Coy/Khurda Road	9556877228
11	Sri Raj Pal	Constable	-do-	8895754708
12	Sri B.C. Bhanja	HC-202	-do-	7008639919
13	Sri T. Sahoo	Constable	-do-	9073918356
14	Sri P. Anil	Constable	-do-	7702927268
15	Sri P.C. Sahoo	Constable	RPF Post, Bhubaneswar	8293302338
SAMBALPUR DIVISION				
1	Sri B.R. Ghotia	IPF	RPF Post, Mahasamud	9752410126
2	Sri Anil Kumar	HC-387	-do-	8000963989
3	Sri Bidyadhar Sutar	SIPF	RPF Post, Rairakhol	9861036170
4	Sri MC Meena	Constable-416	RPF Post, Boinda	8093983393
5	Sri Loknath Pradhan	Constable-88	RPF Post, Balangir	6370852882
6	Sri HS Sahoo	Constable	RPF Post, Bargarh	8329809571
7	Sri Mandeep Singh	Constable	RPF Post, Kantabanji	9050059059
8	Sri Nitish Kumar	Constable-431	R-Coy/Sambalpur	6370087219
9	Sri B. Bagartee	Const-3661	RPF Post, Sambalpur	7681011052
10	Mukesh Kumar Meena	Constable	-do-	7008089623
11	Sri Sourav Singh	Constable	-do-	9456067455
12	Sri Lotan Singh	Constable	P-Cell/Sambalpur	8285269624
13	Sri AK Saini	Constable	SCNL/Sambalpur	8946987440
14	Jubaraj Rohini	Constable	RPF Post, Titlagarh	9337630313
15	Sri Sailendra Kumar	Constable	-do-	7978399529

Annexure-29**CCTV & LUGGAGE SCANNER in ECoR**

Division	CCTV				Luggage Scanner			UVSS		Segway		
	Location/ Station	Number of CCTV under ISS	Number of CCTV other than ISS	Intelligent Analytics / Manual Monitor	Station	No. of entrance	Intelligent Analytics / Manual Monitor	No. of station	No. of UVSS installed	Station	No. of vehicles	Total staff trained
KUR	BBS	32	36	46 inches x 02 nos.	BBS	01	14 inches x 01 no.	BBS	01	CTC	02	60
	CTC	49	07	46 inches x 02 nos. + 55 inches x 01 no.	CTC	01	18 inches x 01 no.	CTC	01	BBS	02	102
	PUI	32	08	46 inches x 03 nos. + 49 inches x 01 no.	PUI	01	16 inches x 01 no.	PUI	01	PUI	02	96
	-	Number of CCTV under VSS	Number of CCTV other than VSS	-	-	-	-	-	-	-	-	-
	BHC	39	04	55 Inches x 02 nos.	-	-	-	-	-	-	-	-
	JJKR	37	02	55 Inches x 02 nos.	-	-	-	-	-	-	-	-
	KUR	40	Nil	55 Inches x 02 nos.	-	-	-	-	-	-	-	-
	BAM	40	06	55 Inches x 02 nos.	-	-	-	-	-	-	-	-

Annexure

	PSA	24	03	55 Inches x 02 nos.	-	-	-	-	-	-	-	-
WAT	VSKP	47	06	42 inches x 03 nos.	VSKP	01	16 inches x 01 no.	VSKP	01	VSKP	02	60
	CHE	39	11	55 Inches x 02 nos.	-	-	-	-	-	-	-	-
	VZM	16	04	32 Inches x 01 no.	-	-	-	-	-	-	-	-
	RGDA	16	Nil	35 Inches x 01 no.	-	-	-	-	-	-	-	-
SBP	SBP	16	Nil	43 Inches x 01 no.	-	-	-	-	-	-	-	-

Annexure-30**Vulnerable Locations for landslides & flood in ECoR****KUR Division**

SI No.	Location				Cause	Whether new location or repeated
	Bridge No.	Kilometre	Block section	UP / DN	(Flood / Breaches / Land slide & others)	
1	3				6,7,8	9
1	Br.No. 361	295/1-5	BHC-BUDR	UP	Flood	Repeated
		295/6-2		DN		
2	Br.No. 393	322/5-9	MZZ-BTV	UP	Flood	Repeated
		322/10-6		DN		
3	Br.No. 615	448/25-27	RTN-KUR	UP	Flood	Repeated
		448/25-27		Mid		
		448/28-26		DN		
4	Br.No. 702	478/1-5	TAP-NKP	UP	Flood	New
		478/6-2		DN		
5	Br.No. 838	521/23-25	GNGD-BALU	UP	Flood	New
		521/24-26		DN		
6	Br.No. 861	528/3-5	BALU-CLKA	UP	Flood	Repeated
		528/6-4		DN		
7	Br.No. 992	596/29-33	JNP-BAM	UP	Flood	Repeated
		596/34-30		DN		
8	Br.No. 1050	631/7-9	IPM-JPI	UP	Flood	New
		631/10-8		DN		
9	Br.No. 1052	632/11-15	IPM-JPI	UP	Flood	New
		632/16-12		DN		
10	Br.No. 63	489/8-11	SIL-MLT	UP	Flood	New
		489/8-11		DN		

11	Br.No. 66	490/18-19	SIL-MLT	UP	Flood	New
		490/18-19		DN		
12	Cutting	583/ 4-2	CAP-BAM	UP, DN	Land slide	New
		(40m)				

SBP Division

SI No.	Block section	Duration of traffic disruption			Location.		Length	Cause of disruption ie due to heavy rains, flooding,
		From date & time	To date & time	Duration	From km	To km		
				(In Hrs)				
1	THV-SPRD	16.07.17	04.06.18	11½ months	326/1 Up line Br.No.588		171 Mtr.	Flash flood with heavy discharge.
2	RPRD-NRLR	15.08.18	16.08.18	28:15 hrs	233/13-15 Dn line Bridge No.385 NRLR end.		10 Mtr.	Flash flood with heavy discharge.
3	HKG-GBQ Up & Dn	20.07.19	20.07.19	3.0 hrs.	576/0	575/6	0.4 Km.	Flooding of track
4	AMB-DKLU	06.08.19	08.08.19	19hrs	266/6-7 Up & Dn Br.No.443 approach toward AMB end.		26 Mtr.(Up)	Flash flood with heavy discharge
5	BLGR-LSX	13.08.19	14.08.19	27:40hr	673/16	674/01	85 Mtrs.	Heavy Rain
6	BLGR-DFR	13.08.19	13.08.19	12 hrs.	693.39	693.455	0.065 Mtrs.	Land Slide at cutting.

			WAT Division			
Sl.	Sub Divn	Major section	Location	Cause		
1	2	3	5	6	7	8
				Flood	Breaches	Land Slide & Others
1	CHE	PSA-VSKP	Km.705/17-13		Yes	
2	CHE	NWP-GNPR	Km.10/8-11, 36/1-3		Yes	

4	ARK	KTV-KRDL	Km no.48/10, 70/27-28, 82/28-29, 83/20-22, 66/10-11, 66/29-30, 71/28-29, 67/22-23, 67/22-24, 38/33-34, 42/19-20, 42/27-28, 64/27-30, 35/20-21, 44/19-20, 64/30-31, 46/25-26, 57/33-58/1, 57/30-31, 64/18-19, 64/9-11, 41/4-5, 41/4-5, 48/8, 56/10-11, 44/26-27, 43/3-4, 56/3-4, 42/16, 66/22-23, 53/9-10, 49/22, 66/30-29, 65/12-13, 71/4-5, 45/4-5, 45/4-5, 46/25-24, 49/28-29, 70/26-28, 71/3-4, 71/27-28, 75/3, 79/29-72/1, 44/23-24, 75/12-13, 77/22-23, 79/27, 82/17-15, 38/23-24, 47/30-31, 66/11-15, 66/27-28, 65/33-34, 68/0-1, 81/7-8, 44/11-12, 46/14-15, 44/20-21, 44/3-5, 67/25, 46/2-3, 47/30, 88/2, 70/30, 64/28-29, 64/30, 64/24-25, 61/1-2, R/3 & R/2 CMDP, 66/01,, 40/20-23, 40/30-31, 41/2-3, 41/22-23, 42/17-18,, 43/5-7, 44/4-5, 46/17-18, 56/13-15, 61/1-2,, 61/2-3,, 61/14-15,, 61/21-22, 62/2-4,			Boulders
89	ARK	KTV-KRDL	62/9-12		30.0m	Wash out
90	ARK	KTV-KRDL	62/15-16, 63/26-27, 64/24-25,, 64/31-32, 65/12-13, 65/24-33, 66/5-6, 66/27-30, 70/24-29, 76/26-28, 80/17-18, 81/6-8, 81/31-82/1, 82/15-17, 93/28-94/1, 105/16-17, 82/15-17, 63/9, 82/15-16, 66/22-23,, 66/18-19, 82/15-17, 66/1-3, 59/25, 61/01, 65/30-31, 53/6-9, 47/20, 58/34-59/1, 38/14-15, 47/22-23, 64/27-28,			Boulders
122	ARK	KTV-KRDL	67/16-22			Boulder hit to Pier -1 and damaged the pier
123	ARK	KTV-KRDL	66/07, 67/25, 70/26-27, 64/29, R-2&3, 66/7-8, 49/11-12, 45/19-20, 38/21-23, 63/33-34, 64/18, 56/16-17, 66/20-21, 44/5-6, 35/1-2, 64/2, 65/12-13, 34/28-29, 65/13-14, Km.207/4-5, Km.131/7-8, Km.131/4-5, Km.124/23-24, Km.126/9-10, Km.126/9-10, Km.131/7-8, Km.129/22, Km.132/15-16, Km.207/4-5, Km.202/14-15, Km.209/9-10, Km.211/15-17, Km.212/10-12, Km.213/4-5,, Km.213/18-214/01, Km.214/9-11, Km.214/18-19, Km.215/2-3, Km.216/16-17, Km.217/17-19, Km.218/2-3, Km.129/22-23, 126/12-18, Km.124/1, Km.131/6-7, Km.166/15-16, Km.131/4-5, Km.122/7-9			Boulder fall
164	KRPU	KTV-KRDL	Km.123/20-21, Km.128/9-10, Km.123/20-21, Km.122/8			Boulders & Muck

170	KRPU	KTV-KRDL	Km.157/2-3			Washout
176	JDB	KTV-KRDL	Km.335/5-7 UP , Km.222/13-14, Km.344/17-23			Land slide/slip
179	LKMR	KRPU-SPRD	Km.142/0			Slip earth
180	LKMR	KRPU-SPRD	Km.127/14-128/4	Flood		
181	LKMR	KRPU-SPRD	Km.88/13-14			CWD failure
182	LKMR	KRPU-SPRD	Km.112/10-12, Km.58/3-4, (Km.112/8-9- Repeated , 2 hrs 30 mins R2), Km.120/16-17, Km.120/16-17, Km.111/18-19, Km.126-128	CWD overflow		
183	LKMR	KRPU-SPRD	Km.101/8-9, Km.40/12-13,, Km.103/3-5,, Km.104/12-13, Km.104/12-13, Km.104/13-14			Slop failure
191	LKMR	KRPU-SPRD	Km.145/5-6, Km.86/1-2, Km.127/12, Km.126/18			Earth slip
192	LKMR	KRPU-SPRD	Km.95/19-Km.96/0, Km.115/10-Km.116/1, Km.58/9-10, Km.13/8-9, Km.93/9, Km.155/8-9, Km.98/4-5, Km.13/11-Km.13/12, Km.92/8, Km.135/13,, Km.17/1, Km.104/12-13, Km.108/13-14, Km.109/7-8, Km.105/18-105/19, Km.100/0-1, Km.13/20-21, Km.17/1-2, Km.137/4-12, Km.86/0-2, RUL Yard			Boulder fall
194	LKMR	KRPU-SPRD	Km.58/1-3, Km.53/6-7, Km.93/9-Km.93/10, Km.119/18,			Rock fall inside T.4,, inside T.3
197	LKMR	KRPU-SPRD	Km.13/11-12			Boulders with muck
198	LKMR	KRPU-SPRD	Km.114/4-5,, Km.119/19-120/0, Km.141/1-2			Soft rock fallen T23
206	LKMR	KRPU-SPRD	Km.137/11-12, Km.137/11-12, Km.92/17-18,, Km.91/9-10,, Km.98/3-5, Km.101/5-7, Km.100/0, Km.105/12-14, Km.155/7-9, Km.13/17-22, Km.101/7-8, Km.125/17-18, Km.142/2-5, Km.142/2-5, Km.11/32-33, Km.126/0-1, Km.137/19-138/0, Km.106/8-9, Km.101/9-10, Km.150/0-1, SKPI Yard, Km.55/11-12, Km 99/22-23, Km 109/22-24, Km 46/30-31, SKPI Yd, Km 116/18-19, Km 137/9-14			slope failure
211	LKMR	KRPU-SPRD	Km.91/2-3			Loose earth
218	LKMR	KRPU-SPRD	Km.119/0- 1, Km.120/4, Km.117/15-16, Km.124/4-5, Km.127/12-13, Km.128/4-5			Overflow of Br.299, 296
226	LKMR	KRPU-SPRD	Km.104/12-13			Loose boulder fall
227	LKMR	KRPU-SPRD	Km.124/4-6	Br.292 over flow		

240	LKMR	KRPU-SPRD	Km.99/14-15			T 14 rock from roof
241	LKMR	KRPU-SPRD	Km.134/13-14, Km.103/1, Km.101/7-8, Km.89/4-89/5, Km.89/5-89/6, Km.90/11-15, Km.90/17-18, Km.98/1-2, Km.101/14, Km.102/2-102/3, Km.103/0, Km.107/18, Km.114/14-16, Km.115/15-16, Km.116/16-17, Km.117/2-117/3, Km.133/4-10, Km.141/10, Km.147/12-13			Tree fallen
251	LKMR	KRPU-SPRD	Km.147/12-14, Km.134/8-9, Km.159/7-10, Km 29/16-17, Km 53/16-17 & 13-14, Km 55/10-13, Km 58/7-8			Earth slip
254	LKMR	KRPU-SPRD	Km.143/19-144/0, Km.96/4-5, Km.137/10-16, Km.142/4, Km.143/9, Km 53/13-14, Km 13/8-9			Boulder fall
257	LKMR	KRPU-SPRD	Km.108/7-8			Earth failure
279	LKMR	KRPU-SPRD	Km.151/0	W/W Jam with silt		
282	LKMR	KRPU-SPRD	Km.88/0-9			Rockfall from U/L portion T 7
283	LKMR	KRPU-SPRD	Km.139/15-16			Soft rock from U/L portion T 29
290	LKMR	KRPU-SPRD	Km.126/2-127/13, Km 84/4-6	Overflow Syphon	of	

Annexure-31

Telephone of Control Rooms & Emergency for (24X7)

Sl.No	Control Rooms	Telephone number
1	NDRF HQ control(NDLS)-	011-24363260, FAX- 011-24363261
2	NDRF Help line(NDLS)	919711077372
3	NDRF / Mundali (Odisha) Control Room	0671-2879711, 09437581614
4	NDRF/ Guntur (AP) control Room	0863-2293050, 08333068559
5	NDRF (RRC) , Vijag Steel plant /VSKP(AP)	08333068565, 08333068560
6	ODRAF (Control Room)	06712339555
7	OSDMA (Control)	0674-2395398, 06742534117
8	SRC (Control for 24 hrs) with GIS	06742534177.

9	Flood Control Room (Odisha) 24X7	06742395951.
10	Air Ambulance Control Room (NDLS)	9540161344.
11	Police Control Room/ Odisha	0671-2304001, FAX-0674-2304354
12	Police Control Room/ Chhattisgarh	07714247123
13	Police Control Room/ VSKP/ AP	08099076739
14	Police Control Room/ Vijayawada/AP	08662576956

Sl no	Emergency phones	Telephone numbers.
1	All in one emergency number	112
2	Police	100
3	FIRE	101
4	Ambulance	102, 108
5	Traffic Police	103
6	Hospital on Wheel/Blood Requirement	104
7	Railway Inquiry	139
8	Women's Help line	181
9	Child Help line	1098
10	Gas leakage	1906
11	Indian Airlines	1407
12	Railway	138,183
13	Dial a Doctor	1911
14	Military Police Help line	155200.

Annexure-32**CUG telephone numbers Superintendent of Police of Districts**

Sl.No	SP of Districts	CUG Telephone number
1	State Police Hqrs.Control room	94389-16555
2	IG of Police , Railway, Cuttack	94389-16946
3	SP (GRPS) Cuttack	9438916890
4	GRPS/ Bhadrak	9438916894
5	GRPS/ Cuttack	9438916895
6	GRPS/ Bhubaneswar	9438916892
7	GRPS/ Khurda Road	9438916896
8	GRPS/Berhampur	9438916893
9	SP (Rly) Rourkela	9438916900
10	DG Police/ Odisha	9438916666. 9438916000
11	Commissioner of Police / Bhubaneswar	8280338300
12	SP/ Cuttack	9438916200
13	SP / Jagatsinghpur	9438916300
14	SP/ Jajpur	9438916240
15	SP / Khurda	9438916280
16	SP/ Nayagada	9438916290
17	SP/Puri	9438916320
18	SP / Bhadrak	9438916370
19	SP/ Angul	9438916430
20	SP/ Dhenkanal	9438916490
21	SP/ Balangir	9438916510
22	SP/ Jharsuguda	9438916530
23	SP/ Sambalpur	9438916550
24	SP/ Sonepur	9438916580
25	SP/ Keonjhar	9438916590
26	SP /Berhampur	9438916670

27	SP/ Gajapati	9438916700.
28	SP/ Ganjam	9438916720
29	SP/ Koraput	9438916790
30	SP/ Malkangir	9438916820
31	SP Nuapada	9438916860
32	SP/ Rayagada	9438916870
1	DGP Raipur/ Chhattisgarh	0771-4240001, 0771-4240077(Fax) 0771-1445730(R)
2	ADG/ Chhattisgrh	09425206663
3	ADG(TRG)/ Chhattisgrh	09425509080
4	IGP/ Chhattisgrh	09425535559
5	Sr. SP/ Raipur/ Chhattisgrh	09425223303
6	SP/ Mohasamud/ Chhattisgrh	09425242777
7	SP Dhamtari/ Chhattisgrh	09424147594
8	SP/ Baster/ Chhattisgrh	09752258444
9	SP/ Dantewada/ Chhattisgrh	094255596301
10	SP/ Sukma/ Chhattisgrh	07587433222
1	Collector/ Vishakhapatanam	08912526999 , 08912754106(Fax)
2	Joint Collector/ Vishakhapatanam	08912565252
3	SP / Vishakhapatanam	08912551104, CUG-9849900200
4	DIG/ Vishakhapatanam	08912754535
5	Collector/ Vizianagaram	08922276720, 08922276177(F)
6	Joint Collector/ Vizianagaram	08922276658, 08922276902(F)
7	SP / Vizianagaram	08922276163, 08922226937(F) CUG-9440795900
8	Collector/ Srikakulam	08942222555, 08942222565(F)
9	Joint Collector/ Srikakulam	08942222479, 08942222670(F)
10	SP / Srikakulam	08942222556, 08942222556. CUG-9440795800
11	DG of Police/ Srikakulam	08912704135, 08912754535(F)

Annexure-33

Addresses of Forensic Science Laboratories in jurisdiction of ECoR
(Refer rule 7.03 and 8.03)

Address	Telephone No	Fax No
Director State Forensic Science Laboratory Police Line Campus Tikrapara, Raipur Chhattisgarh- 492 002	0771-2251258	0771-2251258
Director Forensic Science Laboratory Reed Hills, Opp. Niloufer Hospital Andhra Pradesh, Hyderabad - 500004	040-23390398	040-23394449
Director State Forensic Science Laboratory Rasulgarh, Bhubaneswar Orissa-751010	0674-2586187 0674-2586417	0674-2586187
Regional Forensic Science Laboratory, Berhampur At/PO: National High Way No.5, Gopalpur Junction, Dist. Ganjam -PIN: 760007, Odisha		
Regional Forensic Science Laboratory, Sambalpur At/P.O.: Reserve Police Line, Sambalpur, Odisha	0663- 2522914	
Regional Forensic Science Laboratory, Balasore , At/P.O.: Bamapada, Dist: Balasore, Odisha	06782-255097	
Director State Forensic Science Laboratory 37/1/2, Belgachia Road West Bengal, Kolkata- 700037	033-25565430	033-25565430

Annexure-34**Telephone, Fax number updated on 14.7.2020****Telephone Nos. of National Disaster Management Authority over ECoR**

SI	Name	Land line & Mobile No	Fax, E-mail
1	National Disaster Management Authority, NDMA Bhawan, A-1, Safdargunga Enclave, New Delhi, Pin - 110 029.	011-26701700 Control Room 011-26701728	91-11-26701729 controlroom@ndma.gov.in
2	Directorate General, NDRF, 6th Floor, NDCC-II Building, Jai Singh Road, New Delhi - 110001	011-23438020, 011-23438119 Control Room- 011-23438091, 011-23438136	011-23438091 dg.ndrf@nic.in Control-hq.ndrf@nic.in
3	NDRF 3 rd BN, (Jurisdiction-Odisha & Chhattisgarh) at Mundali, Cuttack, ODISHA	Commandant- 9437864571 Control room- 06712879714 9437581614 9937187222(WLL) 9438882090 (Wireless)	
4	RRC Balasore (Odisha)	- (Team Commander) 9437964575	
5	RRC-DURG (Chhattisgarh)	- (Team Commander) 9437581608	
6	NDRF (AP) 10 th BN at ANU Camus, Nagarjuna Nagar Guntur (AP), Pin- 522510	0863-2293178 Commandant- 9424410138 Control room- 08632293050 04024220949	FAX-0863-2293050 ap10ndrf@nic.in
7	NDRF-RRC, Vizag Steel Plant, Vishakhapatnam, Andhra Pradesh	08333068565 08333068560	

8	Commandant, 4th CISF Training Center Mundali (Orissa),		(Control Room) 06712596313 06712879569	Fax-0671-2879710
9	Commandant, 4th CISF Barasat, (KOLKATTA), NDRF. (for Chemical)	033 - 25263077		FAX-033-25264394
10	Orissa State Disaster Management Authority (OSDMA), Rajib Bhawan, Unit-5 Bhubaneswar	0674-2395379 & 2395531 2391871	State Emergency operation Centre-916742534177	osdma@osdma.org
11	Andhra Pradesh State Disaster Management Authority, Secundrabad.	08645246600		apsdma@ap.gov.in
12	Nodal Officer(Disaster)/ VSKP	Commandant 0891282415 Director 08912543031	Commandant 7382264169 Director – 9490753428	noicap_navy@nic.in
13	Andhra Pradesh Fire Station, Vizag	08912568905		
14	Chhatisgarh Disaster Management Authority, Raipur	0771-2221242 (Superintendent) 07712510939 (Secy)	9425520413 Control room- 07712223471	0771-2221259 cgrelief@gmail.com
15	Chhatisgarh State Fire & emergency Service, Raipur		Control room- 91-7712512331	
16	ODRAF Control Room (24x7) at Cuttack	0671-2339555		
17	Team Leader-ODRAF / Cuttack		9437070279	
18	Team Leader-ODRAF /Jharsuguda		9438500678	
19	Team Leader-ODRAF/ Koraput		8249114949	
20	Team Leader-ODRAF / Rourkela		9438503808	
21	Team Leader-ODRAF / Baripada		9437806782	
22	Team Leader-ODRAF/ Bhubaneswar		986118013	
23	Team Leader-ODRAF/ Chatrapur		9439932505	
24	Team Leader-ODRAF/ Balasore		9337105939	
25	Team Leader-ODRAF /Jagatsinghpur		9437140482	
26	Team Leader-ODRAF / Balangir		8895475053	
27	Team Leader-ODRAF / Dhenkanal		9937949513	
28	Team Leader-ODRAF /Chatrapur		9437034939	
29	Team Leader-ODRAF /Koraput)		9438017229	
30	Team Leader-ODRAF /Rayagada		6371216639	

31	Team Leader-ODRAF /Jajpur		6370357095	
32	Team Leader-ODRAF /Deogarh		9437821901	
33	Team Leader-ODRAF /Boudh		9938032790	
34	Team Leader-ODRAF /Khurda		7978980055	
35	Team Leader-ODRAF /Koraput		8455965985	
36	Team Leader-ODRAF /Bhanjanagar		9861258832	
37	APDRAF		Control room- 9440906404	
38	Liaisoning officer APSDRAF	08645237347	9440627425	devaacmt@gmail.com
39	Reserve Inspector APSDRAF		9440906753	Munuswamy.sunkara@gmail.com
40	Dy.chief Controller of Explosives / VSKP		08912722257	dyccevizag@explosives.gov.in

Disclaimer

This information provided in this document is for the purpose of general guidance. Although, all efforts have been made to ensure authenticity and accuracy, in case of any conflict the provision in GR&SR / Accident manual and other relevant code would over ride.

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