



AIRSC DISASTER MANAGEMENT

Building a Safer, More Prepared and Resilient Railway Ecosystem

A Strategic Safety and Resilience
Initiative of AIRSC



IDENTIFY RISKS EARLY • PREPARE PROFESSIONALLY • RESPOND WITH COORDINATION • RECOVER WITH RESILIENCE

PREPAREDNESS PROTECTS LIVES • RESILIENCE SECURES THE FUTURE

ALL INDIA RAIL SAFETY COUNCIL

Railways—The Lifeline of Our Nation

Safety First • Safety Always

WWW.RAILSAFETY.CO.IN





TRAIN ACCIDENT & DIFFICULT-TERRAIN EMERGENCY RESPONSE

Protect Life • Control Secondary Hazards • Coordinate Rescue • Preserve Evidence

IMMEDIATE PRIORITIES

- SCENE SAFETY
- MEDICAL TRIAGE
- RESCUE ACCESS
- PASSENGER ACCOUNTABILITY
- FIRE PREVENTION
- RESOURCE MOBILISATION

SPECIAL ENVIRONMENTS

- TUNNELS
- BRIDGES
- HILL SECTIONS
- REMOTE CORRIDORS
- FOREST ROUTES
- LANDSLIDE & ROCKFALL ZONES

PREPAREDNESS TOOLS

- ACCESS MAPPING
- ALTERNATIVE COMMUNICATION
- EVACUATION ROUTES
- RESCUE EQUIPMENT
- LIGHTING
- MEDICAL SUPPORT
- RESPONDER TRANSPORT



OPERATIONAL RESPONSE AND INVESTIGATION REMAIN WITH COMPETENT RAILWAY, GOVERNMENT AND EMERGENCY AUTHORITIES



EVERY LOCATION IS DIFFERENT—
PREPARE FOR TERRAIN, ACCESS,
WEATHER AND INFRASTRUCTURE



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VISION 2047



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DIGITAL
INDIA



MAKE IN
INDIA



SKILL
INDIA



SUSTAINABLE
& GREEN
MOBILITY



FIRE • EXTREME WEATHER • HAZARDOUS MATERIALS PREPAREDNESS

Know the Hazard • Control Exposure • Coordinate Specialist Response



FIRE & LIFE SAFETY



DETECTION & ALARMS



EXTINGUISHING EQUIPMENT



SMOKE CONTROL



EMERGENCY LIGHTING



EVACUATION ROUTES



RESPONDER ACCESS



EXTREME WEATHER & CLIMATE



FLOOD



CYCLONE



HEAVY RAIN



EXTREME HEAT



DENSE FOG



LANDSLIDE



COASTAL HAZARD

CLIMATE RESILIENCE CONTROLS



EARLY WARNING



DRAINAGE



RESOURCE POSITIONING



VULNERABLE-ASSET
MONITORING



SPEED RESTRICTIONS



RESTORATION PLANNING



HAZARDOUS MATERIALS & DANGEROUS GOODS



PETROLEUM



CHEMICALS



TOXIC EXPOSURE



FIRE RISK



ENVIRONMENTAL RISK



HAZMAT INCIDENT ACTIONS



IDENTIFY SUBSTANCE



ISOLATE AREA



USE CORRECT PPE



CALL SPECIALISTS



INFORM PUBLIC
ACCURATELY



ONLY TRAINED AND PROPERLY EQUIPPED RESPONDERS MAY APPROACH A HAZARDOUS-MATERIAL INCIDENT

LIFE SAFETY COMES BEFORE LUGGAGE,
PROPERTY OR SERVICE RECOVERY



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SUSTAINABLE &
GREEN MOBILITY



PASSENGER EVACUATION & EMERGENCY MEDICAL PREPAREDNESS

Clear Instructions • Accessible Routes • Calm Movement • Competent Care

EVACUATION CHALLENGES



CONGESTION



SMOKE



DARKNESS



UNFAMILIAR SURROUNDINGS



LANGUAGE BARRIERS



ANXIETY



EVACUATION ACTIONS

LISTEN TO OFFICIAL INSTRUCTIONS •
MOVE ORDERLY • KEEP EXITS CLEAR •
ASSIST WITH CONSENT •
DO NOT RETURN FOR LUGGAGE

VULNERABLE-PERSON PROTECTION



CHILDREN



SENIOR CITIZENS



PREGNANT WOMEN



PERSONS WITH DISABILITIES



PATIENTS

MEDICAL PREPAREDNESS



FIRST RESPONSE



MEDICAL COMMUNICATION



CASUALTY ACCESS



AMBULANCE COORDINATION



HOSPITAL REFERRAL



MASS-CASUALTY ARRANGEMENTS



FIRST AID AND TREATMENT MUST REMAIN WITH TRAINED PERSONNEL
ACTING WITHIN THEIR COMPETENCE

RECOVERY SUPPORT



PSYCHOLOGICAL FIRST AID



FAMILY SUPPORT



RESPONDER WELLBEING



PROTECT LIFE FIRST—MOVE CALMLY,
COMMUNICATE CLEARLY, CARE COMPETENTLY



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SUSTAINABLE &
GREEN MOBILITY



INCIDENT COMMAND • MULTI-AGENCY COORDINATION • CRISIS COMMUNICATION

Clear Authority • Rapid Decisions • Coordinated Response • Trusted Information



UNIFIED INCIDENT COMMAND

Clear authority • Defined priorities •
Reporting lines • Resource tracking •
Incident logging



MULTI-AGENCY COORDINATION

Railway & Metro • Police •
Fire & Rescue • Hospitals •
Disaster Management •
Local Administration



RESILIENT COMMUNICATION

Primary & backup systems •
Contact directories •
Escalation protocols •
Multilingual accessible public updates



ONE INCIDENT • ONE COORDINATED STRUCTURE • ONE CLEAR SOURCE OF INFORMATION

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SUSTAINABLE &
GREEN MOBILITY



SECURE NETWORK
& DATA PROTECTION



RESTORED
RESILIENT
READY ✓



POSTER
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OF 8

RESTORE SAFELY • RECOVER RESILIENTLY • LEARN CONTINUOUSLY

Business Continuity • Operational Recovery • Technology & Cyber Resilience

A Strategic Safety Initiative of the All India Rail Safety Council (AIRSC)



BUSINESS CONTINUITY

Essential services • Recovery priorities • Alternate facilities • Backup communication • Workforce & supplier readiness



SAFE OPERATIONAL RESTORATION

Engineering verification • Controlled testing • Clear acceptance criteria • Phased reopening • Lessons captured



RESPONSIBLE TECHNOLOGY

AI • GIS • Digital Twins • IoT • Drones • Predictive analytics • Human oversight



SECURITY-BY-DESIGN

- Access control
- Monitoring
- Backups
- Incident response
- Data protection



Cybersecurity supports operational safety. Testing must be authorised and professionally controlled.

RECOVERY MUST NEVER BE RUSHED AT THE EXPENSE OF SAFETY

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SUSTAINABLE &
GREEN MOBILITY





EDUCATION • TRAINING • DRILLS • RESILIENCE

AIRSC Academy of Safety and Disaster Management (AASDM)

Building Competence for Safer Railways and a Stronger Nation

WORKSHOPS • TECHNICAL SEMINARS • EXECUTIVE DEVELOPMENT • TABLETOP EXERCISES • SIMULATIONS • FIELD DRILLS • CONFERENCES



WORKSHOP



SEMINAR



TABLETOP
EXERCISE



SIMULATOR



FIELD DRILL



RESEARCH



CERTIFICATE OF
PARTICIPATION



COMMUNITY
AWARENESS



INSTITUTIONAL
COLLABORATION



LEARN

Hazards • Risk •
Prevention • Leadership



PRACTISE

Scenarios • Roles •
Communication • Evacuation



EVALUATE

Observers • Performance •
Gaps • Corrective action



IMPROVE

Post-exercise review •
Lessons • Institutional learning



PUBLIC PREPAREDNESS

Clear awareness • Responsible behaviour • Support for vulnerable passengers



Educational and non-operational activities must remain coordinated with competent railway, metro, security and government authorities.



**WE CREATE PROFESSIONALS WHO BUILD
SAFER RAILWAYS, RESILIENT INFRASTRUCTURE
AND A STRONGER NATION**



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