



Concept Note

On

Workshop on Industrial Disaster Risk Governance & Geospatial Decision Support

1. Introduction

Industrial growth has significantly contributed to national development, but it has also increased the complexity and scale of industrial hazards. Incidents such as chemical leaks, fires, explosions, and hazardous material mishandling continue to pose serious risks to human life, infrastructure, and the environment. Strengthening industrial disaster risk reduction (DRR) capacities is essential for ensuring safe operations, regulatory compliance, and effective emergency response.

This one-day workshop aims to enhance the understanding and operational readiness of stakeholders involved in industrial safety and disaster management. The programme integrates national frameworks, global best practices, geospatial applications, hazardous material lifecycle management, and hands-on simulation of the Incident Response System (IRS) for industrial emergencies.

2. Aim

To build the capacity of professionals and stakeholders in industrial disaster risk reduction, preparedness, and incident response through structured learning, case studies, and simulation exercises.

3. Duration of the Workshop

The workshop will be conducted over a single full day, providing participants with a focused and intensive learning experience.

4. Objectives

- To provide an overview of industrial disaster risks and the national/international legal frameworks governing industrial safety.
- To introduce geospatial tools and techniques for industrial hazard assessment and emergency planning.
- To strengthen understanding of hazardous materials lifecycle management and safe handling practices.
- To train participants in the Incident Response System (IRS) for industrial emergencies through a structured simulation exercise.
- To enhance decision-making, coordination, and communication skills during industrial disaster scenarios.
- To promote adoption of global best practices and compliance standards in industrial DRR.

5. Language of Instruction

The primary language of instruction will be English; however, resource persons will also deliver sessions bilingually, as needed, to ensure clarity, inclusivity, and better

comprehension for participants who may be more comfortable engaging in an additional language.

6. Target Group

The key target audience is officials (Group A) from following Govt Agencies/Agencies/Institutions including officials from State Disaster Management Authorities (SDMAs), District Disaster Management Authorities (DDMAs), State Disaster Response Force (SDRF), National Disaster Response Force (NDRF), Industrial safety officers and plant managers, Fire service personnel, Emergency response teams, Urban local bodies and industrial area administrators, Academicians and researchers in disaster management, and representatives from industries handling hazardous materials.

7. Methodology

The workshop will follow a blended, interactive approach including:

- Expert lectures
- Case study discussions
- Demonstrations of geospatial tools
- Group exercises
- Simulation-based IRS
- Interactive Q&A sessions
- Best-practice sharing and reflective discussions

This methodology ensures practical learning, active participation, and real-world applicability.

8. Boarding, Lodging & Venue of the workshop

The boarding and lodging for the participants will be arranged by NIDM. Travel expenses of the participants shall be borne by respective nominating organisation/department/institute. Confirmation of nominations will be communicated via email. It is therefore requested that nominating officials await confirmation before planning their journey. There is no course fee for participating in this workshop. The workshop will be held at National Institute of Disaster Management (NIDM), New Delhi. Fully equipped training halls, and ICT facilities will be utilized for the programme.

9. Module Structure for the Workshop

The entire workshop is divided into four modules, each with one expert session. The details of the session are as follows.

Component	Description
Pre-Workshop Assessment	Baseline Online Assessment (MCQs)
Module 1.	Prevention & Mitigation: - Industrial Disaster Risk Reduction - Concepts, Legal & Institutional Frameworks
Module 2.	Prevention, Mitigation & Preparedness: - Lifecycle Management of Hazardous Materials
Module 3.	Preparedness: - Geospatial Technologies in Industrial Disaster Risk Reduction
Module 4.	Response: - Incident Response System (IRS) Simulation for Industrial Emergencies (Response)
Post-Workshop Assessment	Online Assessment (MCQs)

10. Expected Outcomes

Participants of the workshop will:

- Gain a comprehensive understanding of industrial disaster risks and regulatory frameworks.
- Learn to apply geospatial tools for hazard assessment and emergency planning.
- Strengthen knowledge of hazardous materials management and safety protocols.
- Develop practical skills in IRS-based emergency response through simulation.
- Improve coordination, communication, and decision-making during industrial emergencies.

11. Organizing Team

Patron	Shri Madhup Vyas, IAS, Executive Director, NIDM
Program Chair	Dr. Kuldeep Chaurasia, HoD- (CBRN & CRMD) and Associate Professor, NIDM Delhi
Course-Coordinator	Dr. Kuldeep Chaurasia, HoD- (CBRN & CRMD) and Associate Professor, NIDM Delhi
Supporting NIDM Team Members	Dr. Pankaj, Dr. Vishal and Shri Satyam Raj

WORKSHOP SCHEDULE

on

Industrial Disaster Risk Governance & Geospatial Decision Support

Proposed Date: 3rd September 2026

Venue: Chanakya Hall, Ground Floor, NIDM, Rohini Campus, Delhi

Time (Hrs)	Programme	Pedagogy	Resource Person
09:30 - 09:55	Registration		NIDM Team
Inaugural Session			
10:00 - 10:20	Welcome Address and Context Setting	Opening remarks and discussion	Dr. Kuldeep Chaurasia, HoD, CBRN & CRMD, NIDM
	Special Address		Prof. Amir Ali Khan, HoD, RID, NIDM
	Special Address		Shri Randeep Kumar Rana, Sr. Advisor, NIDM
	Keynote Address		Shri Madhup Vyas, IAS, Executive Director, NIDM
	Vote of Thanks		Col. Vineet Banga, Joint Director, NIDM
10:20 – 10:50	High Tea		
Technical Sessions: Industrial Disaster Risk Reduction			
10:50-11:00	Pre-Wokshop Assessment	Online Assessment	Dr. Vishal Katekar, NIDM
11:00 - 12:00	An Overview of Industrial Disasters Risk Reduction, Legal and institutional framework for DM	Lecture, case discussion and Q&A	Dr. Pankaj Kumar, Assistant Professor, NIDM
12:00-13:15	Safe Handling of Hazardous materials (Extraction to Disposal)	Lecture, case discussion and Q&A	Shri Amit Tuteja, State Project Officer, UNDP (Former Industry & CBRN Expert, NDMA)
13:15 - 14:15	Lunch	Break	

14:15 - 15:15	Geospatial Technologies in Industrial Disaster Risk Reduction: Concepts, and Tools	Lecture, case discussion and Q&A	Dr. Kuldeep Chaurasia, HoD, CBRN & CRMD, NIDM
15:15 - 16:15	Simulation exercise on incidence Response System for Industrial disaster	Lecture, case discussion and Q&A	Dr. Pankaj/Dr. Vishal/Satyam, NIDM
16:15- 16:25	Post-Wokshop Assessment	Online Assessment	Shri Satyam Raj, NIDM
16:25 - 16:40	Tea Break	Break	
Valedictory Session			
16:40 - 16:50	Valedictory Address		Shri Madhup Vyas, IAS, Executive Director, NIDM
16:50 - 17:20	Distribution of Certificates		Shri Madhup Vyas, IAS, Executive Director, NIDM/ Col. Vineet Banga, Joint Director, NIDM
17:20 - 17:30	Vote of Thanks		Dr. Kuldeep Chaurasia, HoD, CBRN & CRMD, NIDM