

COMPENDIUM OF INDIAN STANDARDS ON

EMERGENCY MANAGEMENT

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Introduction

Bureau of Indian Standards has published number of standards on Emergency Management. Emergency Management is a dynamic and critical field dedicated to safeguarding communities and assets from the impacts of disasters and crises. It encompasses a cyclical approach involving four key phases: mitigation, preparedness, response, and recovery. Mitigation focuses on proactive measures to prevent or reduce the severity of potential emergencies. Preparedness involves planning, organizing, training, and equipping for effective response. The response phase is the immediate action taken during and after an emergency to save lives, protect property, and minimize damage. Finally, recovery focuses on the long-term process of restoring the affected area to normalcy and building future resilience.

The standards are guideline standards detailing about various aspects involved in Emergency Management dedicated to safeguarding communities and assets from the impacts of disasters and crises. It encompasses a cyclical approach involving four key phases: mitigation, preparedness, response, and recovery.

The importance of robust emergency response management cannot be overstated. It is essential for minimizing loss of life and injuries, protecting critical infrastructure and the environment, reducing economic and social disruption, and ensuring a swift and effective recovery. By proactively addressing potential threats and developing well-coordinated response mechanisms, communities can significantly enhance their resilience and ability to withstand and recover from a wide range of emergencies, ultimately fostering safer and more secure environments. The integration of technology, effective communication strategies, and continuous learning from past events are also vital components of contemporary emergency response management.

IS/ISO 22315: 2014 Societal Security — Mass Evacuation — Guidelines for Planning

This standard provides guidelines for planning mass evacuations, focusing on preparedness. It aims to help organizations develop effective, evidence-based evacuation plans.

The standard highlights eight key activities essential for effective mass evacuation planning. These include general planning aspects such as risk assessment, legal compliance, and coordination; preparing and informing the public; mapping at-risk or affected areas; making informed evacuation decisions; establishing public warning systems; analysing evacuee movement; assessing shelter needs; and continuously evaluating and improving evacuation strategies.

IS/ISO 22320: 2018 Security and Resilience — Emergency Management — Guidelines for Incident Management

This standard provides guidelines for incident management, focusing on the principles, processes, and structures necessary for effective response to incidents of any type and scale. The standard outlines essential principles and components of effective incident management, emphasizing ethics, unity of command, collaboration, risk management, preparedness, and adaptability. It details a structured incident management process involving information sharing, planning, decision-making, and feedback, while highlighting the role of diverse perspectives and time sensitivity.

IS/ISO 22322:2015 Societal Security- Emergency Management - Guidelines for Public Warning

This standard provides guidelines for developing, managing, and implementing public warning before, during, and after incidents. It is applicable to any organization responsible for public warning, from local to international levels.

The standard emphasizes the establishment of a comprehensive public warning system that includes designing a framework based on hazard monitoring and warning dissemination, assigning responsibilities, and continuously evaluating and improving the process. Key components involve gathering evidence-based information to assess hazards, making operational decisions, and issuing timely, appropriate warnings to those at risk.

IS/ISO 22327:2018: Guidelines for Implementation of a Community-based Landslide Early Warning System

This standard provides guidelines for establishing and implementing a community-based landslide early warning system (LEWS). It aims to improve understanding, define key components, and outline necessary methods and procedures.

A Landslide Early Warning System (LEWS) consists of seven key subsystems designed to enhance disaster preparedness and response. It begins with comprehensive risk assessments, including technical, institutional, and socioeconomic factors. Effective communication ensures that communities are informed about landslide risks. A dedicated disaster preparedness team is formed, bringing expertise in prevention and response. Evacuation maps and routes are developed for safe escape, supported by clear standard operating procedures (SOPs) for emergencies. The system includes continuous monitoring, early warning mechanisms, and regular evacuation drills to maintain readiness. Crucially, the commitment of local authorities and the community is essential for the system's long-term success and effectiveness.

IS/ISO 22328-1:2020: Guidelines for Community-Based Disaster Early Warning Systems

This standard provides guidelines for implementing a community-based disaster early warning system (EWS). It describes the methods and procedures for implementation and offers examples. The standard is designed for communities vulnerable to disasters, excluding secondary/indirect effects.

A Community-Based Disaster Early Warning System comprises five key subsystems aimed at enhancing local disaster resilience. It starts with risk assessments that consider technical, institutional, socioeconomic, and cultural vulnerabilities. Public awareness is promoted through effective dissemination of disaster-related knowledge, including causes and mitigation strategies. Monitoring and warning services involve installing early detection devices in high-risk areas and ensuring proper coordination with authorities. Strengthening community response capability is essential, involving the formation of disaster teams, identification of shelters and evacuation routes, creation of standard operating procedures, and regular drills. Sustained commitment from both local authorities and the community is vital to ensure the system's long-term effectiveness.

IS/ISO 22329:2021: Guidelines for the Use of Social Media in Emergencies

This standard provides guidelines for the use of social media in emergency management. It covers how organizations and the public can use and interact through social media before, during, and after an incident, and how social media can support emergency services.

The standard highlights the growing significance of social media in organizational communication strategies, recognizing its diverse platforms, content types, and integration with other media. It guides organizations on effectively utilizing social media for incident and crisis management, risk reduction, and policy development.

IS 18922: 2024 /ISO/TR 22351: 2015 Societal Security — Emergency Management — Message Structure for Exchange of Information

This standard describes a message structure for the exchange of information between organizations involved in emergency management. An organization can ingest the received

information, based on the message structure, in its own operational picture. The structured message is called Emergency Management Shared Information (EMSI). This Technical Report describes the message structure built in order to facilitate interoperability between existing and new information systems. The intended audience of this Technical Report is control room engineers, information systems designers and decision makers in emergency management.

An EMSI can be used peer-to-peer at the same level of the command hierarchy or up and down the hierarchy. This information contributes to the situational awareness of organizations involved for facilitating coordination of plans and actions

IS 19063: 2024/ ISO 22324:2022 Security and Resilience — Emergency Management — Guidelines for Colour Coded Alert

This standard provides guidelines for the use of colour codes in emergency management, addressing the need for clear and consistent communication of danger levels. In our daily lives, individuals face a multitude of risks, often requiring swift safety actions, even amidst incomplete comprehension of the threats. Public warnings, delivered through timely notifications and alerts, are crucial in enabling people to take necessary protective measures.

It is a vital tool for enhancing emergency management. Its adoption will lead to greater clarity in communication, more effective public warnings, and increased safety for all.

IS 19081: 2024/ ISO 22325:2016 Security and Resilience — Emergency Management — Guidelines for Capability Assessment

This standard provides guidelines for organizations to assess their emergency management capabilities. It establishes a framework for evaluating and improving how organizations handle emergencies.

The standard assessment model evaluates an organization's emergency management capability using a four-level maturity scale, from Level 1 (basic) to Level 4 (optimal). It focuses on eight key indicators: leadership, resource management, information and communication, risk management, coordination and cooperation, emergency management planning, exercise programme, and incident management system. The assessment process includes planning, data collection, analysis of findings, and reporting results.

This standard helps organizations to evaluate and strengthen their emergency management capabilities, leading to more effective preparedness and response.

IS 19082: 2024/ISO 22326:2018 Security and Resilience — Emergency Management — Guidelines for Monitoring Facilities with Identified Hazards

This standard offers guidelines for monitoring hazards within facilities as part of emergency management and continuity programs. It focuses on establishing a process for hazard monitoring at facilities with identified hazards.

The key elements of the standard focus on reducing losses from hazards through improved prevention, mitigation, preparedness, and response. It provides comprehensive guidelines covering all stages of hazard monitoring—planning, implementation, operation, control, and ongoing improvement.