

**Abstract:**

Comprehensive Management of crisis consist Risk Management and Crisis Management which are not separable both for natural and artificial events management. However preference of risk management to crisis management significantly increases the preparedness of an organization to overcome possible events and crisis. Past experiences show that in addition to decreasing consequent damages, requirement of crisis management will be less needed if risk management tools are applied effectively.

Provisioning an action plan for different kinds of events composes a part of risk management in an event, the effectiveness amount of which is evaluated and examined after implementation.

Assessing the crisis degree of an event which varies with time for different organizations is necessary in providing an action plan. Basis to estimate the degree of crisis is composed of: the magnitude of probable damage, organizational preparedness, equipment and facilities, hence altering technology, facilities and human resources, various degrees of crisis would be identified.

To provision an action plan consistent with crisis degree as well as possessing a dynamic nature, requires taking into account upstream rules, association of different organizations, natural condition and facts of a region. Indeed an action plan should response these questions:

What is the goal? What is the object? Who? What job? Who for? How? Where and when?

Flood is one of the most perilous natural events which cause life and financial damages throughout the world especially in Iran, as well as threatening the safety of rails. It affects the efficiency and effectiveness of rail negatively in transporting human and load terms, like wise physical damages to rail infrastructure such as rail roads and structures consisting bridges, culverts, signals, equipments and stations. Statistics demonstrate that events and damages are mostly stemmed from flood events in rail division.

In this research an action plan is prepared which is consistent with existing organizational structure of crisis management in Railroad Company of Islamic Republic of Iran. Also it accounts different aspects of any flood event in rail division and its consequences. Primary chapters of this report is assigned to review different kinds of probable natural and artificial events with emphasize on flood event, concepts and basis relevant to flood and flood management. Like wise some suggestions are given which are convenient for Iran railroad, respect to the structure of different information management systems,

application and operation of such systems. To reach this aim, investigating the basis related to provision of an appropriate action plan, flood event has

been ranked in 3 levels: Mild, Moderate and intensified, and then providing different scenarios for flood event in 3 time intervals (before, during and after the event) convenient action plan is presented for each time interval.

Successful implementation of an action plan requires the suitable relevant theoretical and practical educations which could be highly met by designing and performing different discussion and field maneuvers. Therefore investigating the basis related to performing Exercises (Maneuvers) in rail transportation division, suggested scheduling and performing process for maneuver of flood event in rail division is explained in chapter 6. Also instruction of an action plan and ranking target groups are studied in chapter 7 in detail. Generally the aim of this study is clear and perfect explanation of different aspects of a flood event in rail division and existing structure of crisis management to provide an efficient action plan and manage flood event which would be revised and modified by relevant experts and specialists after implementation and evaluation.

**Key Words:** Flood, Flood Management, Ranking Flood Ev  
Action Plan, Exercise, Training.



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# **Flood Response Plan on Railway Transportation**

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