

NEW RELEASE

TOWARDS DEVELOPMENT OF A RISK MANAGEMENT APPROACH

2010R01

A risk management approach is an important decision-making tool that complements good program and project management. The report presents an integrated risk management approach with respect to the following:

- Risk management techniques in the road sector
- Risk management for mega projects; and
- Improving the safety of road systems

The concept of risk and the approaches to risk categorisation, analysis and evaluation are presented, including the Risk Analysis by Scenario (RAS) method. The report includes recommendations on how risk management can be used by an organisation and its management to assist decision-making and guide programs and projects.

The report discusses risk management on mega projects, defined as those which are exceptional due to their dimensions, cost, architecture or technical specifications. The many partners and stakeholders involved in these projects will face different risks and/or different levels of exposure to risk. Therefore, projects must aim to achieve a balance between these various risks. Due to the long life cycle of such projects, it is essential to perform risk management at each stage of the project, from the planning, design, construction and operational stages. Five examples of mega-projects are presented including the Rion-Antirion bridge in Greece, the Millau Viaduct in France, the Oresund Link tunnel and bridge between Denmark and Sweden, the Stockholm South link and the Frejus tunnel between Italy and France.

Three different approaches to risk management of assets vulnerable to security threats are discussed. The first two methods were developed with roads, tunnels and bridges as their main focus. The third method is computer-based and addresses all types of infrastructure and their interdependencies. The three approaches are the Highway Vulnerability Assessment methodology, the recommendations of the Blue Ribbon panel on bridge and tunnel security and the CARVER2 methodology. The management of risks related to the security of personnel, facilities, (buildings and equipment) and information technology is also discussed.

The report introduces a technical toolbox for risk management, which is a database of policies, techniques and operational tools, including an inspection facility comprising inventory sheets, to assist budgeting and risk management.

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http://publications.piarc.org/ressources/publications_files/6/7437,2010R01.pdf