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# Introduce Risk Management Techniques in the Road Sector- Overview of the WG1 report

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# WG1 REPORT – A GUIDE TO RISK MANAGEMENT IN A ROAD ORGANIZATION

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- The framework for risk management in a road management organization, developed in the previous cycle, has been updated.
- Special emphasis has been placed on finding practical examples and case studies for the various areas of RM.

The ambition is that the updated framework should be the basis to keep the risk management knowledge area with examples of methods and case studies at PIARC's homepage.



## WORKING GROUP MEMBERS

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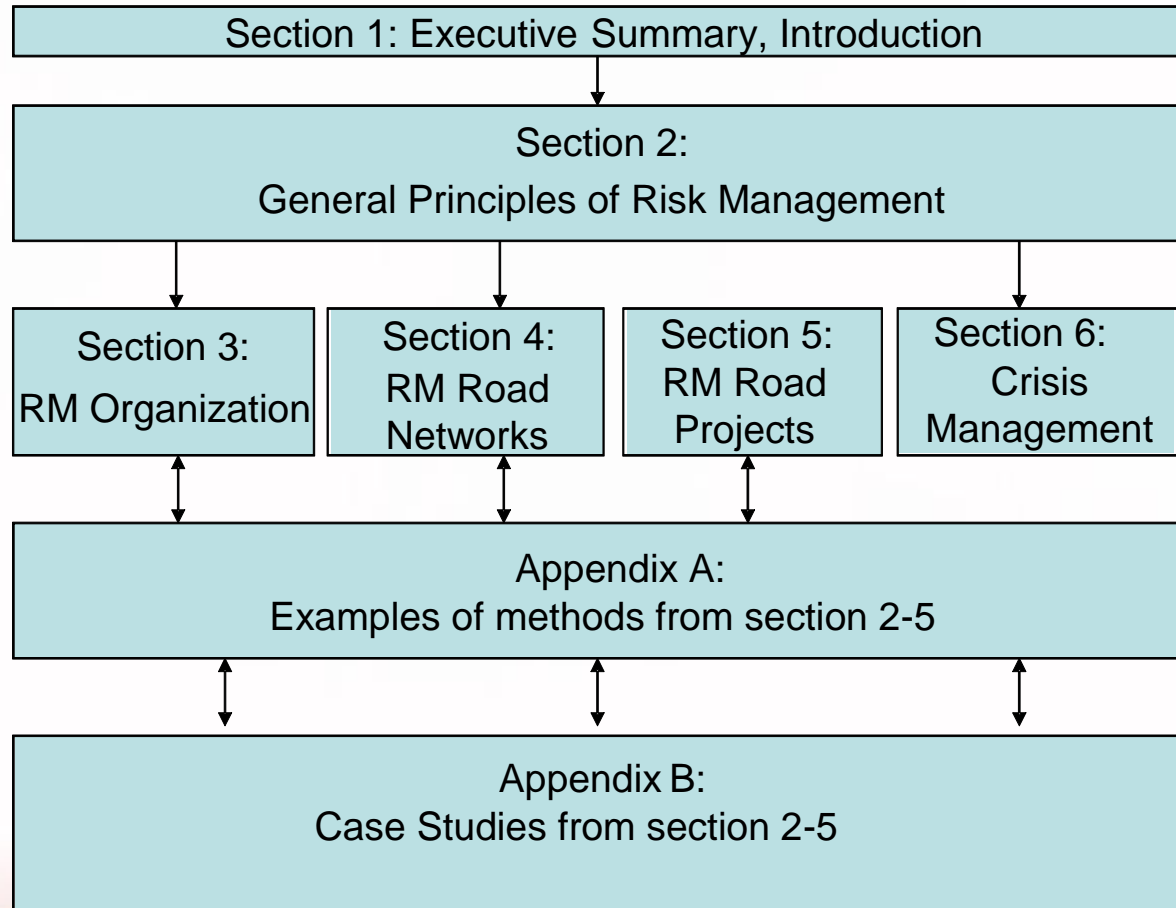
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# A GUIDE TO RISK MANAGEMENT IN A ROAD ORGANIZATION – STRUCTURE OF C3.1 REPORT AND FRAMEWORK FOR RISK MANAGEMENT

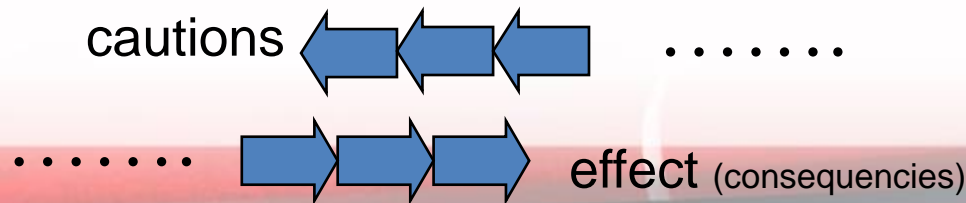
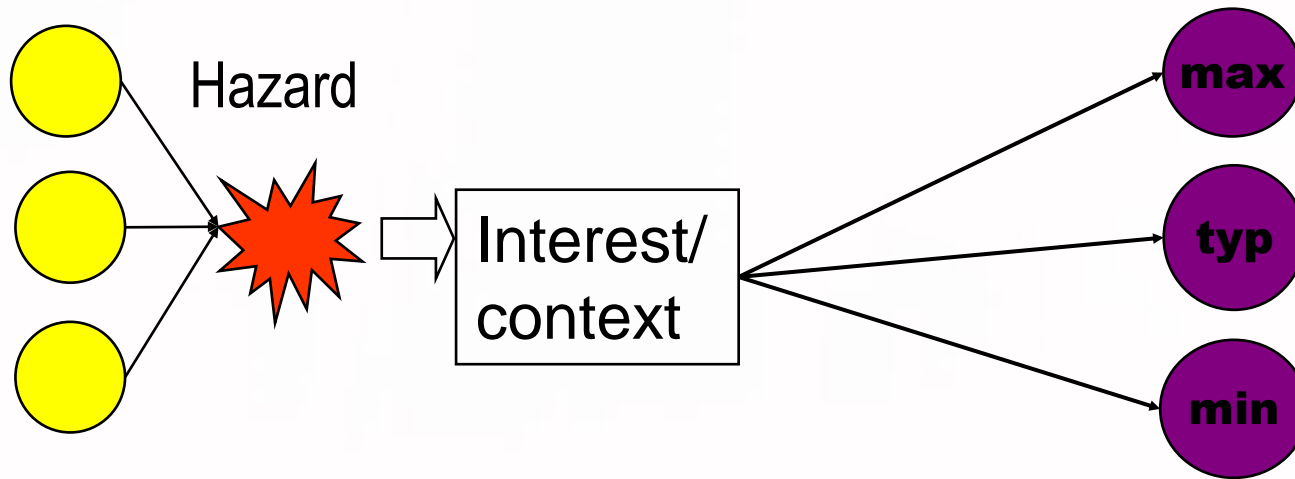


# General principles of RM - example

## Overall scenario method for risk analysis

Risk factor  
(frequency/probability)

consequence  
(damage/losses/disturbances)



# RM organization - example

## First line responsibility

### Risk Ownership

Own risk and risk management activities

The line organization, Support functions

## Second line of responsibility

### Risk Management functions

Establishes and instructions framework for risk assessment and follow-up

Internal control; safety, emergency and security, Information, etc.

## Third line of responsibility

### Audit functions

Testing and validation of effectiveness of risk management and control

Internal audit; quality audit, Audit activities

Common concepts and definitions

Common methods and tools

Joint monitoring and reporting structure

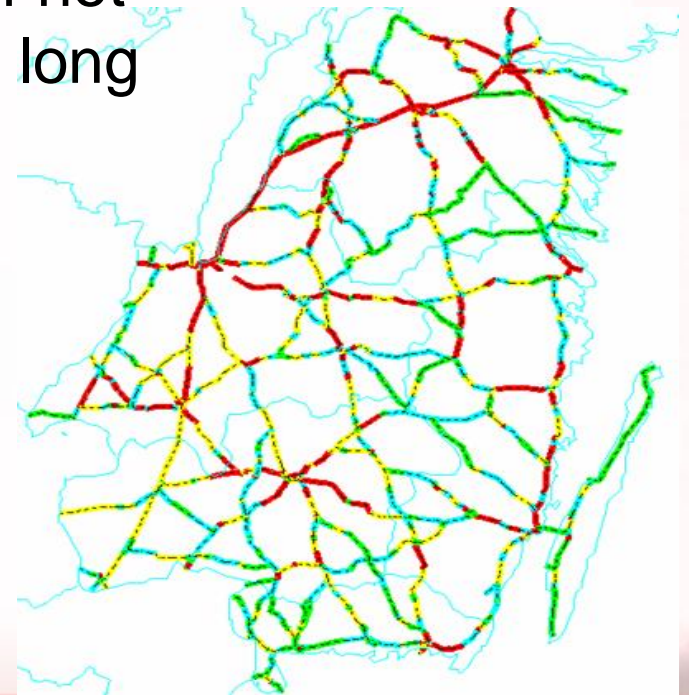
Common support schemes



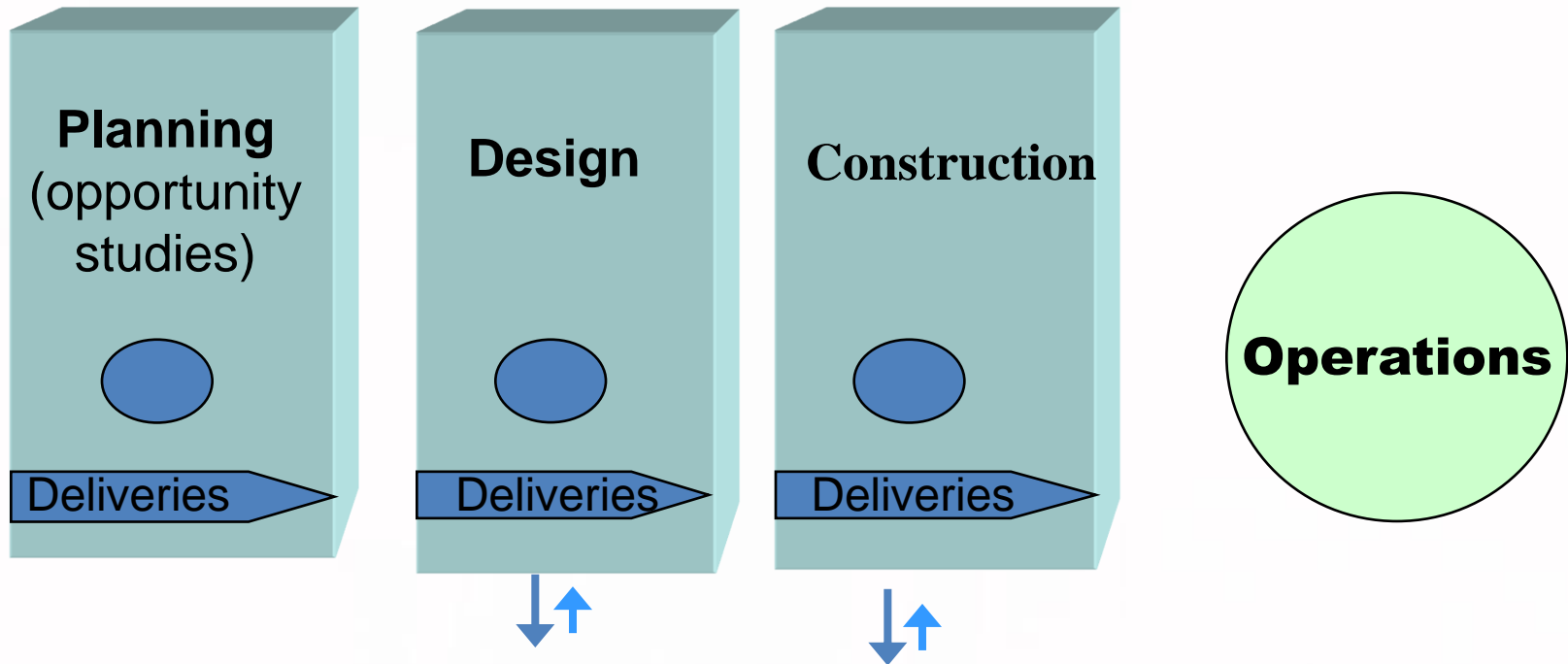
## RM Road Network - example

The map shows prioritization of the links based on the road user perspective, which causes most public economy damage if not operational (has high traffic volume and long reserve alternative road).

- Identify hazards,
- Evaluate and rank the risks
- Decide and carry out risk reduction measures.



# RM Road Project - example



**Riskprofile deliveries to risk owners (contractor, consultant, municipality, project sponsor, etc.) and demands for contractor's own Risk Management.**





# Crisis Management - example

## Crisis Management – Main Scenarios

- Hazard within the Road Transport System
- Hazard from Surroundings
- Hazard from the Road Transport System



# RISK MANAGEMENT – EXAMPLES OF TOPICS TO DEVELOP

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Continuously update the framework for Risk Management in a road management organization and each area of practice and case studies – preferably web based.

The role of risk management in a legal aspect has not been investigated.

Risk management is necessary for internal management and control for better performance in a road organization. The role of risk management in organizational performance management should be investigated in current road operational practices



# RISK MANAGEMENT – EXAMPLES OF TOPICS TO DEVELOP

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The current emergency and crisis management technique for ensuring continuous traffic should be reviewed and be introduced to countries in transition.

A guide is necessary to assist road authorities in the use of crisis management for quick and safe recovery from the disastrous situation after the unpredicted big natural hazards. Lessons can be learned e.g. from the great Tohoku-Kanto disaster, March 2011



## Dare to think ahead

