

Enhancing hazard and crisis management in the framework of the Danube Delta Project

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UNECE Project on hazard and crisis management in the Danube Delta

Final project workshop



UNECE Convention on the
Transboundary Effects of
Industrial Accidents

**Assistance
Programme**





As introduction:

Indicators industrial accident

- The element of surprise
- Short decision time
- Situation materializes unexpectedly
- Decisions are required urgently
- Specific threats like damage human health and environment
- Urgent demands for information are received
- Sense of loss of control
- Demands are made to identify someone to blame
- Reputation suffers
- Communications are increasingly difficult to manage

So: pro-action – prevention – preparedness – response – after care





Focus on oil terminals



Reni (Ukraine)
Giurgiulesti (Moldova)
Galati (Romania)





Hazard and crisis management approach

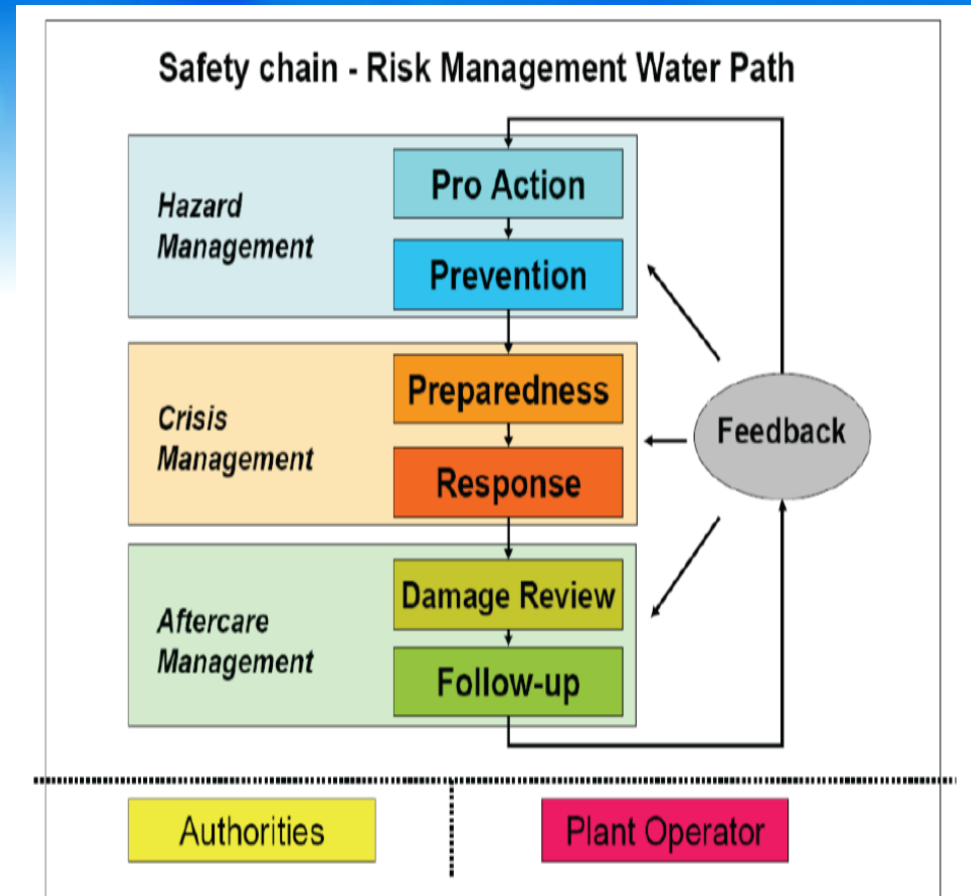
- Effective accident risk management can only be successful if it addresses hazard management (pro-action and prevention) and crisis management (preparedness and response)
- The concept of the safety chain approach is a widely used model for policy making and evaluation in terms of risk management.
- It helps to identify risks of occurrence of an industrial accident, to safeguard a high level of safety and to develop a sound preparedness and response
- It supports through in correcting shortcomings in both hazard and crisis management (aftercare management)





The Safety Chain Concept

- Three components:
 - Hazard management;
 - Crisis management;
 - Aftercare management.
- Each component has two subcategories:
 - Pro-action and prevention for hazard management;
 - Preparedness and response for crisis management;
 - Damage review and follow-up for aftercare management.





The Safety Chain Concept: *Hazard management*

- National laws, regulations, policies and practices in order to prevent accidents
 - taking into account all the relevant stakeholders involved
 - consistent with the relevant international agreements and recommendations
- Identification and mapping of the hazard sources
- Measures (pro-action and technical)
- Maintenance of relevant databases
- Exchange of information on hazards



Activities Danube Delta Project: *Hazard management*

Development of Hazard map for the Danube Delta

- Identification of hazardous activities
- Evaluation of the water hazard class of the hazardous substances present
- Preliminary ranking of industrial activities regarding the risks they represent for the Danube Delta





Activities Danube Delta Project: *Hazard management*

Technical workshop on hazard management (July 2011)

- Identification of hazardous activities
- Accident prevention requirements (ECE Industrial Accidents and Water Conventions, Danube Convention and Water Framework and Seveso II Directives)
- Identification of deficiencies in hazard management within the Danube Delta countries
- Sharing of information on national systems for enforcing safety
- Review of good practices.





Activities Danube Delta Project: *Hazard management*

Joint Visit to the ports of Galati and Giurgulesti (September 2011)

- On-site review of safety standards with use of safety assessment criteria provided by ICPDR
- Review of deficiencies identified in hazard management (national control regimes and safety standards) through application of safety assessment criteria
- Setting up basis for development of safety recommendations and guidelines for oil terminals.





Activities Danube Delta Project: *Hazard management*

Joint Visit 2 to the port of Odessa (September 2013)

- On-site review of safety standards with use of safety reports/documents of the ports and the safety guidelines and good industry practices for oil terminals
- Review of the applicable safety standards for oil terminals
- Discuss the environmental impact of and lessons learnt from past accidents at oil terminals
- Review of the draft safety guidelines and good industry practices for oil terminals





Activities Danube Delta Project

- Development of joint harmonized off-site contingency planning for industrial facilities with possible transboundary effects
- Based on bilateral or trilateral agreements
 - response planning along waterways
 - alert and warning systems
 - Procedures for response and mutual assistance
- Joint training of the response forces
 - Communication exercises
 - Table-top exercises
 - Field exercises
 - Evaluation and the identification of opportunities for development





Activities Danube Delta Project: *Crisis management*

Hazard and crisis management week (March 2015)

- Safety management and safety culture and complacency issues in industrial accidents prevention
- National legal frameworks for crises and hazard management in the Republic of Moldova, Romania and Ukraine
- Comparative analysis
- Identification and mapping of hazardous activities within the hazard management
- Enforcement of hazard management requirements
- Guiding principles and tools for harmonized contingency planning between neighbouring states for accidents affecting transboundary waters
- Table-top exercise, testing procedures, tools and checklist
- Evaluation





Activities Danube Delta Project: *Crisis management*

Technical workshop on crisis management (December 2011)

- Presentations and discussions on national procedures for emergency preparedness and response
- Enhancing awareness preparedness and response
- Analysis of approaches to crisis management
- Identification of deficiencies as well opportunities for cooperation





Activities Danube Delta Project: *Crisis management*

Field and Table Top exercise on the Danube Delta (September 2015)

- Test emergency procedures for notification, communication preparedness and emergency response
- Test procedures for requests for mutual assistance
- Test, provide feedback and finalise the Joint Contingency Plan
- Test command and control and decision making mechanisms
- Test the assessment capacity and capabilities
- Cross-border cooperation





Activities Danube Delta Project: *Crisis management*

Evaluation and lessons identified

- Independent team of external evaluators





Some impressions





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Thank you for your attention!

