

Field and Table Top Exercise Danube Delta Project

Evaluation

Chris Dijkens - The Netherlands

**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**





Why to monitor and to evaluate

- It is a process that helps improving performance and achieving results.
- Its goal is to improve current and future management of outputs, outcomes and impact.
- It is mainly used to assess the performance of projects, institutions and programmes set up by governments and international organisations
- It establishes links between the past, present and future actions





Motivation to evaluate

To identify:

- lessons to be learned
- and underline strong points of the exercises and to further strengthen them
- gaps and to develop ways to eliminate them
- opportunities for improvement





Evaluation Field and Table Top exercise

Do not be afraid of imperfections !

If the exercises are 100% successful then you have failed, because:

- Or the exercise was too easy. In that case valuable time of skilled people and resources is wasted
- Or the opportunity to further improve is missed



By hiding gaps and imperfections, we:

- Are fixing wrong behaviour, which can bring us in danger or even to worsen the accident
- Create a false feeling of safety and efficient operations
- Learn that problem cheating is better than problem solving
- Maintain a huge risk for complacency – which is a critical root cause for accidents and related wrong approaches and decisions





Evaluation approach:

- Independent team of evaluators (Czech Republic)
- Focus on overall objectives with a breakdown in evaluation topics
- Observation during exercises
- First feedback after the evaluation
- Feedback from the players through discussions
- Evaluation report with findings and recommendations





Focus evaluation

- The fulfilment of DD FEX and TTEX goals
- The notification and warning system
- The procedures leading to the correct identification of danger and risk evaluation
- Communication and cooperation between all stakeholders
- Command and control system
- Decision making and the quality of it
- Quality of (mitigation) measures
- Cross-border cooperation





Overall findings

- Excellent preparation of the exercises
- Outstanding hosted by the host country
- Realistic scenarios
- Impressive operations by the services of the Republic of Moldova, Ukraine and Romania
- Dedicated staff
- Open atmosphere – we all wanted to learn!
- Excellent cooperation with and hosted by the Giurgiulesti International Free port
- Several lessons identified that can/should lead to opportunities for improvement and development





Notification and communication

- Response to the notification of the accident was in some cases not sufficient. Information flow was slow.
- Some problems with (international) communication (phone, internet, different frequencies, language).
- PIAC and UNECE IAN system were activated with delay.
- Insufficient communication between the countries about sampling, assessments, analysis, forecasting on potential risks etc.
- No recording/logging of relevant information (as decisions, measures)
- Acoustic warning and alarming signals were not sufficient
- A train passed the accident! Authorities were not informed





Command and control

- A sound communication between the 3 countries about the incident and measures to be taken seemed to be insufficient. This can hinder adequate coordination and decision-making of response actions.
- A sound communication between the commanders and the responsible operational chief could not be observed. In case of an insufficient communication a coordinated response and important decision-making can be hindered.





Deployment

- Dedication of all staff was admirable.
- Response teams reported that there is a shortage of response forces and trained/certified staff who are permanently available for operations. Example: full equipped boat but not sufficient and trained staff to operate the boat.
- Procedures and rules of governance in the emergency response in the Joint Contingency Plan seemed not to be clear for the key players.





In field operations and logistics

- Response units on the site operated efficient and fast and well coordinated.
- The oil booms could not be fixed efficiently and or they rotated. Leakages and pollution!
- Oil skimmer did not work adequate and the number of skimmers is not sufficient.
- The amount of protecting devices and equipment for the personnel on the oil platform is not sufficient.
- Life saving gear on the terminal was not sufficient, like ropes and such to save victims that were pushed into the water.





Assessment (impact) accident

- Sampling of the contaminated surface water at the location of the oil terminal could not be executed because the pollution was dispersed and drifted away due the flow speed of the water.
- Was there communication between the countries about the pollution, measures to be taken etc?
- Conducted assessments, used models, calculations and assessments methodologies to assess the (potential) risks for the human health and the environment varied strongly between the 3 countries.





Recommendations (1)

- Create awareness at the top management of the industrial operators as well within the authorities and at the political level about the importance of preparedness and response to accidents and the essential resources.
- Make an inventory of the available and needed resources, equipment and skills. Develop a plan to improve the situation.
- Develop or review a (existing national) contingency plan and integrate the variety of incident scenarios, including the needed structures, processes and resources. Make an action plan.
- Review the decision-making structure at national, regional and local level as well the roles and responsibilities of the key-players. Revise where needed the structure and roles based on the review.
- Train the decision-making structure and processes through exercises based on a variety of scenarios.
- Include in the Joint Contingency Plan the structure and the means of communication to be used between the three countries to improve the trilateral communication and cooperation and to allow for a quick joint response.





Recommendations (2)

- Review and analyse the capacity, equipment and expertise that is needed to operate adequately in various types and scenarios of accidents.
- Prepare an action plan and discuss the action plan with the senior management and the responsible minister.
- Test and train communications between the 3 countries regarding the response to an accident.
- Review the procedures and equipment of a sound operation in cases of oil spills (fixing booms, number of skimmers, safety equipment).
- Review the operational capability of the international notification systems and appoint a responsible person for the process.
- Implement the Danube Basin Alarm Model (DBAM) to forecast pollution behavior and test it between the 3 countries.





Recommendations (3)

- Develop a training program for the response services and their key experts and professionals to various types of accidents and execute the program systematically.
- Integrate in such a program as well the exercises and trainings with the neighboring countries.
- Investigate opportunities for mutual assistance and support regarding sampling and analysis of hazardous substances as well the exchange of expertise, and train the mutual exchange and cooperation.
- Develop a set of rules and an action plan to ensure the implementation of the joint declaration as agreed by the 3 countries.
- Review the evaluation report, discuss it at the national and international level between the 3 countries and develop an action plan.
- Revise the current Joint Contingency Plan based on the findings and actions to be taken.
- And: train, train and train !!





Some impressions







Thank you for your attention!

