

#### **ECONOMIC COMMISSION FOR EUROPE**

## CONFERENCE OF THE PARTIES TO THE CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS

## **The Assistance Programme**



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## **Acknowledgements**

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The international community has a moral obligation to assist those countries that are determined and committed to improve their environmental performance and governance, but face challenges in achieving these objectives. Such aid is most effective when directed at enhancing local capacities and addressing clearly identified needs and when it seeks to achieve long-lasting improvements. These factors are the foundation of the Assistance Programme.



- Sergiusz Ludwiczak Secretary to the Convention 2000-2006

## **Convention on the Transboundary Effects of Industrial Accidents**

Industrial accidents can be devastating to communities and the environment in the areas where they occur and can have long-lasting effects. Some accidents, however, can affect communities and the environment far from the original accident site.

The best way to protect people and the environment is to prevent accidents from occurring in the first place. It is also important to be prepared to respond in a coordinated and effective way to minimize the effects of accidents, if prevention fails.

The Convention on the Transboundary Effects of Industrial Accidents (the Convention) has been working since 1992 to prevent industrial accidents and to minimize their effects if they do occur.

The Convention requires countries to ensure effective measures to prevent, prepare for and respond to an industrial accident, in particular in transboundary context.

#### Why the Assistance Programme?

For some countries, particularly those with economies in transition, introducing and enforcing national regulations to ensure industrial safety can be difficult.

Therefore, the Assistance Programme (the Programme) was created in recognition that some countries required help to fully implement the Convention. In particular, the Programme has been developed to help countries of Eastern Europe, the Caucasus, Central Asia and South-Eastern Europe.



# **History of the Assistance Programme**

The Programme was launched in 2004 and is based on the principle that assistance can be effective only if a recipient country is capable of receiving the assistance and is committed to taking full advantage of it.

The Programme started with a preparatory phase that included a high-level commitment meeting and fact-finding missions. During the missions countries showed that they were able to receive assistance as well as revealed their needs.

The countries that successfully completed the preparatory phase in 2006 began working in the implementation phase of the Programme. During this phase, assistance is provided to help the countries find solutions to challenges in implementing the Convention.

#### **Assistance Programme tools**

Since 2008, all assistance activities under the Programme are based on the Strategic Approach.

At the core is a cyclic mechanism that helps countries to identify their challenges in the implementation of the Convention and to design actions to address those challenges.

The cyclic mechanism consists of three steps, with the outcome of each step being the input for the next step.

By creating the Strategic Approach for the Assistance Programme we have enabled a more robust and long-term approach to implementing the Convention by the Programme beneficiary countries.

- Chris Dijkens Chairperson of the Bureau, 2009-2010



In Step 1 countries analyse their level of implementation under six areas of work and identify any challenges faced. To help the analysis, a set of indicators and criteria exist for each of the six areas. They provide benchmarks for the implementation of the Convention.

Using the indicators and criteria helps to identify the level of implementation of the Convention, the desired actions for strengthening implementation and to measure progress thus far. Indicators and criteria will make it easier for Assistance Programme countries to improve the implementation of the Convention and thus increase industrial safety.



- Jasmina Karba Bureau Member, 2005-2010 Chair of Indicators and Criteria Task Force, 2009-2010

The six areas of work are: identification of hazardous activities; notification of hazardous activities; prevention; preparedness; response and mutual assistance; and public information and participation.

In Step 2 countries develop a national action plan to address the challenges identified in Step 1. Under the action plans countries, individually or jointly with other countries, design assistance projects.

In Step 3 countries measure the results achieved. Using the indicators and criteria they can make a comparison of the situation before and after the project.

If this leads to the identification of additional challenges a new cycle starts. A number of assistance activities have been organized at the request of beneficiary countries.

This publication provides two examples that illustrate the work within one cycle under the Strategic Approach. Information on other projects implemented under the Assistance Programme can be found at http://www.unece.org/env/teia/.

## **Preventing industrial accidents**

#### Project on the evaluation of safety reporting

The effects of industrial accidents can be significant and long lasting. Preventing an accident is always better than trying to repair the damage caused by the accident.

For effective prevention of industrial accidents a comprehensive policy framework is needed. The framework has to ensure that operators are responsible for the safe operation of their industrial facilities and work out safety reports that reflect the level of industrial safety at the facilities.

To determine whether the industrial facilities operate as safely as outlined in the safety reports, Government authorities hold on-site inspections, to evaluate the application of the safety procedures.

#### The project

Seeing the need to strengthen their efforts aimed at preventing accidents, Croatia, the former Yugoslav Republic of Macedonia and Serbia requested support through the Assistance Programme.



The three countries designed a project for Government representatives to increase their knowledge about safety reporting. In particular, the countries worked to improve the procedures for safety reporting and ensuring the completeness and good quality of the reports.

The project's main phase was a training session on the evaluation of safety reports. During the training, the countries compared their safety reporting procedures and identified further improvements.

The countries also developed a Checklist System for Safety Reporting.

This Checklist is used to evaluate reports and to better understand the information they should contain, and can also be used to review and improve existing procedures for safety reporting.

Furthermore the Checklist helps to prepare guidelines and can be used to train inspection authorities and operators of hazardous activities to prepare safety reports.

#### **Results**

The project was useful for the participating countries, in particular helping them to better understand the role of safety reporting in preventing an industrial accident.



Participation in this training session was of great benefit for Serbia. It made it possible to build up the knowledge of authorities in evaluating safety reports in order to enhance implementation of the Seveso II Directive and the Convention, to strengthen a culture of safety and to improve quality and completeness of safety reports.

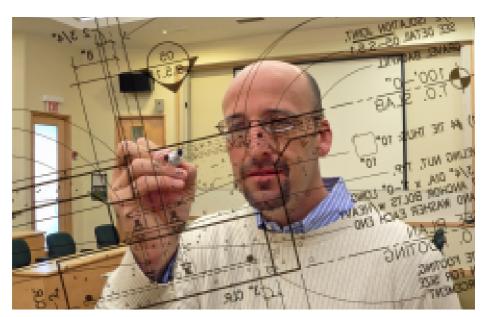
- Suzana Milutinovic Serbia The participants got a clear understanding of what the proper content of safety reports should be. They also identified improvements that they should introduce to existing safety policies to meet international standards.

The countries used the Checklist as a practical tool to support the prevention of industrial accidents. They have since introduced the Checklist into the day-to-day work of the safety authorities in their countries.

The Checklist is designed in such a way that it can be used by any country's public authorities willing to improve prevention of industrial accidents.

Croatia, the former Yugoslav Republic of Macedonia and Serbia requested that the outcomes of this project be used for a follow-up phase with on-site inspection training.

During the follow-up the countries would learn how to use the results of the safety report's evaluation in preparing for and conducting an effective inspection.



## Response to industrial accidents

## Joint management of transboundary emergencies from spills of hazardous substances into the Danube River

Prevention is better than cure. However, accidents can sometimes occur and when they do, a rapid response to limit the damage is vital.

An effective, rapid response to industrial accidents is essential to reduce the effects on the environment and people.

To carry out an effective response to an industrial accident requires that adequate response systems are in place defining procedures and responsibilities of the relevant authorities.

The systems also provide for effective cooperation between authorities within a country and between neighbouring countries.

The system covers early warning and notification, including well trained staff to communicate the nature of any industrial accident to the relevant emergency response personnel.



It also covers the management of the emergency, including the cooperation aspects.



#### The project

The Danube winds its way through many countries in Europe and creates a natural border between some of them.

Seeing the need for increased cooperation in responding to an industrial accident on the river, and to test their national response systems, Bulgaria and Romania requested help through the Assistance Programme and invited Serbia to participate too.

The participating countries designed the project to test the response systems for an industrial accident affecting a river.

Key components of the project included accident notification (within each country and across the borders), modelling the movement of the hazardous substance and cooperation during emergency management within each country as well as between the three countries.

The Danube Project started with a kick-off planning meeting, followed by a technical workshop and an accident simulation and concluded with a final workshop to wrap up the project. During the kick-off meeting, the countries decided that the project should focus on the comparison and testing of their national systems to improve the response to spills from fixed installations of hazardous substances, like gas oil, that could affect the Danube.

The technical workshop allowed the countries to compare their response systems and to jointly draw up the accident simulation scenario for relevant testing.

#### The simulation

The simulation exercise was designed to be as close to a real life scenario as possible while ensuring adequate participation of all the three countries.

The countries decided to select an installation located in Prahovo (Serbia) as the starting point for the simulation.

The response actions were planned to be undertaken mainly between the towns of Prahovo and Gruia (Romania) and downstream to the border with Bulgaria.

The exercise saw buckets of woodchips thrown into the water in order to simulate the oil spill on the river.



The position of the "pollution" was tracked by emergency response crews in boats with the help of GPS devises while other emergency response teams simulated containing the spill with floating barriers.

The countries analysed the data and discussed the results in the final workshop together with plans for the national and international ways forward.

#### **Results**

The project was particularly useful as it gave the emergency services of the three countries the chance to collect data on the effectiveness of their response systems, including the level of cooperation with their counterparts from across the river.

The three countries concluded that their national response systems, both with regard to early warning and notification as well as emergency management, were well suited to dealing with an accident within each country.

However, the accident simulation highlighted the lack of integration of the three systems and showed that cooperation across borders needed improvement.

Participants also concluded that the response systems for any emergency responses could be improved if follow-up activities defined in the project evaluation were implemented.



These kinds of projects provide a stimulation of learning protection environment from different perspectives. An important thing is that people and organizations with a wide range of experiences and skills can join together to solve some complex environmental problems beyond the ability of a single entity. The interactive projects use a combination of several techniques to obtain a deeper and more pragmatic learning experience and cover both theoretical and practical aspects.

- Francisc Senzaconi and Marilena Ghiu Romania

These activities would also continue to improve relationships that were established during the project between the representatives of the different ministries within countries, as well as between the local and regional authorities of the three countries.

They would also continually increase the level of trust created between the participants during the eight months of the project's duration.

Determining the best way to divide the Danube into sectors of responsibility for improved response, based on data collected during the simulation, would be a good starting point for follow-up actions.

Joint early warning and notification exercises organized regularly would be another important action.

The project was also invaluable to show if equipment and staff available is sufficient for effective response.

Based on the simulation, Serbia concluded that the lack of equipment for containing spills in the area of Prahovo could allow a spill to flow downstream before the equipment was transported from other regions.

This led to the immediate decision by the Serbian authorities to place a set of floating barriers with local response units, ready for immediate deployment in the Prahovo area.



## Is the Programme effective?

The Assistance Programme is valuable for many beneficiary countries, especially because its projects deliver tangible results. The results can be achieved because the beneficiary countries can design concrete projects addressing concrete challenges.

This is possible because the Assistance Programme provides the necessary tools and mechanisms. If your country would like to participate in the Assistance Programme, please contact the Industrial Accidents Convention Secretariat at teia.conv@unece.org.

However, to gain from the Programme and achieve a more rapid progress in implementing the Convention, a country must participate in it actively.



The Moldovan people have the right to live and work in a safe environment. A high level of industrial safety is an important condition for that. For the Republic of Moldova, the UNECE Assistance Programme has proven to be an important driving force and a very effective mechanism for a sustainable implementation of the UNECE Industrial Accidents Convention.

- Svetlana Stirbu Republic of Moldova

When the (former Yugoslav) Republic of Macedonia entered the Assistance Programme in 2008 we were in the very first phase of creation of a national scheme for industrial accidents prevention and control. The Programme has given us excellent opportunities to set up a comprehensive system for industrial accidents management completely in line with international, EU and national directions and to share information and experiences with other Parties to the Convention on Industrial Accidents.



- Emilja Kupeva The former Yugoslav Republic of Macedonia The Assistance Programme thanks the donors for their support from the day it was launched in 2004. Key donor countries have included the Czech Republic, Germany, Italy, the Netherlands, Norway, Slovenia and Switzerland.

To continue the success of the Programme requires additional support.

If you would like to contribute to the Assistance Programme, please contact the secretariat of the Industrial Accidents Convention at teia.conv@unece.org.





We would like to congratulate the beneficiary countries and the donor countries for the amazing results achieved through the implementation of specific activities and projects undertaken under the Convention, and particularly, under the Assistance Programme. We believe that multilateral cooperation is a suitable and fruitful way to exchange experiences and to increase capacity to implement the Industrial Accidents Convention. Therefore, the work under the Assistance Programme is continuing to gain strength, and beneficiary countries are becoming more active and creating more projects. This active approach of the beneficiary countries is welcomed and encouraged by Italy, other donor countries and the Bureau of the Convention.

- Giuliana Gassparini and Cristiano Piacente Italy

