



**United Nations  
Economic Commission for Europe  
CONVENTION ON THE TRANSBOUNDARY EFFECTS OF  
INDUSTRIAL ACCIDENTS**

## Convention on the Transboundary Effects of Industrial Accidents

**Workshop on the use of indicators and criteria for the implementation of the Strategic Approach**  
Bratislava, 4–6 May 2011

### **Report of workshop**

#### **Introduction**

1. The workshop on the use of the indicators and criteria for the implementation of the Strategic Approach was held from 4 to 6 May 2011 in Bratislava, Slovakia. The workshop was one of the activities under the Assistance Programme of the United Nations Economic Commission for Europe (UNECE) Convention on the Transboundary Effects of Industrial Accidents and it was funded through the Environment and Security Initiative (ENVSEC).
2. Indicators and criteria are mandatory instruments, adopted by the 6<sup>th</sup> meeting of the Conference of the Parties (The Hague, 8-10 November 2010), to identify and address the implementation challenges and subsequently to measure the progress achieved under the Convention (ECE/CP.TEIA/2010/6).
3. The indicators and criteria were elaborated together with a Form for monitoring, analysing, planning and evaluating the participation of countries in the Assistance Programme. As such, the Form contains three tables: Table 1 for the self-evaluation with regard to the status of implementation of the Convention; Table 2 to plan activities to be undertaken (i.e. national action plan) with regard to the list of priority actions identified in table 1; and Table 3 to report activity(ies) implemented, and on the results achieved. for data collection for self-assessment .
4. The indicators and criteria and the form are to be used in the framework of the Strategic Approach (ECE/CP.TEIA/2008/5), which requires continuous analysis, monitoring and evaluation of the level of implementation of six working areas of the Convention. To promote and create understanding of those instruments, the Bureau of the Conference of the Parties decided to organise a workshop.

5. The workshop mainly concentrated on the first step of the Strategic Approach, which is the analysis and examination of the level of implementation and identification of shortcomings and challenges. The reason for that lies in the fact that the second and third steps ((ii) definition of the steps to be undertaken and the timeframe to eliminate shortcomings, development of an action plan and its implementation; and (iii) assessment of the results achieved) can hardly be effectively performed without a clear and complete self-assessment.

## **I. Objectives**

6. The objective of the workshop was to explain the indicators and criteria and in particular:

(a) To present more in detail the indicators and criteria for the six areas of work identified in the Strategic Approach;

(b) To present the use of the indicators and criteria for the self-evaluation requested in the Strategic Approach;

(c) To present the benefits of the use of the self-evaluation made by each country for the implementation of the Convention and for the proposal and request of assistance activities to be organised under the Assistance Programme;

(d) To introduce the participants to the use of the self evaluation mechanism in view of the preparation of an action plan containing follow-up steps to carry out in order to address the gaps in implementing the Convention identified in the self-evaluation.

## **II. Participation**

7. The workshop was attended by representatives from the following 15 countries participating in the Assistance Programme<sup>1</sup>: Albania – Environmental Inspectorates of Regional Environmental Agency of Tirana and Elbasan –, Armenia – Environmental State Inspectorate of the Ministry of Nature Protection and the Hazardous Substances and Waste Policy Division of the Ministry of Nature Protection –, Azerbaijan – Ministry of Ecology and Natural Resources and the Industrial Safety and Mining Supervision Agency –, Belarus – Ministry of Emergency Situations and Civil Defence –, Bosnia and Herzegovina – Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina and Environment Protection Fund of Republika Srpska –, Croatia – Ministry of Environmental Protection and Physical Planning and Construction –, Georgia – Ministry of Environmental Protection and Ministry of Internal Affairs –, Kazakhstan – Ministry of Emergency Situations and Industrial Safety and Department of Emergency Situations of West Kazakhstan Oblast –, Kyrgyzstan – Department of State Ecological Expertise and State Inspectorate for Monitoring on Industrial Safety and Mining within the Ministry of Natural Resources; Ministry of Emergency Situations and State Agency on Environmental Protection and Forestry –, FYR of Macedonia – Crisis Management Centre; Protection and Rescue Directorate and Ministry of Environment and Physical Planning –, Republic of Moldova – Civil Protection and Emergency Situations Services, Ministry of Internal Affairs; State Hydrometeorological Service and State Ecological Inspectorate –Serbia –

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<sup>1</sup> It is to note that all the countries currently involved in the Assistance Programme were invited to participate to the workshop with no distinction between those in the preparatory phase or in the implementation phase. This decision was taken considering the importance that the use of the indicators and criteria can have for all the countries in both phases.

Ministry of Environment, Mining and Spatial Planning and Sector for Emergency Management of the Ministry of Interior, Tajikistan –Committee on Emergency and Civil Defence; Main Administration of Industrial Safety and Mining; Committee on Environmental Protection– , Ukraine – Ministry of Environment and Natural Resources and State Environmental Inspection – and Uzbekistan – Ministry of Foreign Affairs and Ministry of Emergency Situations –.

8. The workshop was facilitated by international experts<sup>2</sup>: Ms. Jasmina Karba (Slovenia, lead of the workshop and vice-chair of the Bureau of the Conference of the Parties), Mr. Bernard Gay (Switzerland, vice-chair of the Bureau), Mr. Gunnar Hem (Norway, chairman of the Working Group on Implementation), Ms. Susana Milutinovic (Serbia, member of the Bureau), Ms. Sandra Ashcroft (United Kingdom, member of the Working Group on Implementation), Mr. Giorgio Mattiello (Italy), Ms. Jasmina Bogdanovic and Mr. Viktor Novikov (Zoi Environment Network). Mr. Chris Dijkens (Netherlands, Chair of the Conference of the Parties) was the chair of the workshop serviced by the secretariat.

### **III. Opening, welcome addresses and setting the scene**

9. Mr. Chris Dijkens, Chair of the Conference of the Parties, opened the workshop. Mr. Tomas Trcka (Slovakia, member of the Working Group on Implementation) welcomed the participants and the facilitators to Slovakia on behalf of his country.

10. Mr. Dijkens and Ms. Jasmina Karba set the scene for the workshop recalling the origins of the Assistance Programme, the decision of developing the Strategic Approach and the links to the indicators and criteria. Ms. Karba also highlighted the decision of the last meeting of the Conference of the Parties obliging countries to: (i) send their self-evaluations to the secretariat by September 2011, (ii) prepare an action plan based on the self-evaluation by February 2012. They concluded describing the benefits of using the indicators and criteria to implement the Strategic Approach.

### **IV. Programme**

#### **A. Session I Analysis and understanding of the Indicators and criteria**

11. The first and main session of the workshop was dedicated to the detailed analysis of the indicators and criteria for the six areas of work: Identification of hazardous activities, Notification, Prevention, Preparedness, Response and mutual assistance and Information to the public and public participation.

12. The work was conducted in plenum and in break-out sessions. During the plenum facilitators explained the main elements for implementing each area of work with reference to the indicators and criteria and provided practical examples from their own countries.

13. The break-out sessions were dedicated to the analysis of case studies prepared for four areas of work. The participants were divided into five groups, each supported by two facilitators. During the analysis of the case studies the participants, accompanied by the

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<sup>2</sup> All the experts, with the exception of those from Zoi Environment Network, participated to the workshop at the expenses of their governments.

facilitators, were practicing the use of the mechanism of self-evaluation with fictitious situations as a trigger for discussions and questions.

14. The groups analysed the case studies playing the role of representatives of the country described and self-assessed the level of implementation. The groups also pointed out difficulties in the use of the indicators and criteria for the areas studied. The results of the discussions in the break-out sessions were presented by a rapporteur for each group in plenum.

15. Session I was concluded with two presentations, one on the self-evaluation of the area of work I – Identification of hazardous activities –by Mr. Gavril Gilca from Moldova and the second one was on the area of work III – Prevention by Ms. Suzana Milutinovic. Both presentations showed the procedure for self-assessment of the implementation of the area of work highlighting the aspects to be taken in consideration in carrying on this task. The presentations also contained examples of gaps identified through the assessment and further actions to be carried out to overcome them.

## **B. Session II Conclusions and way forward**

16. Session II focused on summarising the elements presented and discussed in the first session and to guide the participants towards the use of the Strategic Approach. Particular attention was also given to receiving feedback from the participants and to present the future steps in the use of the Strategic Approach.

17. The secretariat presented information on how to prepare an action plan. The presentation stressed the importance of having a sound self-evaluation before proceeding in the preparation of the action plan. It also explained how to link the three steps of the Strategic Approach with the three tables that together constitute the Form for monitoring, analysing, planning and evaluating the participation of a country in the Assistance Programme. Finally a short example was given on how to fill in the table with the action plan. The main message was that the indicators and criteria is a concrete instrument for taking advantage of the Strategic Approach.

18. At the end of the workshop the participants formulated the following conclusions on the indicators and criteria as follows:

(a) They constitute a clear, understandable and manageable mechanism that enables a feasible self-assessment;

(b) They facilitate the process of identifying gaps in the implementation of the Convention and to plan concrete actions to overcome them;

(c) They allow the use of the gaps identified by each country not only under the Convention, but also beyond its context, in programmes of other Organisations, such as the European Union, NATO or the Environment and Security initiative (ENVSEC);

(d) They are a good mechanism also to support the progresses of countries in the preparatory phase to guide them to implement the basic tasks;

(e) They can also be a useful instrument for filling in the report on implementation of the Convention;

(f) They need to be used by a group of persons representing different authorities, to facilitate the process of self-assessment (and the gathering of information) and to achieve synergies. For this reason it is important to identify all the relevant stakeholders to be involved in the process;

19. In addition participants pointed out the following aspects related to the use of indicators and criteria:

(a) The translation of the indicators and criteria and of the guiding document into other languages needs ensure the same meaning in all the language versions;

(b) In some cases a country could be at different levels for a given area of work if the national or the international levels are considered;

(c) Participants appreciated the work in groups since it allowed to exchange opinions and experiences and to use the indicators and criteria. The role of the facilitators was also evaluated as very useful.

(d) The table to record results of the activities and addressing their outcome (table 3) is the instrument to be used to monitor progress within a level, especially when passing from one level to the other, because of the complexity of the area of work, can take a long lap of time.

20. The participants agreed on the following recommendations:

(a) The self-assessment, to be carried out effectively, needs to be done by a group of experts. The composition of the group should consider the competences and the knowledge needed to assess the areas of work;

(b) The members of the group should pay attention to some preconditions for the use of the indicators and criteria. These are: (i) a good knowledge of the Convention; (ii) good knowledge of the situation in the country; and (iii) involvement of all relevant stakeholders in the country

(c) The self assessment should be regarded as a measurer and a stimulus for progress in each country;

21. The participants were invited to start the self-evaluation in their countries on the basis of the knowledge gained during the workshop and were also invited to record the results in the evaluation table 1 presented. They were reminded to send the recorded results to the secretariat by the end of September 2011.

22. The Bureau and the Working Group on Implementation would study a mechanism to provide feedback to the self-evaluations submitted to the secretariat and they would

consider the provision of further support in the phase of implementation of the Strategic Approach, should a need arise.

23. Mr. Dijkens thanked the participants and the facilitators for the good and fruitful work and for the good atmosphere that certainly allowed better discussion and cooperation. Mr. Dijkens closed the workshop.

# Annex I

## Agenda

Convention on the Transboundary Effects of Industrial Accidents

*Austria Trend Hotel Bratislava,  
Vysoká 2A, Staré Mesto, 81106 Bratislava*

***Workshop on the use of indicators and criteria  
for the implementation of the  
Strategic Approach  
Provisional agenda  
4 May 2011***

<b>10:00-10.30</b>	<b>Opening and welcome statements</b>
10:00-10:10	<b>Welcoming statement</b> by Mr. Chris Dijkens, Chair of the Conference of the Parties to the Convention, the Netherlands
10:10-10:20	<b>Welcoming statement</b> by Mr. Tomas Trcka, member of the Working Group on Implementation, Slovakia
	<b>Session I: Analysis and understanding of the indicators and criteria</b>
10:20-11:30	<b>The Assistance Programme, the Strategic Approach and the indicators and criteria</b> Mr. Chris Dijkens, and Ms. Jasmina Karba, Vice-Chair of the Conference of the Parties, Slovenia
11:30-11:45	<b>The way of work during the workshop</b> Ms. Virginia Fusé, secretariat
11:45-12:10	Coffee break
12:10-13:00	<b>Indicators and criteria for the Identification of hazardous activities and for Notification</b> Mr. Bernard Gay, Vice-Chair of the Conference of the Parties, Switzerland
13:00-14:00	Lunch
14:00-16:00	<b>Work in group on Identification of hazardous activities and on Notification</b>
16:00-16:30	Coffee break

16:30-18:00	<b>Summary from the rapporteures on the discussions in groups</b>
19:30	Dinner

*5 May 2011*

9:30-10:15	<b>Indicators and criteria for Prevention</b> Ms. Jasmina Karba
10:15-11:30	<b>Work in group on Prevention</b>
11:30-12:00	Coffee break
12:00-13:00	<b>Continuation with the work in group on Prevention</b>
13:00-14:00	Lunch
14:00-14:20	<b>Indicators and criteria for Preparedness</b> Mr. Lukasz Wyrowski, secretariat
14:20-16:20	<b>Work in group on Preparedness</b>
16:20-16:50	Coffee break
16:50-18:15	<b>Summary from the rapporteures on the discussions in groups</b>
19:30	Dinner

*6 May 2011*

9:00-9:20	<b>Indicators and criteria for Response and mutual assistance</b> Ms. Sandra Ashcroft, member of the Working Group on Implementation, United Kingdom
9:20-9:40	<b>Indicators and criteria for Information to the public and public participation</b> Mr. Gunnar Hem, Chair of the Working Group on Implementation, Norway
9:40-10:10	<b>Example of self-evaluation on Identification of hazardous activities</b> Mr. Gavril Gilca, Moldova
10:10-10:40	<b>Example of self-evaluation on Prevention</b> Ms. Suzana Milutinovic, member of the Bureau of the Conference of the Parties, Serbia
10:40-11:00	Coffee break
11:00-12:15	<b>Short statements by participating countries</b>  <b>Session II: The way forward</b>
12:15-12:45	<b>Highlights on how to prepare an action plan</b> Ms. Virginia Fusé
12:45-13:15	<b>Summary and conclusions from the workshop</b> Mr. Chris Dijkens
13:15-13:45	<b>Closing of the workshop</b>
14:00	Lunch

## Annex II

### Case Studies

Convention on the Transboundary Effects of Industrial Accidents

*Workshop on the use of indicators and criteria for the implementation of the Strategic Approach*

*Bratislava, 4-6 May 2011*

### **Work in group on IDENTIFICATION of HAZARDOUS ACTIVITIES and NOTIFICATION**

#### **CASE STUDY**

Indicators for the area of work "Identification of hazardous activities":

Indicator 1 *Mechanism for the collection of data*: set of procedures, implementation rules and actions to be undertaken by the authorities and operators allowing the relevant authorities to collect adequate data for the identification of hazardous activities (HA) from the operators. The mechanism should properly define the type of data to be collected (as a minimum, the name and classification of the substances used and their quantities), the data format to be used for data collection, the responsible bodies, the procedures and the timing for data collection.

Indicator 2 *Mechanism for the analysis and validation of data*: set of procedures, implementation rules and actions:

- (a) To ensure that:
  - (i) The system for the classification of substances used in the country has been applied correctly by HA operators;
  - (ii) The data collected is complete and adequate for the purposes of identifying HA;
  - (iii) The data collected corresponds to the real situation in the country with regard to existing HA;
- (b) To transform received data if necessary for the purpose of identifying HA;
- (c) To identify HA by applying relevant criteria from the Guidelines to Facilitate the Identification of Hazardous Activities for the Purposes of the Convention, adopted at the first meeting of the Conference of the Parties (Budapest, 22–24 November 2000) (ECE/CP.TEIA/2 Annex IV, as amended by CP.TEIA/2004/4);
- (d) To ensure that the list of HA has been given an official status and is recognized and treated as the official list of HA in the country with regard to national legislation and with regard to the Convention. This will also include ensuring availability of a validated list of HA at the national level and to neighbouring countries.

Indicator 3 *Mechanism for the review/revision of data*: set of procedures, implementation rules and actions to be used to review the official list of HA and to revise it if necessary. Review and revision shall be undertaken at regular intervals.

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At the request of a civil servant from the Ministry of Interior, a discussion took place on 21/3/2008 with representatives of the Ministries of Environment and Defence on some questions relating to the response to major accidents. One of the participants highlighted that, in order to prepare adequate contingency plans, you must know where your dangerous installations are. There was consensus on this, and it was agreed to hold further meetings on the identification of such activities that may require special attention at the national level, involving other experts from the authorities and the industry.

Two months later, a second meeting took place with additional experts. The participants came to a common understanding of the basic requirements relating to a proper definition of installations requiring contingency plans. Their attention was drawn by an expert from the Ministry of Environment to the UNECE TEIA Convention on the

Transboundary Effects of Industrial Accidents. It was found that there are useful synergies that should be exploited. The group decided to assess rapidly whether the framework of the Convention could be used as a basis to prepare a proposal to identify dangerous installations, also for installations that may not have transboundary impacts.

On 20/6/2008 a further meeting with the same participants now joined by a group of lawyers took place. The participants studied the requirements of the Convention. It became soon clear that the requirements of the Convention go well beyond the aspect of contingency planning. The chair of the group was asked to bring the whole idea of the Convention to the attention of a group at a higher hierarchical level of government. As it was reckoned that progress towards an implementation of the Convention was likely to take a lot of time, and as the need for an identification of dangerous installations was undisputable, the group decided to prepare a proposal to introduce a procedure for the identification of hazardous activities, taking into account the requirements of the Convention. The procedure should make sure that it is based on correct data and take into account the developments within the installations.

In the meantime, the group at a higher hierarchical level had decided to commit to the implementation of the Convention and designated the Competent Authority (the Ministry for Environment), which should also lead and coordinate all the work towards ratification of the Convention in an ad hoc Ministerial Group. The Ministerial Group decided that the work on the identification of hazardous installations should go ahead as planned and not wait on progress on other issues. The first proposal for an identification procedure was discussed in September 2008 by the Ministerial Group. After a few revisions a mandate was given on 12/2/2009 to an ad hoc Task Force "Identification of hazardous installations" to proceed with a view to set up a full system for the identification of hazardous installations. The Ministry of the Environment is heading the Task Force.

The important elements of decision [5] are the following:

- The data must be provided by the operators according to the electronic form "Identification of hazardous installations - operator data" (see attachment A, for a paper version giving the structure of form, simplified for the workshop).
- The data must be sent in quintuplicate to the Ministry of the Environment, Task Force "Identification of hazardous installations "
- The received data will be checked for clarity and completeness by the unit of the Ministry of the Environment in charge of the Task Force; should the need arise, this unit will gather additional/corrected data from the operator.
- The Ministry of the Environment will distribute the operator's forms to the other members of the Task Force to cross check the data with the data already in their possession.
- The Task Force will make a first assessment of whether transboundary effects are possible and send it for comment to the operator
- After reply and discussions with the operator the Task Force will include in either the list "Installations which could produce transboundary effects and fall within the scope of the Convention", in the list "Installations which may in the future fall within the scope of the Convention", or in the list "Installations unlikely to fall within the scope of the Convention in the future".
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The Task Force delivered its report on 15/05/2009. It was discussed by the Ministerial Group which found that a number of stakeholders had still not been taken in consideration. They invited the Task Force to complete the work. After this had been done, the MG was satisfied that all stakeholders had been consulted and that there was sufficient agreement on introducing a full system for the identification of hazardous installations. It was decided jointly by the ministries to mandate the Task Force to go ahead and present a detailed plan for the implementation.

The Task Force delivered a detailed plan for the implementation on 28/09/2009. It was discussed by the Ministerial Group which was satisfied that all stakeholders had been consulted and that the arrangements proposed seemed to be workable. It decided to have first the procedure tested in the Lake Region. The Foreign Ministry draw the attention of the Ministerial Group on the aspect of notification. The Ministerial Group agreed that the aspect should also be tackled.

After successful testing in the Lake Region and a few technical modifications, the Ministerial Group decided on 20/01/2010 to adopt the system for identification. It noted that the system would allow identifying installations that may have transboundary impacts, as required by the Convention and that they should be notified. It was decided to follow up on the project and meet again in four months to take stock of the issue.

The next meeting of the Ministerial Group on 20/05/2010 was a disappointment as the progress on identification has been very slow. It was noted that the capacity and the expertise for a nationwide implementation was

limited within the Ministries. Furthermore, enquiries from a neighbouring country showed that the transboundary aspect has not been satisfactorily taken into account so far. The Ministerial Group discussed the situation in depth and came to an agreement on resources as well as on the responsibilities regarding notification. It decided (1) to allocate additional personal resource from the Ministry of Environment and the Ministry of Interior to the task of identification, (2) to send two persons to a late June UNECE workshop under the assistance programme on the identification of hazardous installations, with the mandate to be prepared to inform the Ministerial Group and share effectively the knowledge acquired with the member of the task force and (3) to set up a new, more realistic plan for the implementation, including training (to be reviewed after the UNECE workshop) and (3) fix the responsibilities for notification in an interministerial decree.

As decided, two persons, from the Environment and the Interior Ministry respectively, participated to the 23-24/06/2010 UNECE workshop. They held a meeting with the Task Force on 02/07/2010 to discuss the results of the workshop and explore the best ways to transfer the knowledge. They also reviewed the plan for the implementation, taking into account the need for training as well as the electronic form "Identification of hazardous installations - operator data" (see attachment B). The Task Force informed the Ministerial Group by letter from 09/07/2010 and submitted the reviewed implementation for approval. The Ministerial Group approved the new plan by letter from 03/08/2010.

According to the plan for the implementation, a meeting of the Ministerial Group took place on 14/10/2010. It took note of the progress of the identification and of the preparation for the publication of the decree on notification. On this basis it considered it had enough material on hazardous installations to go about defining the internal procedures for the notification. It therefore mandated an expert group to establish a detailed, concrete proposal to the Ministerial Group. On the other hand, it mandated the member of the Ministerial Group from the Foreign Ministry to look into the procedure for the notification itself, and to begin to this effect the necessary consultations with the neighbouring Parties /countries.

The next meeting of the Ministerial Group on 17/12/2010 was devoted to a discussion of the list of hazardous installations that should be notified to the neighbouring Parties. The Ministerial Group noted that a number of installations could have impacts on the water path. A member of the Ministerial Group, drawing the attention of the group on the fact that the country lies downstream from a heavily industrialised basin in its northern neighbour and that it could be negatively affected, asked whether contact has been taken with this neighbouring country for identification /notification. The Ministerial Group came to the conclusion that such contacts have not been yet established, but that it should urgently be done. The Ministerial Group decided to meet again in 3 months to review the list and follow up on the bilateral contacts with the neighbouring Parties/countries.

As the Ministerial Group met again on 21/03/2011, it discussed an updated list, which was rather different from the last one. It turned out that the list had been corrected for some errors and also took into account a number of recent developments. This raised the question of how to better validate and maintain an adequately up-to-date list of installations. The Ministerial Group decided to have a closer look at the problems and to discuss a proposal at the next meeting.

This meeting took place on 03/05/2011. The Ministerial Group agreed to the proposal for a better validation of data. It took also note of the progress achieved on the notification: 3 of the 5 neighbouring Parties/countries did show interest, the other two were of the opinion that it was still too early for them. The first consultations on legal aspects took place with the more advanced country and a date has been fixed for a first informal exchange of information on the hazardous installations which may have transboundary effects.

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Convention on the Transboundary Effects of Industrial Accidents  
*Workshop on the use of indicators and criteria for the implementation of the Strategic Approach*  
*Bratislava, 4-6 May 2011*

**Work in group on PREVENTION**

**CASE STUDY**

Indicator 1: *Mechanism giving the responsibility for industrial safety to HA operators*: set of procedures, implementation rules and actions allowing the competent authorities:

- (a) To unambiguously identify HA operators as responsible for the safe operation of activities; and
- (b) To unambiguously oblige HA operators to demonstrate the safe operation of activities to the competent authorities using defined methodologies, methods and models.

Indicator 2: *Mechanism introducing the control regime of the competent authorities*: set of procedures, implementation rules and actions allowing the competent authorities to manage industrial accident hazards. In practice this means that the competent authority has — as a minimum — set safety goals, identified the scope/dimension of major accident hazards in the country and organized monitoring of hazardous activities from an industrial accident hazard point of view. Such monitoring could consist of the review of safety documentation, licensing, inspection control and prohibitions.

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A neighbour of an establishment informed local police of a fire in this establishment. A fire awoke an interest of media to explore what representatives of local/regional/national authorities are doing to ensure that such fires would not happen and that consequences of such fires are minimised should they occur.

At the initiative of local police a meeting took place at the level of local authorities. The meeting revealed that the local authorities were aware of an activity operating on the territory of local community and dealing with hazardous activities but did not have an insight into which measures exactly should have been undertaken by the operators for the prevention of such accident. Conclusion of the meeting was that another meeting be organised with representatives of ministries to discuss existing arrangements in the country for the operators of hazardous activities related to the prevention of accidents.

Some months later representatives of local community and ministries, responsible for environmental protection (M1), for response to emergencies (M2), for fire and explosion protection (M3) and for safety and health at work (M4) met and discussed measures the operator has in place for the prevention of such accidents.

In this meeting inspectors of M1 explained that the results of inspection control show that the operator has several preventative measures in place although national legislation only imposes two mandatory measures on operators of hazardous activities:

- the preparation of guidelines for the employees on how to behave in case of fire,
- installation of fire extinguishers.

Inspectors also explained that they have internally been discussing situation in different hazardous activities in the country. According to their findings the number and type of preventative measures of different hazardous activities differ very much. They thought that these need to be harmonised and adopted more to the existing best practice.

Almost in parallel to the above meeting and at the initiative of a Focal Point to the UN ECE TIA Convention awareness raising mission was organised in the country. Members of an awareness raising team made representatives of M1, M2, M3 and M4 and of the administration of two local authorities on which territory majority of hazardous activities in the country operates aware of the requirements of the convention in detail. Special attention was given to the requirements of the Convention relating to the prevention of industrial accidents.

During this awareness raising mission participants analysed the practice in the country with regard to the prevention of major accidents and came to following conclusions:

- that there are rescue and relief teams organised in the country to respond to accidents and that in general emergency preparedness seem to be better managed than prevention,
- that there are no requirements in the national legislation for operators of hazardous activities to systematically assess hazards and scenarios of possible industrial accidents,
- that national legislation does not define details on how the responsibility for safe operation be performed by operators in practice,
- that environmental inspectors perform controls over the operation of hazardous activities, but that these controls are not performed in harmonised and systematic way.

Final conclusion was that existing arrangements related to the prevention of industrial accidents need to be revised and necessary amendments be introduced to harmonise them to the requirements of the Convention.

After the awareness raising mission representatives of ministry M1 sent a proposal to the ministers M1, M2, M3 and M4 to review and revise existing rules related to the responsibilities of operators of hazardous activities for prevention of industrial accidents.

Ministers M1, M2, M3 and M4 reviewed the proposal and decided to follow the proposal.

They also decided that minister M1 would be the responsible minister and an assignment was given to the Head of Industrial Sector (HIS) of the ministry M1 to convene a working group (WG) composed of representatives of four ministries, representatives of operators, external experts and an NGO. The tasks of this WG would be:

- to look at existing arrangements for the prevention of industrial accidents and to compare them with requirements of the Convention and with existing good practice,
- to suggest actions to ensure that in the country a transparent and robust system is established which obliges operators of hazardous activities to address hazards of industrial accidents and to demonstrate to competent authorities their measures for the prevention of such accidents.

HIS would serve as head of WG.

Before starting the work of WG the HIS met with representatives of Licensing Department of M1. Discussion revealed that not only arrangements with regard to the responsibilities of operators should be defined more in detail but that also instruments and procedures of competent authorities for the control of operation of hazardous activities should be reviewed and revised to meet the requirements of Convention and be aligned to practice in more advanced countries.

As a consequence HIS sent a proposal to minister M1 to broaden a mandate of WG so that WG would work on two aspects of major accident prevention:

- arrangements to cover the responsibilities of operators and
- arrangements to ensure that competent authorities perform monitoring and control over the operation of hazardous activities.

A proposal has been accepted, adequate decision has been taken by M1 and WG has been informed of extended mandate.

HIS prepared a programme of work for the WG to systematically cover the issues entrusted to the WG. Based on this programme members of the WG met several time for discussion, organised a workshop to study best practice related to the prevention of major accidents and drafted a project proposal to be implemented under the Assistance Programme of

the UN ECE TEIA Convention. A proposal suggested that external experts be nominated to assist in reviewing and revising arrangements (rules and procedures) for the prevention of major accidents. The project has been approved.

During the project implementation members of the WG met external experts several times to analyse the circumstances in the country related to the prevention of major accidents and to exchange views on how best revise existing arrangements to harmonise it with best practice and requirements of the Convention.

Existing capacities in the country to manage the arrangements related to the prevention of industrial accidents were examined too. The impression was that these would need to be strengthened once more advanced system for the prevention of industrial accidents will be adopted, that additional training would need to be organised for competent authorities and that also awareness raising actions need to be organised for operators.

Finally a detailed proposal has been prepared by the members of WG suggesting actions and activities to be undertaken to revise and complement existing arrangements for the prevention of major accidents so that these are harmonised with the requirements of the Convention. The proposed actions and activities related to the revision of existing legislation, to the preparation of new legislation, to increasing knowledge and strengthening capacities in the country.

The proposal has been accepted by the minister M1. Legal Affairs Department of ministry M1 supported by the WG was tasked to prepare proposals of the revised legislation and/or to prepare new legislation so that clear and detailed rules be defined for operators and competent authorities to perform their responsibilities with regard to the prevention of major accidents. It was estimated that all together 3 existing regulations need to be revised and 2 additional to be prepared.

After some months of intensive work legal experts finalised a proposal for amendments to first regulation R1. Amended regulation R1 would define:

- type of activities to be used as parameters showing the degree of hazard to help operators and competent authorities to identify hazardous activities with a potential for industrial accidents ,
- that operators of such activities need to demonstrate to competent authorities their measures for the control of hazards,
- that safety documentation should be prepared for demonstration purposes,
- that activities would be ranked in three groups based on the amount of hazardous substances present,
- issues to be addressed in safety documentation separately for all three groups of activities,
- scope of safety documentations separately for three groups of activities,
- frequency of review/revision of safety documentation and of demonstration .

The national Chamber of Economy - Sector for Energy organised a workshop where proposal of amended R1 was presented to operators of hazardous activities. The operators realised the complexity of work behind the preparation of safety documentation and suggested that a case study be undertaken to look at implications of revised R1 in practice - especially on methodologies, methods and models to be used for the demonstration purposes.

One of the operators of hazardous activity volunteered to provide real data of his activity that could be used as an input for the case study which should be prepared by external experts. The intention was that in the process of preparing this sample safety documentation operators of different activities could take part to learn about available and most suitable methods to identify hazards and scenarios of industrial accidents, to assess possible consequences and affects. Preparing sample safety documentation could also be used for discussion on measures in place in this activity for the prevention of accidents and on arguments whether additional measures should be introduced based on identified possible scenarios of industrial accidents.

Finally sample safety documentation was not used for learning purposes of operators only but also for pilot examination of sample safety documentation performed by competent authorities.

Results of discussions during the preparation and examination of sample safety demonstration were used for the preparation of new guideline G1 defining methodologies, methods and models to be used for the preparation of safety documentation.

In the time when G1 was prepared a regulation R1 has been adopted and published in the Official Journal.

Representatives of a country participating in the UN-ECE TIA COP 7 in Sweden presented the progress achieved in the implementation of the Convention and especially the results of pilot study. When discussing the progress that has been achieved and future plans of a country representative of European Commission suggested that a country applies for an EU funded TAIEX project – a study visit to relevant competent authorities of an EU member state. Such study visit would enable visiting experts to have insight into the system of measures, actions, procedures for the prevention of industrial accidents in an advanced country.

A proposal for a TAIEX project has been prepared and approved.

Convention on the Transboundary Effects of Industrial Accidents  
*Workshop on the use of indicators and criteria for the implementation of the Strategic Approach*  
*Bratislava, 4-6 May 2011*

**Work in group on PREPAREDNESS**

**CASE STUDY**

Indicator 1 - Mechanism giving the responsibility for emergency preparedness to HA operators: set of procedures, implementation rules and actions ensuring that HA operators prepare, coordinate, test, review and revise on-site emergency plans.

Indicator 2 - Mechanism giving the responsibility for emergency preparedness to the competent authorities: set of procedures, implementation rules and actions ensuring that the competent authorities prepare, coordinate, test, review and revise off-site emergency plans and sets of procedures giving the competent authorities the right to impose responsibility on HA operators.

Indicator 3 - Mechanism ensuring transboundary compatible emergency plans: set of procedures, implementation rules and actions ensuring that the competent authorities of the concerned parties cooperate and coordinate emergency plans to make them compatible.

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In a country A there was a big fire at an oil storage facility AB, which was owned by an international well know oil corporation ABC. The accident led to only few injuries– 2 employees of the facility and 3 fire fighters involved in extinguishing the fire. After the accident the local media interviewed the manager of the facility. The manger informed the media that for his company the safety is a high priority, and that they were investigating the cause of the accident to prevent such in the future. At the same time he informed that he was pleased to see effective mitigation of the effects of the accident. The accident proved that the staff was well trained to respond effectively and quickly in an event of an emergency situation including effective and close work with the local fire fighters. He stressed that this was possible due to good contingency plan, and good cooperation that had been established over two years with the local authorities. He mentioned that his enterprise helped the authorities in establishing the off-site contingency plan and tested the plans in drills that had been organized at the initiative of the company.

A journalist from the local media made an investigation through which he found out that the emergency preparedness was at relatively high level in the region with the AB storage facility, what was the result of standards set up by the ABC enterprise. (The enterprise has a policy in applying its corporate safety standard at its facilities all around the world; this corporate safety standard is based on the EU requirements). On the other hand the national legislation for preparedness was only very general; it required availability of contingency plans at the facilities but there was no secondary legislation that would specify standards to be compiled with or responsibilities of the industry and local authorities. The journalist concluded his article in the local newspaper with an open question asking what would happen if the facility AB would not have been owned by ABC enterprise having high safety standards, including high-level of preparedness to accidents.

The article got attention of a politician who requested that a responsible Ministry [Ministry] would ensure that an independent audit would be carried out on how well the facilities and local authorities were prepared in the country to respond to man-made disasters. The audit was made by an international consultant and showed that contingency plans were available at the industrial facilities throughout the country but they did not follow any common standard, some like that one of AB facility were clear and with straightforward procedures and including possible accident scenarios, as well as that they were well known to facility staff, but in majority of cases the plans contained only some procedures, staff was not very much aware of them, no accidents scenarios were included. Interviews with different facilities employees' showed that no exercises had been organized, and in a few cases where such had been organized,

and from which the consultant saw movies recorded, they were more of a show cases rather than a serious undertaking for verification of possible accidents scenarios and facilities' staff preparedness to them. The consultant also pointed at lack of contingency plans at the level of local authorities.

The conclusion of the independent audit was that the level of preparedness was rather weak. Therefore should it come to an accident at any of the many operating facilities it could cause sever effects on their employees but also on the surrounding, including effects on life and health of the local citizens.

Following the independent audit, the Ministry experts discussed it with the aim to draw up possible steps forward on how to improve the preparedness to man-made disasters. The experts agreed that the starting point for improving the situation should be through improving the regulatory framework to set clear responsibilities for the preparedness to emergency situations, including setting minimum standards for contingency plans, their testing and updating. The group agreed that good practice as available in the area of preparedness to emergency situations should be followed, when improving the regulatory framework and preferably a country that had worked in same area recently should be invited to share experience. This could be done within a context of international cooperation under the UNECE Industrial Accidents Convention.

The proposal was considered by the Minister and subsequently presented for discussion at the meeting of the cabinet of ministers. The cabinet took a decision that the improvement of the regulatory framework was necessary and shall be implemented as soon as possible. The Ministry was requested to lead the process and involve relevant national partners. It should use the existing know-how available in the region with the ABC enterprise, as well as apply for projects that could help the process.

Following the decision of the cabinet, the Minister established a working group (WG) in his Ministry to be responsible for the process.

The WG faced a challenge in organizing its work as the local experts were not sure where to start. It was therefore agreed that before any process could be designed more knowledge needs to be gained on how emergency preparedness is organized and enforced in other countries. The national focal point for the Industrial Accidents Convention was contacted for advice on how good practice could be learned. The focal point suggested contacting the Convention's secretariat. The contact with the secretariat led to elaboration of a project under the Assistance Programme aimed at learning good practice in organising emergency preparedness. Within this project a national workshop was organized at which regulatory frameworks of country X, Y, Z from Western and Central Europe were presented and discussed. The workshop allowed drawing the following conclusions:

- the regulatory framework should allow for imposing the responsibility for emergency preparedness on the HA operators, and for giving the right/competence to relevant authority for enforcing the regulation.
- the regulatory framework should impose the responsibility for emergency preparedness in the areas around HA on relevant authorities.
- the regulatory framework should also allow for ensuring cooperation on emergency preparedness with neighbouring countries

The country Y offered to provide its regulatory framework on emergency preparedness to the WG for study.

The WG members studied the regulatory framework obtained from country Y and held a number of meetings to discuss the principles and targets, institutions involved in country Y and institutions to be involved in their own country, compared the regulatory framework against their own country existing legislation.

The WG members drafted (including proposals for amendments to existing acts) the regulatory acts to cover for OnEP:

- (a) Principles to be followed and targets to be achieved through the application of OnEP;
- (b) Principles with regard to the sharing of capacities to respond to emergencies;
- (c) Parameters for linking the degree of hazard with the responsibility for the preparation of OnEP;
- (d) Matters to be covered by OnEP;
- (e) Source of input data to be used for the preparation of OnEP;
- (f) Institutions to be involved in the consultation or coordination of OnEP;
- (g) Procedure for the coordination of OnEP with external institutions and authorities, responsible for the preparation of OfEP;
- (h) Procedures and rules with regard to the review and revision of OnEP;
- (i) Testing of OnEP;

(j) Inspection controls.

And for OfEP:

Principles to be followed and targets to be achieved with the application of OfEP;

- (b) Principles with regard to the sharing of capacities to respond to emergencies;
- (c) Parameters to assign the responsibility for the preparation of OfEP to the relevant competent authority;
- (d) Input data needed for the preparation of OfEP;
- (e) Rules with regard to the compatibility with OnEP;
- (f) Institutions/experts to be involved in the preparation of OfEP;
- (g) Matters to be covered by OfEP;
- (h) Procedures for review and revision of OfEP;
- (i) Testing of OfEP;
- (j) Inspection controls.

The WG with the availability of the draft regulatory acts started consultations with the different national and local authorities on the acts. The draft acts for OnEP were also reviewed in the context of emergency plan and emergency procedures applied at the AB facility. A project under the Assistance Programme was established during which consultations were held with international experts to discuss the draft legal acts vis-à-vis the enforcement challenges. Through the consultations the draft acts were further adjusted. At the same time a plan was drafted to allow for implementation of the new regulations, including training for authorities to develop contingency plans and training for inspectors to verify the plans. A project was requested under the Assistance Programme to facilitate the training on development of contingency plans during which guidelines for authorities and industry were to be developed. At the same time the newly drafted acts were submitted for adoption.

The members of the WG participated in a workshop discussing results of a project organized to test transboundary cooperation between neighbouring countries. They learned that transboundary cooperation needs find its basis first in the regulations which would allow for effective cross-border notification as well as joint response forces work in the border area including efficient communication between emergency staff of the neighbouring countries and simplified procedures for border crossing for emergency forces in an event of accident. Secondly regular consultations and meetings were presented as a key to establishing effective cooperation. Such allow two neighbouring countries to introduce a process of trust building. The WG members returned to the country and prepared a report sharing the conclusion of the workshop. The possibilities for improving transboundary cooperation had been discussed at the meeting of the cabinet. The ministers agreed to establish basis in the legislation for building effective cooperation, at the same time its implementation should be depended on the readiness of each of the neighbouring countries for cooperation through establishment of a bilateral agreement.

The parliament adopted the bill passing the new legislation on the emergency preparedness. Also the implementation of a project requested 6 months earlier on training for developing contingency plans has started. During the project international experts together with local experts were discussing accidental scenarios and designing preparedness actions. These had been discussed for a industrial facility located in a proximity of a transboundary river. One of possible accidental scenarios showed that the river could be endangered in an accident and a spill could reach during spring time the territory of neighbouring country. The local experts informed that there was no experience so far in cooperating with a neighbouring country. At the same time a legal act had been in preparation to set a basis for cooperating in an event of an emergency, including notification and taking steps for joint preparedness to these situations. The local experts also informed that transboundary cooperation would certainly depend on the readiness of the neighbour to cooperate. The international experts suggested that the existing project could be extended of a component during which experts from neighbouring country would be invited to discuss the contingency planning in the transboundary context.

The work has continued. Different accidents scenarios were considered at a number of industrial facilities in the country. Based on the considerations contingency plans had been updated/developed - both the on-site and off-site plans. The operators as well as the authorities used the guidelines developed during the Convention's project. This process took some two years.

During this time also a project meeting was organized with the experts of the neighbouring country and supported by international experts to discuss joint cooperation to prepare for and during emergency situations. The country A informed about its draft legislation to set a basis for the cooperation. The experts of the neighbouring country showed interests in the subject and readiness to start a process to introduce similar basis in the legislation allowing for the cooperation. During the next meeting the countries agreed to jointly establish a process during which a bilateral agreement could be elaborated specifying the joint responsibilities in the event of emergency situations and in preparing for them.

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