

*UNECE Convention on Transboundary Effects of Industrial
Accidents*

Training on identification of hazardous activities

22- 23 November 2011, Bishkek

The Serbian approach to the identification of hazardous activities under the Convention

Convention on the Transboundary Effects of Industrial Accidents

Identification of hazardous activities

From Article 4. of the Convention
„Identification, Consultation and Advice“

*For the **purpose of undertaking preventive measures** and setting up **preparedness measures**, the Party of origin shall take measures, as appropriate, to **identify hazardous activities** within its jurisdiction and to **ensure that affected Parties are notified** of any such proposed or existing activity.*

System for identification of hazardous activities

RESPONSIBILITIES

METHODOLOGY



**IDENTIFICATION
PROCESS**

System for identification of hazardous activities

OBJECTIVES



- **Elaborating and validating a list with hazardous activities according the Convention's requirements; and**
- **Ensuring that it functions over time independently from staff changes within the responsible authority/ies.**

Indicators to be used

- First: A mechanism for the collection of data;
- Second: A mechanism for the analysis and validation of data;
- Third: A mechanism for the review/revision of data.

SERBIAN LEGISLATION

- Law on Ratification of the Convention on transboundary effects of industrial accidents (Official Gazette RS No. 42/09)
- Law on Environmental Protection (Official Gazette RS No. 135/04)
- Law on amending the Law on Environmental Protection (Official Gazette RS No. 36/09)
- Law on Chemicals (Official Gazette RS No. 36/09)

By-laws on chemical accident prevention and chemicals management

- Rulebook on the list of dangerous substances and their quantities → harmonized with Annex I
- Rulebook on the content of Notification
- Rulebook on the content and methodology for elaboration of Major-accident prevention policy, Safety report and Internal emergency plan
- Rulebook on the classification, packing, labeling and advertising of chemical and certain product
- Rulebook on classification, packing, labeling and advertising of chemical and certain product in accordance with GHS of classification and labeling of the UN

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.

Mechanism for the collection of data

Progress stage 5:

- *Mechanism for data collection adopted through governmental act or other form of national practice, but not yet operational in practice.*
- **The adopted mechanism must define the following as a minimum:**
 - (a) **The type of data to be collected** (*the name and classification of the substances used and their quantities*);
 - (b) **The data format to be used by HA operators to present data to the competent authority/ies;**
 - (c) **Those responsible for data collection** (e.g., the authorities, the departments, etc.);
 - (d) **The frequency of data collection.**
- **The need for training to implement the mechanism has been discussed.**
- **A training programme has been designed in case of a confirmed need.**

Progress stage 5 for the first mechanism-explanations

The type of data to be collected

Legislation defines obligations of the operator of the installations where activities are performed that include or might include one or more dangerous substances in prescribed quantities, to submit to the Ministry Notification with data about establishment and data on hazardous substances (*characteristics of chemicals*) they use/storage/ handle and their **quantities**.

Progress stage 5 for the first mechanism-explanations

The type of data to be collected

Data are collected for all installations where hazardous substances are present in quantities equal to or greater than thresholds listed in the List of dangerous substances (The Rulebook on the list of dangerous substances and their quantities) - **compliant with Annex I of the Convention.**

Progress stage 5 for the first mechanism-explanations

The data format to be used by HA operators to present data to the competent authority/ies

Data are collected by fulfilling **forms** (The Rulebook on the content of Notification).

Progress stage 5 for the first mechanism-explanations

Those responsible for data collection (e.g., the authorities, the departments, etc.)

- LEP defines responsibilities
- Operator of the hazardous activity in which are performed activities where one or more dangerous substances are present or may be present in quantities equal to or greater than prescribed shall be obliged to submit Notification (data format) to the **Ministry**.
- The Minister shall prescribe content of the Notification (data format) - Rulebook on the content of Notification.

Responsibilities

**Ministry of Environment,
Mining and Spatial Planning**

**Section for Chemical
Accidents Protection**

Environmental Inspection,
Department for chemical and
Seveso installation management

National level, authority which is responsible for **collecting** data on hazardous activities is the Ministry of Environment, Mining and Spatial Planning (MEMSP)

Progress stage 5 for the first mechanism-explanations

The frequency of data collection

**The timing for data collection is defined
(LEP)**



**Linkage with the validation, review/revision
of data**

Operator shall submit data:

- **On new establishment, at least three months before commencing operation;**
- **On existing establishment no later than six months from the day the Law comes into force;**
- **On existing establishment which activities were such that the dangerous substances were present in quantities lower than prescribed, in case of increase of quantities of dangerous substances up to the quantities prescribed in the List of dangerous substances, no later than six months from the day of change;**

Operator shall submit data:

- **In case of modification of the activity process, change of nature or quantity of dangerous substance or other changes that may impact the danger of occurrence of chemical accident, the operator must immediately notify the Ministry about them, and in the event the changes refer to the modification of installations or storage, prior to introducing such modifications.**

Progress stage 5 for the first mechanism-explanations

- **Ministry organized training sessions for inspectors responsible for collecting and processing data on hazardous activities in May 2009 and September 2010 in order to improve identification of hazardous activities.**
- **Ministry in cooperation with Chamber of Commerce organized few seminars for operators regarding identification and notification on hazardous activities.**

Conclusion

Within the adopted mechanism needed elements are defined – progress stage 5 is reached.

Progress stage 6

Mechanism for data collection (as adopted in progress stage 5) is operational and implemented in practice by the competent authorities.

Resources (staff, funding, etc.) have been secured.

Competent national experts are available and continuously trained to use the mechanism.

Explanations

Capacities within the Ministry are insufficient.

Great number of operators are limited with resources.

Ministry organized few seminars for competent national experts regarding identification of hazardous activities.

Ministry organized few seminars for operators regarding fulfilling the forms for notification.

There is a need, competent national experts to be continuously trained to use the mechanism.

Still progress stage 5!

Identification of shortcomings and challenges with a list of priority actions to be undertaken

Inspections' capacities responsible for collecting data on hazardous activities are insufficient.

Task of operators is to fulfil and submit to the Ministry the Notification – at this moment the operators' capacities are insufficient.

Priority

Organize training activities which will target competent national experts, as well as selected operators to be trained to use the mechanism.

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;

Mechanism for the analysis and validation of data

Set of procedures, implementation rules and actions:

- (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.

Mechanism for the analysis and validation of data

Progress stage 5:

- *Mechanism for the analysis and validation of data adopted through governmental act or other form of national practice, but not yet operational in practice.*

- **The adopted mechanism must define the following as a minimum:**
 - (a) **Those responsible for data analysis (e.g., the authorities, the departments, etc.);**
 - (b) **The various elements to be included in the data analysis;**
 - (c) **The validation procedure;**

Mechanism for the analysis and validation of data

Progress stage 5:

- (d) Those responsible for data validation (e.g., the authorities, the departments, etc.);
 - (e) The time intervals of data validation;
 - (f) The availability of a validated list of HA.
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- The need for training to implement the mechanism has been discussed.
 - A training programme has been designed in case of a confirmed need.

Progress stage 5 for the second mechanism-explanations

Those responsible for data analysis (e.g., the authorities, the departments, etc.)

Authority which is responsible for processing data on hazardous activities is the Ministry of Environment, Mining and Spatial Planning (MEMSP).

Responsibilities

**Ministry of Environment,
Mining and Spatial Planning**

**Section for Chemical
Accidents Protection**

Environmental Inspection,
Department for chemical and
Seveso installation management

National level, authority which is responsible for **processing** data on hazardous activities is the Ministry of Environment, Mining and Spatial Planning (MEMSP)

Progress stage 5 for the second mechanism-explanations

The various elements to be included in the data analysis

The result of the data analysis should show whether data collected is complete, compliant with Annex I, adequate for the purpose of identifying hazardous activities and that it corresponds to the real situation.

Progress stage 5 for the second mechanism-explanations

- LEP defines the evaluating process (appointing a technical commission, on-site inspection)

Mechanism for the analysis and validation of data

- Checking whether the data collected are complete and corresponds to the real situation
- Making a list of present hazardous substances and their quantities
- Checking the compliance with Annex I - Substance and quantity criteria

Mechanism for the analysis and validation of data

- Look at the scope of the Convention - Exclusion criteria (Art.2.2)
- Applying the location criteria
- Risk assessment, if needed

- **Rulebook on the content and methodology for elaboration of Major-accident prevention policy, Safety report and Internal emergency plan**
- **Rulebook on the list of dangerous substances and their quantities**
- **Rulebook on the content of Notification**

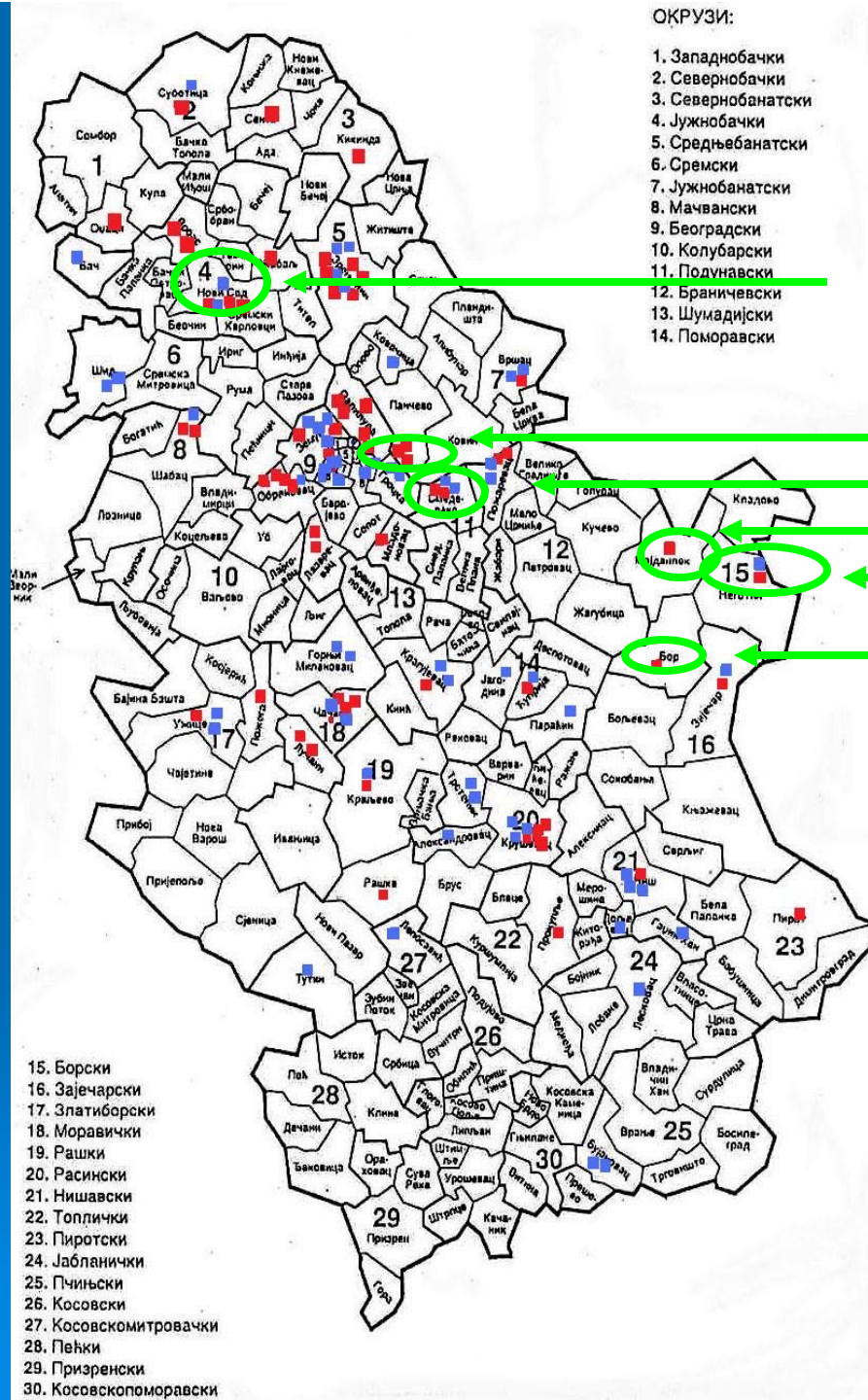
Progress stage 5 for the second mechanism-explanations

- List of dangerous substances and their quantities (Rulebook on the list of dangerous substances and their quantities) - **compliant with Annex I**
- Using of a system for classification of chemicals according the physical – chemical, toxicological and ecotoxicological properties
- Law on Chemicals/Rulebook on the classification, packing, labeling and advertising of chemical and certain product
- UN/ADR Classification of the chemicals
- SDS (Safety Data Sheet)

Progress stage 5 for the first mechanism-explanations

- Based on the collected data, the Ministry shall determine hazardous activities which may cause chemical accidents with transboundary effects and keep register of these hazardous activities.
- Ministry shall notify on hazardous activity the competent authority of the country that may be affected with consequences of such accident.

Hazardous activities in Republic of Serbia



- Upper tier
- Lower tier
- Under the Convention

Preliminary list of hazardous activities under the Convention

	Hazardous activity	Geographical location	Type of activity
1	Chemical industry Prahovo	Prahovo	Production of mineral fertilizers
2	Copper Mines Bor	Bor	Tailing
3	Copper Mines Majdanpek	Majdanpek	Tailing
4	Oil Refinery Pancevo	Pancevo	Oil refinery
5	Fertilizer company	Pancevo	Production of mineral fertilizers, nitric compounds and ammonia
6	Petrochemical company	Pancevo	Polymers production
7	Oil refinery Novi Sad	Novi Sad	Oil refinery
8	NIS Petrol Jugopetrol – Installation Prahovo	Prahovo	Storage of petroleum products
9	NIS Petrol Jugopetrol – Installation Smederevo	Smederevo	Storage of petroleum products

Validation procedure

- **Provisional list of hazardous activities** → validation is needed
- **It is necessary to prescribe validation procedure**
- **Forming the Joint Expert Group for analysis, validation and review/revision of data (members from MEMSP, MoI, MAFW, MLSP, other institutions, experts)**

Progress stage 5 for the second mechanism-explanations

- Those responsible for data validation (e.g., the authorities, the departments, etc.)
- The time intervals of data validation
- The availability of a validated list of HA
- Authority which is responsible for processing data on hazardous activities is the Ministry of Environment, Mining and Spatial Planning (MEMSP).
- Currently –the linkage with collection of data and the time intervals of data validation .
- The list is available within the country, and will be available to the authorities of the neighbouring countries.
- There is the need for training to implement the mechanism.

Conclusion

Within the adopted mechanism needed elements are not completely defined - progress stage 4 is reached.

Identification of shortcomings and challenges with a list of priority actions to be undertaken

- **To form the Joint Expert Group for analysis, validation and review/revision of data (members from MEMSP, MoI, MAFW, MLSP, other institutions, experts).**
- **To prescribe validation procedure.**
- **To clearly define the time intervals of data validation .**
- **To prescribe the procedure for notification and exchange of data on the hazardous activities which may cause transboundary effects in the occurrence of a chemical accident.**
- **To design a training programme and organize training activities.**

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.**

Mechanism for the review/revision of data

Progress stage 5:

- *Mechanism for the review/revision of data adopted through governmental act or other form of national practice, but not yet operational in practice.*
- **The adopted mechanism must define the following as a minimum:**
 - (a) The linkage with the mechanism for data collection;**
 - (b) The parameters to be used for the review of data;**
 - (c) Those responsible for the review/ revision of data (e.g., the authorities, the departments, etc.);**
 - (d) The linkage with the validation procedure.**
- **The need for training to implement the mechanism has been estimated/discussed.**
- **A training programme has been designed in case of a confirmed need.**

Progress stage 5 for the third mechanism-explanations

- According to LEP the operator shall periodically review the data in safety documentation and as needed update it:
 - at least every five years;
 - on its own initiative or upon request of the Ministry due to the new facts obtained , based on the analysis of other chemical accidents or nearly missed accidents.
- In the event of modification of the work process, change of nature or quantity of dangerous substance or other changes that may affect the danger of occurrence of chemical accident, the operator must immediately enter changes in the safety documentation and submit them to the Ministry.
- **But, we still need the validation procedure!**
- There is the need for training to implement the mechanism.

Conclusion

Within the adopted mechanism needed elements are not completely defined - progress stage 4 is reached.

Identification of shortcomings and challenges with a list of priority actions to be undertaken

- **To prescribe validation procedure and make the linkage with review/revision of data.**
- **To design a training programme and organize training activities.**



THANK YOU FOR YOUR ATTENTION!