

# UNECE Convention on the Transboundary Effects of Industrial Accidents

Benchmarks in the implementation of the UNECE Convention  
on the Transboundary Effects of Industrial Accidents

Self-assessments and action plans



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## 1. Introduction

This document is designed for use in the development of the mandatory self-assessments that countries from South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia submit to the secretariat under the Assistance Programme of the UNECE Convention on the Transboundary Effects of Industrial Accidents (TEIA). Self-assessments allow countries to assess their actual situation in implementing the Convention and in enhancing industrial safety. They are tools for tracking progress and identifying possible shortcomings. Any shortcomings identified in the self-assessment provide the basis for the development of plans of activities and needs-driven external assistance projects designed to overcome the shortcomings.

The responsible authorities and the relevant stakeholders can together apply their professional judgement across the set of indicators. National experts can complete the quantitative benchmarking (discussing progress stages across indicators) of a self-assessment in a one- or two-day meeting, though more time is needed to complete the qualitative benchmarking, which is more important and entails collecting the necessary information and producing a report. The participation of all the relevant authorities in industrial safety is crucial to completion of the qualitative benchmarking.

Countries are encouraged to use self-assessments for their own purposes and to look for synergies such as links to disaster risk reduction.

The self-assessments and plans of activities are submitted to the secretariat of the Industrial Accidents Convention. The secretariat presents those documents to the Convention's Working Group on Implementation (WGI), composed of national experts representing Parties to the Convention. The WGI goes through the self-assessments and plans of activities and provides comments to the submitting countries, if needed. The self-assessments and plans of activities are kept confidential.

## 2. The Convention and the Assistance Programme

The UNECE Convention on the Transboundary Effects of Industrial Accidents (TEIA) is designed to protect people and the environment against industrial accidents by preventing accidents from occurring, or by reducing their frequency and severity and by mitigating their effects. The Convention promotes active international cooperation between countries, before, during and after an industrial accident, and encourages its Parties to help each other in the event of an accident, to cooperate on research and development and to share information and technology.

The Assistance Programme was launched in 2004 and helps countries reach an optimal level of industrial safety through the implementation of the Convention. The Assistance Programme organizes activities on a needs-driven basis and functions on the basis of a strategic approach. The strategic approach was designed to ensure the continuous improvement and sustainability of the Convention's implementation by the beneficiary countries of the Assistance Programme. Countries within the Assistance Programme benefit from the pool of expertise among the UNECE TEIA Convention Parties and the industrial safety community in addressing shortcomings and priorities in legislation, institutional capacities or technical fields identified through the self-assessments.

At its seventh meeting, in 2012, the Conference of the Parties to the Convention requested the publication of the benchmark document in a more user-friendly manner to facilitate its use by the beneficiary countries of the Assistance Programme. This document reflects a number of improvements and simplifications based on country experiences in using the document, expert feedback and in-depth discussions in selected countries.

## 3. The Strategic Approach and the priority working areas

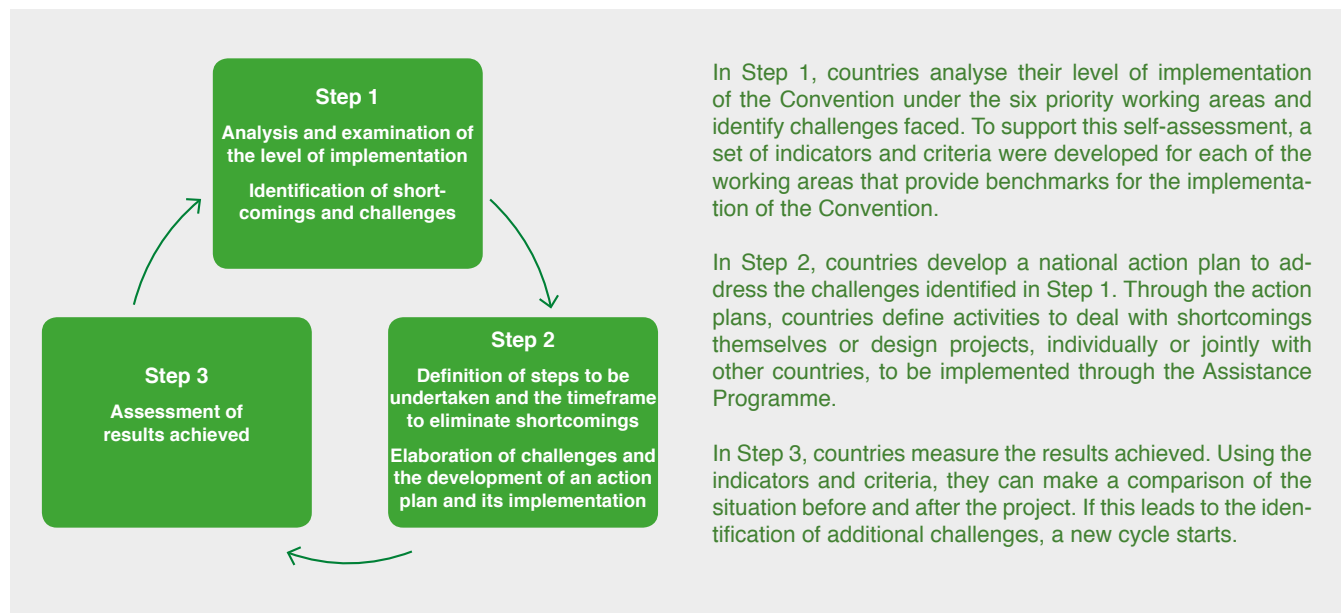
The strategic approach is a tool providing a robust basis for the comprehensive, carefully planned and coordinated implementation of the Convention. It is designed not to replace the plans already available or being developed, but to function as an umbrella for all the plans, integrating and linking them with each other.

The strategic approach requires countries to analyse, monitor and evaluate the level of implementation in each priority working area and to identify shortcomings and challenges regarding implementation of the Convention. The strategic approach also requires that countries compare the situation before and after the measures taken and determine if further improvements are needed. The figure below shows the stepwise mechanism.

This document is designed to help countries start applying the strategic approach by conducting self-assessments, which should be undertaken:

- The first time a country uses the strategic approach
- Whenever it changes its related legislation and practices
- Whenever it undertakes an action aimed at eliminating particular shortcomings
- At the end of any assistance activity

In every instance the countries should follow the stepwise mechanism. Table 1 shows the linkage between steps of the cyclic mechanism and information that needs to be provided by the countries.



A plan of activities is a prerequisite for the submission of project proposals under the Assistance Programme and should demonstrate the level of progress, the identified needs and the proposed actions. In preparing a project proposal, countries might find the information collected in Tables 10, 11 and 12 useful. (See chapters 6, 7 and 9.)

In ensuring that the strategic approach is implemented, the Bureau and the WGI of the Convention:

- Approve activities under the Convention's Assistance Programme based on a plan of activities
- Monitor the application of the strategic approach
- Monitor the progress achieved by countries as a whole and the impact of activities under the Assistance Programme.

**Table 1.** Linkage between steps of the cyclic mechanism and information to be submitted

Steps of the cyclic mechanism	Use of the tables
<p><b>Step 1</b> Analyse and examine the level of implementation of the Convention identifying shortcomings and challenges.</p>	<p><b>Table 10</b> Collect data on the results of the self-assessment, with a detailed and precise explanation of the progress stage assigned to a specific indicator and of the identification of shortcomings and challenges. List priority actions to be undertaken.</p>
<p><b>Step 2</b> Define ways forward and timing to undertake and eliminate shortcomings; i.e., development of an action plan and its implementation.</p>	<p><b>Table 11</b> List planned activities to be carried out (plan of activities). The plan needs to be based on the shortcomings or challenges identified and needs to be validated by the relevant authorities according to the rules and practices in each country.</p>
<p><b>Step 3</b> Assess the results achieved.</p>	<p><b>Table 12</b> Record activities implemented within a cycle and the results achieved. Data should be collected for each activity undertaken at the national or international level, independently or with external assistance, regardless of a programme under which activities took place.</p>

## A. The priority working areas

Table 2 links the six working areas identified as priorities to the Convention's articles and annexes.

**Table 2.** The six priority working areas and links with the Convention's articles and annexes

Working area	Convention's articles and relevant annexes
1. Identification of hazardous activities	<u>Art. 4</u> Identification, consultation and advice Annex <u>I</u> and <u>V</u>
2. Notification of hazardous activities	<u>Art. 4</u> Identification, consultation and advice Annex <u>II</u> and <u>III</u>
3. Prevention	<u>Art. 6</u> Prevention Annex <u>IV</u> and <u>V</u>
4. Preparedness	<u>Art. 8</u> Emergency preparedness Annex <u>VII</u>
5. Response and mutual assistance	<u>Art. 10</u> IAN System + <u>11</u> Response + <u>12</u> Mutual Assistance Annex <u>IX</u> + <u>X</u> + <u>XII</u>
6. Information to the public and public participation	<u>Art. 9</u> Information to and participation of the public Annex <u>VIII</u>

Two additional working areas have been identified – the siting of hazardous activities and civil liability. The UNECE TEIA Conference of the Parties decided that these two areas would be addressed after most of the shortcomings in the first six working areas are dealt with adequately.

Countries have to identify and analyse two cross-cutting themes – legislation (both primary and secondary) and institutional capacity (at the national and local levels) – when assessing the six working areas.

## B. Indicators

For each priority working area a set of indicators defines a Party's obligations under the Convention.

**Table 3.** Overview of indicators across working areas

Working area	Indicator	Explanation of the indicator
1. Identification of hazardous activities	I. Mechanism for data collection	Set of procedures, implementation rules and actions allowing the relevant authorities to collect adequate data for the identification of hazardous activities (HA) from the operators, the type of data to be collected, schedules and procedures for data collection.
	II. Mechanism for data analysis and validation	Set of procedures, implementation rules and actions ensuring that the authorities and HA operators correctly apply the system for the classification of substances compliant with Annex I of the Convention and use the relevant criteria, recommended by the Convention, in a cross-border context. Collected data should be complete and adequate to identify HA and correspond to the real situation in the country. The country establishes an official HA list and ensures its availability at the national level and to neighbouring countries.
	III. Mechanism for data review and revision	Set of procedures, implementation rules and actions for review and revision of the official HA list.
2. Notification of hazardous activities	I. Mechanism for trans-boundary consultation on hazardous activities	Set of procedures, implementation rules and actions to ensure that affected Parties have an opportunity to inform Parties of origin of their views on the list of HA, regardless of its status (unofficial, official/validated), and to pursue a settlement of differences.
	II. Mechanism for notification of hazardous activities	Set of procedures, implementation rules and actions allowing the competent authorities to notify potentially affected neighbouring countries of existing and/or planned HA.
3. Prevention	I. Mechanism for responsibility for safe operation to HA operators	Set of procedures, implementation rules and actions allowing the competent authorities to unambiguously identify HA operators as responsible for the safe operation of activities and to oblige HA operators to demonstrate the safe operation to competent authorities and the public using defined methodologies, methods and models.
	II. Mechanism for control regime	Set of procedures, implementation rules and actions allowing the competent authorities to manage industrial accident hazards, by setting safety goals, identifying the scope of major accident hazards in the country and organizing the monitoring of hazardous activities (review of safety documentation, licencing, inspection control and prohibitions, for instance).
4. Preparedness	I. Mechanism for responsibility for emergency preparedness of HA operators	Set of procedures, implementation rules and actions ensuring that HA operators prepare, coordinate, test, review and revise on-site emergency plans.
	II. Mechanism for responsibility for emergency preparedness of 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.
	III. Mechanism for trans-boundary emergency plans	Set of procedures, implementation rules and actions ensuring that the competent authorities of the concerned parties cooperate with each other and coordinate emergency plans to make them compatible.

Working area	Indicator	Explanation of the indicator
5. Response and mutual assistance	I. Mechanism for prompt recognition of industrial accidents	Set of procedures, implementation rules and actions ensuring that the competent authorities activate the relevant measures promptly in the event of an accident or of an imminent threat of an accident.
	II. Mechanism for application of UNECE IAN system	Set of procedures, implementation rules and actions ensuring that the competent authorities use the UNECE Industrial Accident Notification (IAN) system for the purpose of obtaining and transmitting industrial accident notifications at the international level.
	III. Mechanism for local notification systems	Set of procedures, implementation rules and actions ensuring that the local authorities use adequate systems for the purpose of receiving and transmitting industrial accident notifications at the bilateral level.
	IV. Mechanism for requesting/providing assistance for IA	Set of procedures, implementation rules and actions ensuring that the country has a system in place to send a request for assistance in case of need, and to respond to a request for assistance from another country quickly and reliably.
6. Information to the public and public participation	I. Mechanism for information to the public potentially affected by IA	Set of procedures, implementation rules and actions to be followed by the relevant authorities and/or HA operators to give adequate information to the public in areas that might be affected by an industrial accident.
	II. Mechanism for public participation	Set of procedures, implementation rules and actions to enable the public – in the Party of origin as well as in the affected Party – to express its views and concerns on prevention and preparedness measures in relevant procedures.

### Note on the indicators

Please note that the sustainable implementation of working areas identified under the Industrial Accidents Convention requires ongoing attention. This means that whenever an element of the Convention is implemented, it needs to be monitored, reviewed and revised as needed.

The Convention uses the concept of mechanisms, which aim to provide continuity within the working areas. Under the working area “identification of hazardous activities”, for instance, the authorities should recognize that even after they have collected the data for the first indicator (“mechanism for the collection of data”), they need to remain engaged. The data sources may change, installations may close (or others open), and the quantity and/or type of chemicals may change. This is why the mechanism for collection of data needs to specify the frequency of data collection, and why countries need to establish procedures, implementation rules and actions ensuring that data collection is carried out regularly.

All of the indicators have these elements in common, and the procedures, implementation rules and actions are essential parts of the indicators.



The indicators have been constructed as systems/mechanisms to encourage continuity in the actions of the competent authorities, and therefore in the implementation of the Convention.

## C. Criteria

Six progress stages specify the criteria for meeting the Convention's obligations for each indicator. Countries measure their progress on their level of implementation of the Convention for each indicator by determining which progress stage corresponds to the country's situation. The self-assessments and plans of activities provide ample opportunity for the Parties to explain their assessment.

The country can rank its current position among six progress stages, where stage 6 is the highest level of achievement of the Convention and national legislation. No country can permanently remain at progress stage 6 without continuous assessment and investment. A simple reduction in personnel can change the balance of a situation and undermine the full functioning of a mechanism.

Progress stage 1: There is little awareness among competent authorities of the need to introduce the indicator, of the requirements for setting it up or of the indicator's benefits. Ad hoc activities covering the indicator might be in place, but not a systematic procedure.

Progress stage 2: There is awareness among experts of the need to introduce the indicator and discussions are started on how to introduce and present the indicator to policymakers for a formal decision. The initial discussions could be among authorities, experts and HA operators and should lead to an understanding of the legal context and a proposal to introduce the indicator in question. Initial discussions can also include initial exploration of available good practices.

Progress stage 3: A decision has been taken at the level of policymakers to introduce or update the indicator. All relevant governmental and other stakeholders to be consulted have been identified. In this progress stage discussions have led to a proposal to policymakers, who have formally (not necessarily by law or decree) decided to introduce the mechanism in question and mandated/nominated a competent authority to elaborate the relevant legislation and procedures.

Progress stage 4: Intensive and detailed discussions take place among relevant stakeholders on the content of the legislation and procedures specifying the functioning of the indicator and the resources needed for its implementation.

Progress stage 5: The indicator has been adopted and all the minimum elements listed in the benchmark document defined in a governmental act, a sub-law or national practice, but the indicator is not yet operational in practice (due to a lack of human or financial resources, for instance). The need for training to implement the mechanism has been discussed, and any necessary training programme has been designed.

*IMPORTANT NOTICE: If one or more of the listed minimum elements are not formally required by national legislation or practice, countries may consider this indicator at a lower progress stage, and take steps to introduce the necessary updates to the laws and regulations. In cases where some individual items from the list of minimal elements of the same indicator are fully present in legislation or national practice and others are not, countries can use the visual marks in the self-assessment tables to take note of the less advanced items. The countries need to decide the collective ranking on a case-by-case basis. The overall benchmarking for such indicators is unlikely to match the complete minimal requirements of Stage 5.*

Progress stage 6: The indicator is fully operational and implemented in practice by the competent authorities. Human and financial resources are secured. National experts (both among competent authorities and HA operators) are available and continuously trained to use/implement the indicator.

An optimal level of implementation of the Convention is reached when a country has in place and is implementing a comprehensive system specific for each working area. When the country ranks all indicators within a working area at progress stage 6, the optimal level for that working area is achieved. A description of the optimal level of implementation follows the self-assessment table for each working area.

## 4. Self-assessment

In preparation for the self-assessment, countries may want to invite the representatives of the relevant authorities and operators to a group discussion where various players can share their views and experiences and conduct initial quantitative benchmarking (ranking progress stages). Typically, the list of partners to be invited for discussions or consulted during the self-assessment process include:



- Ministry or agency on environment or natural resources
- Ministry or agency on emergencies or civil defence and rapid response units/centres
- State control authorities including those responsible for industrial and environmental safety inspections
- Ministry of foreign affairs
- Ministries or agencies on health, safety, industry, energy and economic development
- Selected (major) operators of hazardous activities – oil and gas companies, chemical industries
- Public organizations – such as Aarhus centres

Since most requirements need to be reflected in national legislation, sub-laws and procedures, countries should ensure the participation of experts with in-depth knowledge of the formal requirements. Questions regarding specific sections, definitions and wording used in the self-assessment could be addressed to the UNECE TEIA Focal Point in the country or to the secretariat.

In brief, the self-assessment entails the following steps:

1. Reading the descriptions of each indicator, rapid analysis of the current country situation and initial ranking the indicator against the progress stage achieved (quantitative benchmarking)
2. Providing information and a memo note stating why the country is at the indicated progress stage using the guiding questions in the tables and any supplementary material explaining special circumstances or specificities of the country's situation (qualitative benchmarking)
3. Defining shortcomings and compiling lists of priority actions

Countries are requested to submit completed self-assessments to the Convention secretariat and to update them as necessary, keeping the secretariat informed of new developments. Each country using the strategic approach should include in its self-assessment information concerning activities carried out through other programmes or organizations such as the European Union, the United Nations Development Programme, the United Nations Environment Programme, and others.

In conducting the self-assessment, the country should use the tables provided in each working area. The self-assessment begins with the determination of which stage best represents the country's situation on each indicator within each working area. Some indicators include several elements, and progress within a single indicator may be uneven. Some of the required minimal elements may have been in place for long time and may be well regulated, for example, while others are not yet regulated or prescribed in legislation, as

is often the case with the transboundary aspect of the indicators. In any event, the self-assessment is a product of a nationally determined and collective qualitative and quantitative benchmarking and the secretariat will respect all the information provided.

The memo notes, to be inserted in Table 10, explaining the selection of the progress stage could include brief descriptions of the indicator-related legal instruments, institutional arrangements, procedures and the initiatives already in place at the national level. The idea is to provide sufficient argumentation for the identified progress stage in the form of a report for the country itself and for the WGI who will review the self-assessment. Noting the distinction between having an indicator that is legally adopted at the national level (stage 5) and having effective and full enforcement in place (stage 6) is a common example. In such cases, the argumentation could enumerate any relevant deficiencies – the absence of a definition of the roles and responsibilities of the competent authorities; a lack of cooperation or coordination among stakeholders or between neighbouring countries; shortfalls in human, technical or financial resources; or the failure to provide periodic and continuous training.

When describing the reasons for identifying a given progress stage per indicator, when mentioning the legislation, please note that a description of what is defined by legal acts is more useful than lists of adopted legislation: “The country adopted a rulebook defining the procedure for checking whether data collected are complete and compliant with Annex I” could be a useful description, for example. The explanatory notes should identify the responsible authorities for each indicator, and where there are multiple authorities, the notes should explain who is responsible for which action.

The list of priority actions leads directly to the development of plans of activities, which in turn lead to the submission of project proposals. (Chapter 7 provides a template for such proposals.)

## 5. Priority working areas

Countries should use the self-assessment tables associated with the working areas to assess and describe each of the indicators, and to develop an in-depth analysis of the status of the indicators with respect to the Convention. While working with the tables, users need to consider the minimal elements of each indicator carefully, make an effort to evaluate the country's current situation regarding the indicator and rank it in the progress stage that corresponds to the country's progress – which forms the quantitative part of benchmarking. The guiding questions form the qualitative part of the benchmarking, and are meant to help users determine the appropriate rankings for the indicators and provide argumentation.

# Self-assessment of working area 1: Identification of hazardous activities

Progress Stage

## Criteria for self-assessment of progress

6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6	
1. Mechanism for data collection	<p><b>Set of procedures, implementation rules and actions</b> allowing the relevant authorities to collect adequate data for the identification of hazardous activities (HA) from the operators, the type of data to be collected, schedules and procedures for data collection.</p> <p><b>The minimum elements</b> to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Those responsible for data collection</li> <li><input type="checkbox"/> The type of data to be collected including the characteristics and quantities of chemicals</li> <li><input type="checkbox"/> The data format to be used by HA operators to present data to the competent authorities</li> <li><input type="checkbox"/> The frequency or schedule of data collection</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who is responsible for data review and revision?
	<p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training is regularly conducted</li> <li><input type="checkbox"/> The necessary improvements and revisions are undertaken</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	How is the link with the mechanism for data collection established?
2. Mechanism for data analysis and validation	<p><b>Set of procedures, implementation rules and actions</b> ensuring that the authorities and HA operators correctly apply the system for the classification of substances compliant with Annex I of the convention and use the relevant criteria, recommended by the convention, in a cross-border context. Collected data should be complete and adequate to identify HA and correspond to the real situation in the country. The country <b>establishes an official HA list and ensures its availability at the national level and to neighbouring countries.</b></p> <p><b>The minimum elements</b> to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Those responsible for data analysis and data validation</li> <li><input type="checkbox"/> The elements to be included in the data analysis</li> <li><input type="checkbox"/> The validation procedure and time intervals of data validation</li> <li><input type="checkbox"/> The availability of a validated list of HA within the country for authorities at the ministerial and lower levels, and for other stakeholders</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Relevant criteria are applied in identification of HA that potentially fall under the scope of the Convention</li> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who is responsible for data analysis? For validation?
	<p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> <li><input type="checkbox"/> The necessary improvements and revisions are undertaken</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What are the elements for analysis?
								Provide details for any procedures to be followed and time intervals set for validating data.
								What rules are in place for sharing the list within the country and with authorities of other countries?

### 3. Mechanism for data review and revision

**Set of procedures, implementation rules and actions** for review and revision of the official HA list.

**The minimum elements** to be defined in a governmental act or national practice (**Stage 5**) include:

- Those responsible for the review and revision of data.
- The linkage with both data collection and validation (official confirmation of HA) procedures
- The parameters to be used for the review of data including the reasons for and minimum frequency of review

In addition:

- Any necessary training programme is designed

**Stage 6** is achieved when:

- Human and financial resources are secured
- Training to implement the mechanism is regularly conducted
- Review and revision occur at regular intervals



Who is responsible for data review and revision?

How is the link with the mechanism for data collection established?

According to which criteria are the data reviewed and revised?

How the review and revision of data is linked to the official validation?



### Optimal level of implementation

Countries have in place and are implementing a comprehensive system for the identification of hazardous activities based on the definition of clear responsibilities and of a methodology for the process of identifying hazardous activities, which allows them to elaborate and validate a list with hazardous activities according to the convention's requirements and to ensure that it functions over time independently of staff changes within the responsible authorities.

**Validation** in this document indicates that the relevant competent authority considers a list of hazardous activities as officially falling under the scope of the Convention.

**Review** implies that the validated list of HA still represents completeness, adequacy and compliance with the real situation in the country.

**Revision** implies that the list of HA is updated and changed if the result of the review indicates that this is necessary as, for example, in the case of a change in chemicals produced, handled or stored in a given installation, or the closure of an installation.

**Annex I** lists threshold quantities of hazardous substances that are present or may be present in the activity for the purpose of identifying HA as such. It includes both named substances (for example, ammonium nitrate with a threshold quantity of 50 metric tonnes, or chlorine with 25 metric tonnes) and categories such as flammable, toxic or oxidizing. When identifying HA, countries should take into consideration the possibility of aggravation of the hazards involved and the quantities of the hazardous substances and their proximity.

The relevant elements for the identification of HA, as given in **Annex IV** of the *Guidelines to Facilitate the Identification of Hazardous Activities for the Purposes of the Convention*, cover substance, quantity and location. The substance and quantity element specifies that one or more hazardous substance is present or may be present in quantities at or in excess of the threshold quantities listed in **Annex I**. The location element specifies the inclusion of HA activities that are within 15 kilometres of the border, for activities involving substances that may cause a fire or explosion or involving toxic substances that may be released into the air in the event of an accident, and along or within the catchment areas of transboundary and border rivers, transboundary or international lakes, or within the catchment areas of transboundary groundwater.

# Self-assessment of working area 2: Notification of hazardous activities

Progress Stage

## Criteria for self-assessment of progress

6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6	
1. Mechanism for transboundary consultation on hazardous activities	<p>Set of procedures, implementation rules and actions to ensure that affected Parties have an opportunity to inform Parties of origin of their views on the list of HA, regardless of its status (unofficial, official/validated), and to pursue a settlement of differences.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Those responsible for initiating transboundary consultation on existing or planned hazardous activities</li> <li><input type="checkbox"/> Those responsible for responding to an initiative to consult</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who is responsible for initiating a process of transboundary consultation on hazardous activities?
	<p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> </ul>						<input type="checkbox"/>	Who is responsible for responding to an initiative to consult on hazardous activities?
2. Mechanism for notification of hazardous activities	<p>Set of procedures, implementation rules and actions allowing the competent authorities to notify potentially affected neighbouring countries of existing and/or planned HA.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The notification format and channels for both the existing and planned hazardous activities</li> <li><input type="checkbox"/> The authorities responsible for notification</li> <li><input type="checkbox"/> The timing for the notification of existing/planned hazardous activities</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What notification formats and channels are in place for existing and planned hazardous activities?
	<p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> </ul>						<input type="checkbox"/>	Who is responsible? What is the timing for notification?



## Optimal level of implementation

Authorities maintain a functioning system for the notification of neighbouring countries of hazardous activities, and the system functions regardless of staff changes.

**Consultation** should take place when a country is unsure if there is a risk associated with a proposed site or activity, and therefore consults with neighbours to assess the potential risks. Such consultation may result in the determination that the Convention applies to the identified site or the site is subject to a bilateral agreement, in which case the country with the site or activity formally notifies the potentially affected country or countries.

Legacies of interstate or intrastate conflicts or complex political situations can limit a country's ability to use the transboundary consultation and **notification** mechanisms, even when all the necessary resources, legislation and rules are in place. Alternative channels of communication on subjects related to the Convention can be created through international organizations.

Transboundary consultation could be performed either in parallel with the analysis of data received from the operators for the purpose of identifying HA, or after a concerned Party has been notified of an HA list, or at the initiative of a concerned Party.

Please note that notification also occurs in the event of an emergency, or an imminent threat of one. In such cases, notification should rely on the reliable and real-time communication channels and points of contact, including the UNECE IAN System.

# Self-assessment of working area 3: Prevention

Progress Stage

## Criteria for self-assessment of progress

6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6	
1. Mechanism for responsibility for safe operation to HA operators	<p>Set of procedures, implementation rules and actions allowing the competent authorities to unambiguously identify HA operators as responsible for the safe operation of activities and to oblige HA operators to demonstrate the safe operation to competent authorities and the public using defined methodologies, methods and models.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Parameters for linking the degree of hazard with the responsibility for safe operation and for defining the scope of demonstrations, which might vary by level of industrial accident hazards</li> <li><input type="checkbox"/> Content of the demonstration taking account of Annexes IV and V of the Convention</li> <li><input type="checkbox"/> Methodologies, methods and models to be used for the demonstration</li> <li><input type="checkbox"/> Frequency of demonstration and frequency of review/revision of demonstration</li> </ul> <p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Authorities provide awareness campaigns for HA operators</li> <li><input type="checkbox"/> Any necessary training/guidance for HA operators is available</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>How do the parameters for safe operation relate to the degree of hazard?</p> <p>How are the content of demonstrations and methodologies, methods and models defined?</p> <p>How often do demonstrations take place, and how often are they reviewed and revised?</p>
	<p>Set of procedures, implementation rules and actions allowing the competent authorities to manage industrial accident hazards, by setting safety goals, identifying the scope of major accident hazards in the country and organizing the monitoring of hazardous activities (review of safety documentation, licencing, inspection control and prohibitions, for instance).</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Parameters for identification of hazardous activities</li> <li><input type="checkbox"/> Licencing of planned hazardous activities (scope and content of safety documentation, administrative procedure, criteria for granting/denying a licence)</li> <li><input type="checkbox"/> Examination of safety documentation provided by HA operators for demonstration purposes and communication of the results, especially safety measures to be taken by the operator, procedures and deadlines</li> <li><input type="checkbox"/> Criteria and procedures for prohibiting a hazardous activity from operating</li> <li><input type="checkbox"/> Inspection controls, methods of inspections, actions in case of non-compliance</li> <li><input type="checkbox"/> Responsible competent authorities</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Who are the responsible competent authorities?</p> <p>How are the parameters for identifying hazardous activity defined?</p> <p>What is the procedure for licencing of planned hazardous activities?</p> <p>Who is responsible for examining the safety documentation provided by HA operators, and what methods are used?</p>

## 2. Mechanism for control regime

Stage 6 is achieved when:

- Human and financial resources are secured
- Training to implement the mechanism is regularly conducted
- Any necessary guidance documents and/or checklists are available and used
- Exchange of information/experience within the country and between countries occurs regularly

What are the rules for communication with operators?

What are the criteria for prohibiting a hazardous activity from operating, and for inspection controls?



### Optimal level of implementation

A comprehensive system ensures that the operators of hazardous activities take full responsibility for safe operation and are obliged to demonstrate to the competent authorities and to the public the safe operation of those activities. The authorities maintain an effective control regime over hazardous activity operators, and update the prevention system to take new trends into account.

**Preventive activities** are mainly the responsibility of operators and competent authorities. The operators have to ensure safety at installations, and the **competent authorities** have to establish and enforce the relevant legislative framework to ensure that **operators** take all the appropriate measures for safe operations (the so-called control regime).

Some hazardous activity operators may use several tiers of hazard security to match precautions to different levels of risk, but the Convention specifies that the parameters of such a system need to be based in national legislation or regulations, or else the system is just good practice that may not be followed by all operators.

Methodologies, methods and models used for demonstrations should be implemented in accordance with national legislation, and not simply on the basis of good company practices. Modelling applied in risk assessments or environmental impact statements are now mainstream tools in most countries. Accident modelling is a newer technique that may not be broadly practiced yet. National legislation and procedures are important in both cases. The frequency, goals and modalities of inspections may vary by type – regular inspections versus inspections following a complaint or an accident. HA operators should review and if necessary revise a demonstration at regular intervals or when there is a change that might influence the demonstration – the use of a different chemical, or a change in quantity, for instance.

**Demonstration** in the context of preventive measures implies – depending on legislation and national practices – that competent authorities, operators or both set safety objectives, conform to safety standards, conduct risk analyses or safety studies for hazardous activities, prepare the necessary documentation and action plans and undertake training of personnel engaged in hazardous activities. Most countries require operators to demonstrate to competent authorities and the public the safe performance of HA by providing basic details of the process and other information (consult **Annex V** of the Convention). Note that the demonstration does not guarantee that no accidents will occur, but should make evident that all adequate measures are employed.

For the prevention of industrial accidents, **Annex IV** of the Convention offers a non-exhaustive list of measures that may be carried out, depending on national laws and practices, by Parties, competent authorities, operators, or by joint efforts. Examples include:

- The application of the most appropriate technology in order to prevent industrial accidents and protect people and the environment
- The establishment of internal management structures and practices designed to implement and maintain safety regulations effectively
- The monitoring and auditing of hazardous activities and the carrying out of inspections

**Annex V** of the Convention covers matters that should be considered in the **analysis** and **evaluation**, and should be regulated by national legislation or practice. The content of a demonstration typically includes:

- Information and analysis of the conditions, quantities and properties of hazardous substances on an industrial site
- A range of accident scenarios showing the approximate quantity of a release and the extent and severity of the resulting consequences for people and the environment, including the extent of hazard zones and the possibility of domino effects from adjacent activities
- An assessment of the likelihood of an accident occurring, and the timescale within which an industrial accident could develop
- The size and distribution of the population in the vicinity, including the age, mobility and susceptibility of that population
- A description of the preventive measures in terms of both equipment and procedures
- Other information as stipulated in **Annex V** of the Convention and national practice

# Self-assessment of working area 4: Preparedness

Progress Stage

## Criteria for self-assessment of progress

6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6		
<b>1. Mechanism for responsibility for emergency preparedness of HA operators</b>	Set of procedures, implementation rules and actions ensuring that HA operators prepare, coordinate, test, review and revise on-site emergency plans. The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> Principles to be followed and targets to be achieved through the application of OnEP; sharing of capacities to respond to emergencies</li> <li><input type="checkbox"/> Parameters for linking the degree of hazard with the responsibility for the preparation of OnEP</li> <li><input type="checkbox"/> Contents and source of input data for the preparation of OnEP</li> <li><input type="checkbox"/> Institutions to be involved in consultation and procedures for coordination of preparation of OnEP with external institutions and authorities responsible for the preparation of OfEP</li> <li><input type="checkbox"/> Procedures and rules with regard to the review and revision of OnEP, testing of OnEP and inspection controls</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What elements are included in on-site emergency plans?  Who is responsible for what?  What is the procedure for coordination of OnEP preparation?  What are the procedures for review and revision and testing of OnEP, and for inspection controls?
	<b>Stage 6 is achieved when:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Any necessary training/guidance for HA operators is available</li> <li><input type="checkbox"/> The authorities provide any necessary awareness-raising campaigns for HA operators</li> <li><input type="checkbox"/> Member of rescue and relief teams of HA operators are trained regularly to be able to respond to an emergency</li> </ul>						<input type="checkbox"/>	<input type="checkbox"/>	
<b>2. Mechanism for responsibility for emergency preparedness of competent authorities</b>	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. The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> Principles to be followed and targets to be achieved through the application of OfEP, and principles with regard to sharing of capacities to respond to emergencies</li> <li><input type="checkbox"/> Parameters to assign the responsibility for the preparation of OfEP to the relevant competent authority</li> <li><input type="checkbox"/> Contents and input data needed for the preparation of OfEP</li> <li><input type="checkbox"/> Rules with regard to the compatibility with OnEP</li> <li><input type="checkbox"/> Procedures for review and revision of OfEP, testing of OfEP and inspection controls</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What elements are included in off-site emergency plans?  What procedures are in place for assigning responsibility for the preparation of OfEP and who is involved in the preparation?  How is compatibility with OnEP ensured?  What are the procedures for review and revision and testing of OfEP and for inspection controls?
							<input type="checkbox"/>	<input type="checkbox"/>	



<p><b>2. Mechanism for responsibility for emergency preparedness of competent authorities</b></p>	<p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> <li><input type="checkbox"/> Any necessary guidance documents and/or checklists are available and used</li> <li><input type="checkbox"/> There is exchange of information/experience within the country and between countries, as needed</li> <li><input type="checkbox"/> Member of rescue and relief teams are trained regularly to be able to respond to an emergency</li> </ul>		
<p><b>3. Mechanism for transboundary emergency plans</b></p>	<p>Set of procedures, implementation rules and actions ensuring that the competent authorities of the concerned parties cooperate with each other and coordinate emergency plans to make them compatible.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The parameters for determining the need to ensure compatibility of emergency plans in the transboundary context</li> <li><input type="checkbox"/> The assignment of responsibilities</li> <li><input type="checkbox"/> The modalities for the exchange of data, including type and scope of data and frequency of exchange</li> <li><input type="checkbox"/> The modalities for reviewing, revising and testing of compatible emergency plans</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul> <p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> <li><input type="checkbox"/> Exercises to train joint transboundary response are performed regularly</li> </ul>		<p>What are the parameters for ensuring the compatibility of emergency plans in the transboundary context?</p> <p>What are the procedures for the exchange of information and for the review, revision and testing of compatible emergency plans?</p> <p>Who is responsible?</p>



### Optimal level of implementation

A comprehensive system requires HA operators to establish, maintain and test on-site emergency plans (OnEP) – the emergency plans for the installations within their perimeter – and to ensure their capacity to respond to emergencies. The competent authorities establish, maintain and test off-site emergency plans (OfEP) – the emergency plans outside the perimeter of the installations – ensure their capacity to respond to emergencies and ensure HA operator compliance. The competent authorities ensure compatibility of off-site with on-site plans, as well as compatibility of emergency plans in a transboundary context.

As in Working Area 3, the Convention recognizes that the level of preparedness varies with the degree of the hazard, and specifies that national legislation needs to establish the parameters for linking the degree of hazard with the responsibility for the preparation of OnEPs.

**Compatibility of OnEPs and OfEPs** implies data exchange between the operator responsible for preparing the OnEP and the competent authority responsible for preparing the OfEP in order to harmonize measures in response to an emergency. The compatibility and testing of OnEPs and OfEPs may entail field tests or tabletop exercises, and should consider specific local factors as well as transboundary aspects. The specific toxic substances that are potential hazards in the event of an industrial accident in a given area, for example, should be the basis for determining the capacity at nearby hospitals and for specifying the medications that should be available.

In the transboundary context, countries need to reach agreements about how communications will be conducted, and should consider the advantages and disadvantages of local and centralized networks: can local branches of emergency centres directly contact authorities in other countries, or should contacts pass through central emergency centres?

Targets may be defined in terms of people, environment and property to be protected.

The capacity to respond to emergencies may be divided among HA operators and external rescue and relief services.

Detailed discussions related to responsibility for preparedness of HA operators might include:

- General principles that the country decides to follow
- Criteria for industrial accident scenarios to be used as a basis for preparing plans
- Targets
- Principles with regard to ensuring capacity to respond to emergencies
- Parameters for linking the degree of hazard with an obligation for the preparation of plans
- Data needed as an input for the preparation of plans
- Institutions, authorities, rescue units and experts to be consulted and coordinated in the preparation of plans
- Arrangements to be covered by plans (in line with **Annex VII** of the Convention)
- Procedures and rules with regard to the review and revision of plans
- Testing of plans

**Annex VII** of the Convention provides a non-exhaustive list of emergency preparedness measures for the preparation of OnEP and OfEP. These measures may include:

- Arrangements for warning people and arrangements for their evacuation; other protective or rescue actions; and health services
- Identification of on-site personnel, people who might be affected off site, and rescue forces
- Details of technical and organizational procedures that are appropriate for response in the event of an industrial accident
- Measures for treatment, collection, clean-up, storage, removal and safe disposal of hazardous substances and contaminated material, and restoration

Examples of matters that could be covered by OnEP or OfEP include:

- Organizational roles and responsibilities for dealing with an emergency
- A description of the equipment and resources available
- Methods and procedures to be followed by emergency and medical personnel
- Arrangements for training and exercises

# Self-assessment of working area 5: Response and mutual assistance

Progress Stage	Criteria for self-assessment of progress
6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6	
<b>1. Mechanism for prompt recognition of industrial accidents</b>	Set of procedures, implementation rules and actions ensuring that the competent authorities activate the relevant measures promptly in the event of an accident or of an imminent threat of an accident. The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> The parameters, responsibility and procedures to recognize an industrial accident or an imminent threat of one and linking it with national procedures and measures to contain and minimize the effects</li> <li><input type="checkbox"/> The parameters, responsibility and procedures for recognizing existing or potential transboundary effects of an industrial accident or an imminent threat thereof</li> <li><input type="checkbox"/> The procedure for and responsibility to notify and communicate with possibly affected Parties, to jointly assess possible effects if appropriate, to ensure joint response (at the border of two or more countries) and to coordinate measures to contain and minimize effects of an industrial accident</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who is responsible for activation of relevant measures?  What are the national procedures to contain and minimize accident effects, including potential transboundary effects?  What are the procedures to communicate with possibly affected Parties and to jointly assess possible effects?  What are the procedures to ensure joint response and to coordinate measures?
	<b>Stage 6</b> is achieved when: <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> </ul>						<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Mechanism for application of UNECE IAN system</b>	Set of procedures, implementation rules and actions ensuring that the competent authorities use the UNECE Industrial Accident Notification (IAN) system for the purpose of obtaining and transmitting industrial accident notifications at the international level. The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> Obligatory use of a relevant notification system for the notification of industrial accidents in a transboundary context</li> <li><input type="checkbox"/> A Point of Contact to operate a relevant notification system for transboundary notification purposes</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the notification of industrial accidents in a transboundary context obligatory?  Is there a Point of Contact to operate the transboundary notification system?
	<b>Stage 6</b> is achieved when: <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Points of Contact use the IAN System</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> </ul>						<input type="checkbox"/>	<input type="checkbox"/>

<p><b>3. Mechanism for local notification systems</b></p>	<p>Set of procedures, implementation rules and actions ensuring that the local authorities use adequate systems for the purpose of receiving and transmitting industrial accident notifications at the bilateral level.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Those responsible for operating the notification system at the local level</li> <li><input type="checkbox"/> The procedures to be used under the notification systems at the local level</li> <li><input type="checkbox"/> The link to the notification system at the national level</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul> <hr/> <p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Notification exercises are performed regularly</li> </ul>	<p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>What notification systems are in place at the local level?</p> <p>How are these systems linked to the national level?</p> <p>Who is responsible for operating the notification system at the local level?</p>
<p><b>4. Mechanism for requesting/providing assistance for IA</b></p>	<p>Set of procedures, implementation rules and actions ensuring that the country has a system in place to send a request for assistance in case of need, and to respond to a request for assistance from another country quickly and reliably.</p> <p>The minimum elements to be defined in a governmental act or national practice (<b>Stage 5</b>) include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A Point of Contact for mutual assistance</li> <li><input type="checkbox"/> Parameters upon which the assistance requested will be based</li> <li><input type="checkbox"/> Parameters upon which a request for assistance from another Party will be evaluated and responded to</li> <li><input type="checkbox"/> Procedures to be followed and division of responsibilities with regard to the request/provision of assistance</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul> <hr/> <p><b>Stage 6</b> is achieved when:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Training to implement the mechanism is regularly conducted</li> </ul>	<p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Who is responsible for requesting or providing assistance?</p> <p>Which institution is the Point of Contact for assistance?</p> <p>What are the procedures and parameters for the request and provision of assistance?</p> <p>What bilateral agreements on cooperation for mutual assistance are in place?</p>



### Optimal level of implementation

A comprehensive system provides for prompt recognition of an industrial accident or an immediate threat of an accident, and for the activation of preparedness procedures and transboundary cooperation. Procedures for requesting and providing assistance are in place.

Countries normally have emergency response centres, and maintain both domestic and international systems, but may use systems other than UNECE IAN.

While the Convention focuses exclusively on industrial accidents as opposed to general emergencies, the notification system required by the Convention may be a part of a general notification system or may be separate.

Many transboundary responses occur on the basis of phone or radio calls or videoconferences, but the countries need to have written agreements guiding their responses to requests.

The legal basis for a request or a response to a request for assistance may include national legislation, bilateral agreements, and participation in a convention or other multilateral agreement.

Detailed discussions relating to the application of the UNECE IAN system might include the authority to serve as a Point of Contact for transboundary notification purposes; the necessary equipment; possible amendments to national legislation to ensure the use of the IAN System; and training to ensure the use of the IAN system.

Detailed discussions relating to requesting or providing assistance for IA might include the legal basis to be used to request and to respond to a request for assistance; the designation of a Point of Contact for mutual assistance; parameters for a decision to be taken to request assistance; parameters for a decision to be taken to provide or reject assistance; procedures to be applied; and division of responsibilities.

The Point of Contact for notification of accidents, potentially affecting other countries and the Point of Contact for mutual assistance should preferably be the same.

# Self-assessment of working area 6: Information to the public and public participation

Progress Stage

## Criteria for self-assessment of progress

6	The indicator is fully operational and implemented by the competent authorities, the operators or both.
5	The indicator has been adopted and covers all the minimum elements, but is only partly operational in practice (due to lack of resources).
4	Intensive and detailed discussions take place among stakeholders on the content of legislation and specific procedures.
3	A decision has been taken at the level of policymakers to introduce or update the indicators. Relevant stakeholders are identified.
2	Initial discussions at the national level or among authorities, experts and operators are leading to the introduction of the indicators.
1	Little awareness among competent authorities of the need to introduce the indicator or of the requirements for setting it up.

Indicator	Definition	1	2	3	4	5	6	
<b>1. Mechanism for information to the public potentially affected by IA</b>	Set of procedures, implementation rules and actions to be followed by the relevant authorities and/or HA operators to give adequate information to the public in areas that might be affected by an industrial accident.  The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> The parameters and procedures to determine the potentially affected public that needs to be informed</li> <li><input type="checkbox"/> Responsibility given to an authority or to HA operators to ensure public information</li> <li><input type="checkbox"/> Scope and content of public information, and review and revision of public information</li> <li><input type="checkbox"/> Dissemination channels (by post; newspapers; Internet; on the premises of an authority or an operator)</li> <li><input type="checkbox"/> Exceptions to provision of information to the public, if relevant</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What procedures are used to determine the affected public that needs to be informed?  Who is responsible for ensuring the provision of information to the public?  What are the exceptions to provision of information?  What are the dissemination channels?
	<b>Stage 6 is achieved when:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Authorities provide any necessary awareness-raising campaigns for the public</li> </ul>						<input type="checkbox"/>	
<b>2. Mechanism for public participation</b>	Set of procedures, implementation rules and actions to enable the public – in the Party of origin as well as in the affected Party – to express its views and concerns on prevention and preparedness measures in relevant procedures.  The minimum elements to be defined in a governmental act or national practice ( <b>Stage 5</b> ) include: <ul style="list-style-type: none"> <li><input type="checkbox"/> The parameters for the definition of procedures relevant for public participation (circumstances for public invitation to participate and possible national security or defence exceptions to public participation, among others)</li> <li><input type="checkbox"/> The authorities to be responsible for ensuring opportunities for public participation</li> <li><input type="checkbox"/> The time frames and modalities for public participation</li> <li><input type="checkbox"/> An authority responsible for taking due account of the outcome of the public participation and for informing the public of final decisions, with relevant explanations</li> </ul> In addition: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any necessary training programme is designed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What are the procedures for public participation?  Who is responsible for ensuring public participation?  Who is responsible for taking account of the outcomes of public participation, and for informing the public of decisions?
	<b>Stage 6 is achieved when:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Human and financial resources are secured</li> <li><input type="checkbox"/> Authorities provide any necessary awareness-raising campaigns for the public</li> <li><input type="checkbox"/> Authorities take due account of the outcomes of public participation, inform the public of final decisions and provide relevant explanations</li> </ul>						<input type="checkbox"/>	



## Optimal level of implementation

A comprehensive information and public participation system ensures that the public receives adequate information and can easily participate in the decision-making process related to IA prevention and preparedness in their country of origin and in neighbouring countries and other possibly affected countries.

In transboundary cases, the Convention encourages countries to provide information to the public across borders, and to allow people from neighbouring countries the opportunity to express any concerns they may have.

The use of the Internet removes a technical barrier to information access, and countries that maintain domestic websites can reach people in other countries as well.

Initial discussions relating to public participation might take place among authorities, experts, the public, non-governmental organizations or other stakeholders. The authorities must be willing to give the public the opportunity to participate in relevant procedures. The public should be able to access adequate information free of charge when participating in relevant procedures to make known its views and concerns on prevention and preparedness measures.

The scope and content of public information should follow **Annex VIII** of the Convention and include elements such as name and location of the HA, a generally understandable explanation of the activity, general information from an environmental impact assessment, if relevant, potential effects of an industrial accident and the off-site emergency plan, and should also take into account information from Annex V, namely:

- The quantities and properties of hazardous substances on the site
- Brief descriptive scenarios of a representative sample of industrial accidents possibly arising from the hazardous activity, including an indication of likelihood

Each scenario should contain:

- The approximate quantity of a release
- The extent and severity of the resulting consequences to people and the environment
- The timescale within which the industrial accident could develop from the initiating event
- Any action that could be taken to minimize the likelihood of escalation
- The number and distribution of people that might be affected

## 6. Results of self-assessment with regard to the status of implementation of the Convention

Please complete and electronically submit the form to UNECE TEIA secretariat at: [Teia.Conv@unece.org](mailto:Teia.Conv@unece.org)

The following forms are available on the Convention's website:

<http://www.unece.org/env/teia/welcome.html>

Country name:

Date:

Contact details of responsible officer:

**Table 10.** Results of self-assessment

Working area	Indicator	Progress stage with explanation	Shortcomings, challenges and a list of priority actions
1. Identification of hazardous activities	I. Mechanism for data collection		
	II. Mechanism for data analysis and validation		
	III. Mechanism for data review and revision		
2. Notification of hazardous activities	I. Mechanism for transboundary consultation on hazardous activities		
	II. Mechanism for notification of hazardous activities		
3. Prevention	I. Mechanism for responsibility for safe operation to HA operators		
	II. Mechanism for control regime		
4. Preparedness	I. Mechanism for responsibility for emergency preparedness of HA operators		
	II. Mechanism for responsibility for emergency preparedness of competent authorities		
	III. Mechanism for transboundary emergency plans		
5. Response and mutual assistance	I. Mechanism for prompt recognition of industrial accidents		
	II. Mechanism for application of UNECE IAN system		
	III. Mechanism for local notification systems		
	IV. Mechanism for requesting/providing assistance for IA		
6. Information to the public and public participation	I. Mechanism for information to the public potentially affected by IA		
	II. Mechanism for public participation		



## 7. Action plans

Preparing the action plan entails the following steps:

1. Referring to the self-assessment tables
2. Proposing the activities
3. Filling in the details

The last column of the self-assessment table (Table 10) identifies the shortcomings and priorities for each working area and the respective indicators. This is where the preparation of the action plan begins.

The lists of priority actions from the self-assessment tables provide the starting points for the action plans. For each priority action under each indicator, the action plan tables provide space for a list and description of the activities to be undertaken. The activity descriptions may specify the kind of training, workshop, seminar or awareness-raising campaign that is needed, whether bilateral agreements are in place and the status of relevant legislation, for example. Then for each activity, the tables provide space to identify the organization with lead responsibility, the stakeholders to be consulted or involved and the timing of the activity, and to state what type, if any, of external assistance is needed.

Countries may identify needs for external assistance in any working area. Training, technical assistance and help with developing industry guidance are typical examples of assistance specified by countries. The TEIA Convention secretariat is available to help identify training resources, and may be able to facilitate information and experience exchange on good practices. Requests for more expensive assistance may be more difficult to fulfil, but countries should nevertheless make requests for assistance regardless of cost. While the Assistance Programme was not designed to make additional funds available and beyond the delivery of needs-driven activities, the Convention may be able to coordinate the provision of services or identify potential donors. The countries may use the information developed in the self-assessments and action plans as a foundation for applications for assistance from a range of sources.

Please complete and electronically submit the form to UNECE TEIA secretariat at:  
Teia.Conv@unece.org

These forms are also available on the Convention's website:  
<http://www.unece.org/env/teia/welcome.html>

Country name:  
Date:  
Contact details of responsible officer:

**Table 11.** Plan of activities to be undertaken with regard to the list of priority actions identified in self-assessment

Activities	Description of the activity with an indication of targeted result	Responsibility and stakeholders involved	Timing	External assistance needed? If yes, what kind?
1st activity				
2nd activity				
...				

## 8. Template for the submission of project proposals under the Assistance Programme

Countries should use the following template when requesting assistance activities. Countries should have already performed a self-assessment and developed an action plan. The project proposals should be sent to the secretariat by the country's focal point through an official letter.

These forms are also available on the Convention's website:  
<http://www.unece.org/env/teia/welcome.html>

### Project proposal for activities under the Assistance Programme

#### 1. Information about the applicant

- a) Country and institution
- b) Name of contact person (in case more countries are involved, please indicate the name of one contact person per country)
- c) Contact details (per each contact person)

#### 2. Overview of the project proposal

- a) Title (should reflect the nature/content or key issues of the project)
- b) Duration
- c) Beneficiary countries and their involved ministries
- d) Partner countries and their involved ministries
- e) Overall estimated project cost

#### 3. Detailed information about the project proposal

(Please use the information provided in your country's self-assessment and action plan. Please note that the information provided needs to demonstrate the need of the activity proposed.)

- a) Project background

Why is the project needed? Please describe the project background based on the results of your country's self-assessment, in particular with regard to the: area(s) of work and indicator(s) the project proposal refers to; the current situation in your country, as expressed in the progress stage identified for the indicator(s); and shortcomings and challenges identified. In case this is a follow-up activity to one previously organized, please report also on the results achieved in previous activities. (Approximately 500 words.)

- b) Project objectives  
What are the project's general objectives? What is the foreseen impact? Please describe the project objectives, and the hoped-for impact of the activity in the country. Please base this description on the results of your country's action plan. (Approximately 200 words.)
- c) Expected project results  
What are the concrete/targeted results that should have been achieved after the implementation of the project? Please describe, based on the objectives in section (b) above, the expected results of the project. (Approximately 150 words.)
- d) Project activities  
What activities (for instance availability of guidance, training session, etc.) would better tackle the objectives and expected results identified in sections (b) and (c) above? Please propose a description of the way such activities should be conducted (for instance, what kind of guidance, if a training session who should be the participants, how many, etc.) (Approximately 200 words.)
- e) External assistance  
What kind of external assistance would best respond to your needs? Please describe, based on the information provided in your country's action plan.
- f) Project budget  
What would be the estimated costs for the project activity or activities?
- g) Time frame  
According to which time frame do you plan to implement the project?

## 9. Report on activities implemented and results achieved

This table correspond to the third step of the cyclic mechanism (see Table 1).

*Please complete and electronically submit the form to UNECE TEIA secretariat at:*

*Teia.Conv@unece.org*

Please note that the following forms are also available as stand-alone forms available on the Convention's website:

<http://www.unece.org/env/teia/welcome.html>

Country name:

Date:

Contact details of responsible officer:

**Table 12.** Report on activities and results

Activities	Results achieved	Follow-up
1st activity		
2nd activity		
...		

## 10. Conclusions

In working toward the objective of the continuous improvement and sustainability of the implementation of the Convention, the strategic approach has the participating countries analyse their progress and evaluate their level of implementation across the six priority working areas. This approach, which comes from the field of industrial safety, is unique among UNECE conventions.

Conducting self-assessments provides the participating countries with a number of opportunities and advantages. A frank and comprehensive analysis done in the spirit of the Convention can lead to insights that may guide the development of plans or inspire cooperative projects with neighbours. Under any circumstances, an understanding of the strengths and weaknesses related to industrial safety can only assist the responsible authorities to take responsible steps whether on their own or through requests for external assistance. The self-assessment process works less as an additional reporting obligation than as a tool for strengthening domestic and cross-border readiness and for encouraging progress towards an accident-free world. In addition, the findings of the self-assessments are useful in policy development and in building synergies with disaster risk reduction and emergency response activities.

Completion of the self-assessments positions the countries to apply to the Assistance Programme for support for needed improvements in their industrial safety schemes. Countries may apply for support on their own or in cooperation with neighbours to work on joint projects. Assistance is predicated on the availability of funding and is contingent on approval by the Bureau and clearance by the Working Group on Implementation.

The completion of the self-assessment also supports countries in preparing the national implementation reports that Parties to the Convention and countries in the Assistance Programme are requested to submit biannually.

## Acronyms and abbreviations

HA	Hazardous activities
IA	Industrial Accident
IAN	Industrial Accident Notification
OfEP	Off-site emergency plans
OnEP	On-site emergency plans
TEIA	Transboundary Effects of Industrial Accidents
UNECE	United Nations Economic Commission for Europe
WGI	Working Group on Implementation

