

ECE Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention)

1. The United Nations Economic Commission for Europe and its Environment Division



The United Nations Economic Commission for Europe (ECE) was created in 1947 as one of five regional commissions of the United Nations.

The others are the:



- Economic Commission for Africa (ECA) ;
- Economic and Social Commission for Asia and the Pacific (ESCAP) ;
- Economic Commission for Latin America and the Caribbean (ECLAC) ;
- Economic and Social Commission for Western Asia (ESCWA).

ECE has 56 countries located in the European Union, non-EU Western and Eastern Europe, South-Eastern Europe, the Commonwealth of Independent States (CIS) and North America. All these countries dialogue and cooperate under the aegis of UNECE on economic, environmental and other sectoral issues.

The Environment Division is one of the six Divisions of ECE. It hosts five environmental conventions, also known as multilateral environmental agreements or MEAs, all of which are now in force:

- Convention on Long-Range Transboundary Air Pollution;
- Convention on Environmental Impact Assessment in a Transboundary Context;
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes;
- Convention on the Transboundary Effects of Industrial Accidents;
- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

Some of the Conventions have one or more protocols into force.

While many of the UNECE environmental conventions started as regional instruments, a number of them have become or are in the process of going global, and the work under these MEAs has for a long time included States outside the UNECE region in their activities.

2. The Convention on the Transboundary Effects of Industrial Accidents

The Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention, or the Convention) is one of the five MEAs hosted by ECE. Its first version was signed on 18 March 1992 in Helsinki by 27 Parties. At the beginning of 2015, it counted 41 Parties among ECE Member States. It provides a legal framework towards coordination and cooperation to prevent, be prepared for and respond to industrial accidents, especially those with transboundary consequences.

These accidents can be of technological nature, and they can also be caused by natural disasters (NATECH).

2.1. History

An accident at Sandoz agrochemical storehouse in Schweizerhalle, Basel, Switzerland on 1 November 1986 caused one of the most severe man-made environmental disasters in the history of Europe. This accident resulted in large volumes of firefighting water that drained into the Rhine River along with tons of pollutants. This created a long toxic plume flowing through Switzerland, France, Germany and the Netherlands. It significantly destroyed the biological life of the Rhine and killed hundreds of thousands fish.

Since the accident, the international community, especially in Europe, took many steps to improve the safety at industrial facilities and to protect international rivers and lakes. In particular, the UNECE Conventions on the Transboundary Effects of Industrial Accidents was being negotiated and eventually, adopted in 1992. The Convention entered into force in 2000.

Also policy development had been carried out at the level of the European Union. The so-called “Seveso legislation” goes hand in hand with the Convention. The Seveso directives are the means through which the EU, Party to the Convention, implements the requirements of the Convention.

2.2. The Convention and the EU Seveso legislation

The requirements of the Convention and of the Seveso legislation are fully compatible. The Convention has an annex (annex I) with substances within the scope of the Convention which Parties are required to identify and subsequently, notify to potentially affected Parties. This annex has been harmonised in 2014 with the Globally Harmonized System on the Classification of Chemicals (GHS) and, therefore, with the relevant annex of the Seveso III Directive.

Contrary to the Seveso legislation, the Convention does not have a two-tier approach. Only the installations falling under the Seveso upper-tier category fall under the Convention.

The main difference between the two frameworks is the transboundary aspect that characterises the Convention vis-à-vis other national legislation.

There are also several differences with regard to the terminology used, for instance the Convention speaks about “industrial accidents”, whereas the Seveso legislation talks about “major accidents”.

2.3. The Convention today

Under the Convention, Parties have to work nationally on:

- Prevention (including ensuring that operators of installations reduce risks of accidents);
- Preparedness (including country development of institutions and mechanisms to ensure preparation, coordination, testing, review and revisions of emergency plans);
- Response (including building capacities to promptly recognise the magnitude of the accident, promptly coordinate the needed response measures and prompt use of early-warning systems);
- Public awareness and public participation in decision making (including involving the public in emergency exercises).

Parties also have duties internationally that include:

- Mutual assistance (including facilitating dialogue among countries and identifying actions to facilitate the assistance activities – border crossing for equipment and personnel during assistance etc.);
- Public awareness also in neighbouring countries;
- Exchange of technology and information.

3. Prevention

Industrial accidents can cause significant damage to communities and the environment, both locally and across borders. The first line of defence against industrial accidents is to prevent them from occurring. The Convention therefore requires Parties to place prevention at the heart of their efforts to minimize the effects of industrial accidents. Article 6 of the Convention obliges Parties to take preventive measures, further specified in Annex IV, including measures to be carried out by Parties, competent authorities, operators, or by joint efforts.

A key step in preventing an industrial accident is to identify all hazardous activities within the jurisdiction of a Party. The Convention’s annex I (amended in 2006 and in 2014) provides criteria and lists for the identification of hazardous activities. Once a hazardous activity has been



Source: UNECE Industrial Accidents Convention - ARR

identified. According to articles 4 and 9 of the Convention, information on hazardous activities should be made available to the public and other countries that could be affected. Their cooperation will be required to reduce the transboundary impact of an industrial accident, should one occur.

As part of Parties' obligations with regard to prevention, article 6 also requires that the operators of any hazardous activity provide an analysis and evaluation of the activity to demonstrate its safe performance. Matters which should be considered in the analysis and evaluation are detailed in annex V.

The analysis of hazardous activities is especially important when new developments are being planned. Before any new industrial facility is constructed, proper land use planning should be conducted to determine the most suitable site. This should be done with the objective to minimize the risk to the population and the environment including in potentially affected Parties.

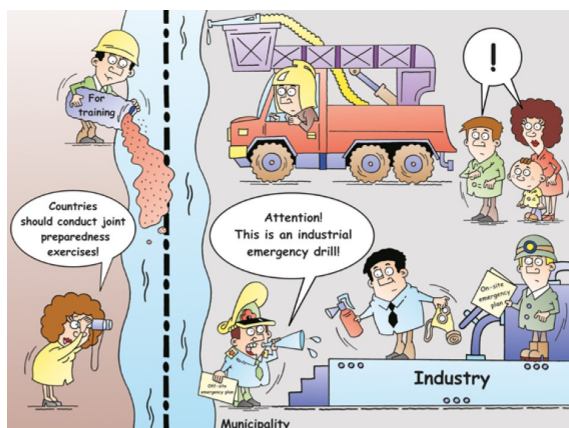
Prior to any industrial facility being built, meaningful and effective public participation should also take place. Annex VI of the Convention states that the results of public consultation and participation processes should be considered pursuant to Article 7, concerning decision-making on the location of hazardous activities. The Convention on Access to Information, Public Participation in Decision-making and Access to Justice (Aarhus Convention) also offers guidance in this regard.

To assist Parties in meeting their obligations with regard to the prevention of industrial accidents, several guidelines have been produced under the auspices of the Convention. These include Guidelines for Location Criteria, Safety Guidelines for Tailing Management Facilities, Safety Guidelines for Pipelines, and a Checklist System for Safety Reports.

4. Preparedness and Response

Despite best efforts, industrial accidents do sometimes occur. It is therefore very important that countries are fully prepared in order to reduce the impact of an industrial accident on communities and the environment.

In order to prepare for industrial accidents, countries should have identified hazardous facilities where an accident could occur as part of the prevention obligations of the Convention. All relevant authorities at the local, regional and national level should be fully prepared and have the proper equipment and training in place to deal with any accident scenario.



Source: UNECE Industrial Accidents Convention - ARR

In addition, procedures should be in place to inform the public in the event of an industrial accident or a threat thereof.

If an industrial accident has possible transboundary effects, Parties are required to inform neighbouring countries of the risks and share all available information necessary for an effective response. The Industrial Accident Notification (IAN) System has been created under the auspices of the Convention to facilitate the timely notification of countries that may be affected by an industrial accident.

The Convention encourages Parties to assist each other and cooperate in their response to industrial accidents, as well as in research and development and the sharing of information and technology. The Convention aims to provide a platform for cooperation within and between countries and the exchange of experience and good practices.

Annex VII of the Convention specifies emergency preparedness measures pursuant to article 8, which requires the development of transboundary emergency plans. National emergency plans should be compatible with those of neighbouring countries, so that they are able to respond to transboundary impacts. Article 9 further determines that the public should have an opportunity to participate in the preparation of prevention and preparedness measures, as well as have access to judicial proceedings to appeal a relevant decision.

Responding promptly to an industrial accident is crucial in reducing its effects on communities and the environment. Emergency services personnel need to be mobilized and coordinated across local, regional and national authorities.

5. The Assistance Programme

In 2000, the Convention launched the Assistance Programme to support countries with economies in transition with the implementation of the Convention.

The Assistance Programme aims at supporting Parties and ECE countries with economies in transition to improve their industrial safety. The Programme is based on the principle that assistance can be effective only if a recipient country is capable of receiving the assistance and is willing to take advantage of it. The Strategic Approach, adopted in 2008, provides concrete tools for beneficiary countries of the Programme to self-assess their situation, monitor progress made, and request targeted assistance through an action plan and project proposal. For more information, please see the relevant documents and sections of the website at <http://www.unece.org/env/teia/ap/introduction.html>.



Source: UNECE Industrial Accidents Convention - ARR

Examples of activities carried out under the Programme include:

- Joint management of transboundary emergencies in the Danube River involving Serbia, Bulgaria and Romania (2009) ;
- A project about hazard and crisis management between Moldova, Romania and Ukraine (2011-2015) ;
- Joint inspections to hazardous industrial sites (2011 and 2012) ;
- Field exercise of response to accidental water pollution (planned for September 2015).

Products and communication materials on the Convention

The Convention is available at:

http://www.unece.org/fileadmin/DAM/env/documents/2013/TEIA/1321013_ENG_Web_New_ENG.pdf

The Convention has also been working on finding creative ways for promoting awareness among national institutions, industry, NGOs and the public about the importance of major accidents prevention, preparedness and response.

Examples of such efforts include:

* **Cartoons**, available at: <http://www.unece.org/index.php?id=36970&L=0>

* A short **film** about the Industrial Accidents Convention, available at:
<https://www.youtube.com/watch?v=3Ph8jKOOaS0&index=1&list=PL4iZR0KjySQ9VxjaqLHPk0yeXQYssy-Tz>

* An **on-line training** on industrial accidents, available at: <http://www.unece.org/index.php?id=32240&L=0>

* **Publications** (for instance Sectoral Checklist for Preparation and Inspection of a Safety Report) available at: <http://www.unece.org/environmental-policy/treaties/industrial-accidents/publications.html>