

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE
COMMISSION ÉCONOMIQUE DES NATIONS UNIES POUR L'EUROPE
ЕВРОПЕЙСКАЯ ЭКОНОМИЧЕСКАЯ КОМИССИЯ
ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ

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

as amended on 15 December 2015

**Convention
sur les effets transfrontières
des accidents industriels**

telle que modifiée le 15 décembre 2015

**Конвенция
о трансграничном воздействии
промышленных аварий**

с поправками от 15 декабря 2015 года

NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries

NOTE

Les appellations employées dans la présente publication et la présentation des données qui y figurent n'impliquent de la part du Secrétariat de l'Organisation des Nations Unies aucune prise de position quant au statut juridique des pays, territoires, villes ou zones, ou de leurs autorités, ni quant au tracé de leurs frontières ou limites.

ПРИМЕЧАНИЕ

Употребляемые обозначения и изложение материала в настоящем издании не означают выражения со стороны Секретариата Организации Объединенных Наций какого бы то ни было мнения относительно правового статуса страны, территории, города или района, или их властей, или относительно делимитации их границ.

| |
|----------------|
| ECE/CP.TEIA/33 |
|----------------|

| |
|----------------------------|
| UNITED NATIONS PUBLICATION |
|----------------------------|

| |
|---|
| <i>Sales No.:</i> T.17.II.E.7 ISBN: 978-92-1-016373-6 e-ISBN: 978-92-1-060121-4 |
|---|

Convention on the Transboundary Effects of Industrial Accidents

done at Helsinki, 17 March 1992

as amended on 15 December 2015



UNITED NATIONS

New York and Geneva, 2017

Preamble

The Parties to this Convention,

Mindful of the special importance, in the interest of present and future generations, of protecting human beings and the environment against the effects of industrial accidents,

Recognizing the importance and urgency of preventing serious adverse effects of industrial accidents on human beings and the environment, and of promoting all measures that stimulate the rational, economic and efficient use of preventive, preparedness and response measures to enable environmentally sound and sustainable economic development,

Taking into account the fact that the effects of industrial accidents may make themselves felt across borders, and require cooperation among States,

Affirming the need to promote active international cooperation among the States concerned before, during and after an accident, to enhance appropriate policies and to reinforce and coordinate action at all appropriate levels for promoting the prevention of, preparedness for and response to the transboundary effects of industrial accidents,

Noting the importance and usefulness of bilateral and multilateral arrangements for the prevention of, preparedness for and response to the effects of industrial accidents,

Conscious of the role played in this respect by the United Nations Economic Commission for Europe (ECE) and recalling, inter alia, the ECE Code of Conduct on Accidental Pollution of Transboundary Inland Waters and the Convention on Environmental Impact Assessment in a Transboundary Context,

Having regard to the relevant provisions of the Final Act of the Conference on Security and Cooperation in Europe (CSCE), the Concluding Document of the Vienna Meeting of Representatives of the Participating States of the CSCE, and the outcome of the Sofia Meeting on the Protection of the Environment of the CSCE, as well as to pertinent activities and mechanisms in the United Nations Environment Programme (UNEP), in particular the APELL programme, in the International Labour Organisation (ILO), in particular the Code of Practice on the Prevention of Major Industrial Accidents, and in other relevant international organizations,

Considering the pertinent provisions of the Declaration of the United Nations Conference on the Human Environment, and in particular principle 21, according to which States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

Taking account of the polluter-pays principle as a general principle of international environmental law,

Underlining the principles of international law and custom, in particular the principles of good-neighbourliness, reciprocity, non-discrimination and good faith,

Have agreed as follows:

Article 1

Definitions

For the purposes of this Convention,

(a) “Industrial accident” means an event resulting from an uncontrolled development in the course of any activity involving hazardous substances either:

(i) In an installation, for example during manufacture, use, storage, handling, or disposal; or

- (ii) During transportation in so far as it is covered by paragraph 2 (d) of Article 2;
- (b) “Hazardous activity” means any activity in which one or more hazardous substances are present or may be present in quantities at or in excess of the threshold quantities listed in Annex I hereto, and which is capable of causing transboundary effects;
- (c) “Effects” means any direct or indirect, immediate or delayed adverse consequences caused by an industrial accident on, inter alia:
 - (i) Human beings, flora and fauna;
 - (ii) Soil, water, air and landscape;
 - (iii) The interaction between the factors in (i) and (ii);
 - (iv) Material assets and cultural heritage, including historical monuments;
- (d) “Transboundary effects” means serious effects within the jurisdiction of a Party as a result of an industrial accident occurring within the jurisdiction of another Party;
- (e) “Operator” means any natural or legal person, including public authorities, in charge of an activity, e.g. supervising, planning to carry out or carrying out an activity;
- (f) “Party” means, unless the text otherwise indicates, a Contracting Party to this Convention;
- (g) “Party of origin” means any Party or Parties under whose jurisdiction an industrial accident occurs or is capable of occurring;
- (h) “Affected Party” means any Party or Parties affected or capable of being affected by transboundary effects of an industrial accident;
 - (i) “Parties concerned” means any Party of origin and any affected Party;
 - (j) “The public” means one or more natural or legal persons.

Article 2

Scope

1. This Convention shall apply to the prevention of, preparedness for and response to industrial accidents capable of causing transboundary effects, including the effects of such accidents caused by natural disasters, and to international cooperation concerning mutual assistance, research and development, exchange of information and exchange of technology in the area of prevention of, preparedness for and response to industrial accidents.
2. This Convention shall not apply to:
 - (a) Nuclear accidents or radiological emergencies;
 - (b) Accidents at military installations;
 - (c) Dam failures, with the exception of the effects of industrial accidents caused by such failures;
 - (d) Land-based transport accidents with the exception of:
 - (i) Emergency response to such accidents;
 - (ii) Transportation on the site of the hazardous activity;
 - (e) Accidental release of genetically modified organisms;
 - (f) Accidents caused by activities in the marine environment, including seabed exploration or exploitation;
 - (g) Spills of oil or other harmful substances at sea.

Article 3

General provisions

1. The Parties shall, taking into account efforts already made at national and international levels, take appropriate measures and cooperate within the framework of this Convention, to protect human beings and the environment against industrial accidents by preventing such accidents as far as possible, by reducing their frequency and severity and by mitigating their effects. To this end, preventive, preparedness and response measures, including restoration measures, shall be applied.
2. The Parties shall, by means of exchange of information, consultation and other cooperative measures and without undue delay, develop and implement policies and strategies for reducing the risks of industrial accidents and improving preventive, preparedness and response measures, including restoration measures, taking into account, in order to avoid unnecessary duplication, efforts already made at national and international levels.
3. The Parties shall ensure that the operator is obliged to take all measures necessary for the safe performance of the hazardous activity and for the prevention of industrial accidents.
4. To implement the provisions of this Convention, the Parties shall take appropriate legislative, regulatory, administrative and financial measures for the prevention of, preparedness for and response to industrial accidents.
5. The provisions of this Convention shall not prejudice any obligations of the Parties under international law with regard to industrial accidents and hazardous activities.

Article 4

Identification, consultation and advice

1. For the purpose of undertaking preventive measures and setting up preparedness measures, the Party of origin shall take measures, as appropriate, to identify hazardous activities within its jurisdiction and to ensure that affected Parties are notified of any such proposed or existing activity.
2. Parties concerned shall, at the initiative of any such Party, enter into discussions on the identification of those hazardous activities that are, reasonably, capable of causing transboundary effects. If the Parties concerned do not agree on whether an activity is such a hazardous activity, any such Party may, unless the Parties concerned agree on another method of resolving the question, submit that question to an inquiry commission in accordance with the provisions of Annex II hereto for advice.
3. The Parties shall, with respect to proposed or existing hazardous activities, apply the procedures set out in Annex III hereto.
4. When a hazardous activity is subject to an environmental impact assessment in accordance with the Convention on Environmental Impact Assessment in a Transboundary Context and that assessment includes an evaluation of the transboundary effects of industrial accidents from the hazardous activity which is performed in conformity with the terms of this Convention, the final decision taken for the purposes of the Convention on Environmental Impact Assessment in a Transboundary Context shall fulfil the relevant requirements of this Convention.

Article 5

Voluntary extension

Parties concerned should, at the initiative of any of them, enter into discussions on whether to treat an activity not covered by Annex I as a hazardous activity. Upon mutual agreement, they may use an advisory mechanism of their

choice, or an inquiry commission in accordance with Annex II, to advise them. Where the Parties concerned so agree, this Convention, or any part thereof, shall apply to the activity in question as if it were a hazardous activity.

Article 6

Prevention

1. The Parties shall take appropriate measures for the prevention of industrial accidents, including measures to induce action by operators to reduce the risk of industrial accidents. Such measures may include, but are not limited to those referred to in Annex IV hereto.
2. With regard to any hazardous activity, the Party of origin shall require the operator to demonstrate the safe performance of the hazardous activity by the provision of information such as basic details of the process, including but not limited to, analysis and evaluation as detailed in Annex V hereto.

Article 7

Decision-making on siting

Within the framework of its legal system, the Party of origin shall, with the objective of minimizing the risk to the population and the environment of all affected Parties, seek the establishment of policies on the siting of new hazardous activities and on significant modifications to existing hazardous activities. Within the framework of their legal systems, the affected Parties shall seek the establishment of policies on significant developments in areas which could be affected by transboundary effects of an industrial accident arising out of a hazardous activity so as to minimize the risks involved. In elaborating and establishing these policies, the Parties should consider the matters set out in Annex V, paragraph 2, subparagraphs (1) to (8), and Annex VI hereto.

Article 8

Emergency preparedness

1. The Parties shall take appropriate measures to establish and maintain adequate emergency preparedness to respond to industrial accidents. The Parties shall ensure that preparedness measures are taken to mitigate transboundary effects of such accidents, on-site duties being undertaken by operators. These measures may include, but are not limited to those referred to in Annex VII hereto. In particular, the Parties concerned shall inform each other of their contingency plans.
2. The Party of origin shall ensure for hazardous activities the preparation and implementation of on-site contingency plans, including suitable measures for response and other measures to prevent and minimize transboundary effects. The Party of origin shall provide to the other Parties concerned the elements it has for the elaboration of contingency plans.
3. Each Party shall ensure for hazardous activities the preparation and implementation of off-site contingency plans covering measures to be taken within its territory to prevent and minimize transboundary effects. In preparing these plans, account shall be taken of the conclusions of analysis and evaluation, in particular the matters set out in Annex V, paragraph 2, subparagraphs (1) to (5). Parties concerned shall endeavour to make such plans compatible. Where appropriate, joint off-site contingency plans shall be drawn up in order to facilitate the adoption of adequate response measures.
4. Contingency plans should be reviewed regularly, or when circumstances so require, taking into account the experience gained in dealing with actual emergencies.

Article 9

Information to, and participation of the public

1. The Parties shall ensure that adequate information is given to the public in the areas capable of being affected by an industrial accident arising out of a hazardous activity. This information shall be transmitted through such channels as the Parties deem appropriate, shall include the elements contained in Annex VIII hereto and should take into account matters set out in Annex V, paragraph 2, subparagraphs (1) to (4) and (9).
2. The Party of origin shall, in accordance with the provisions of this Convention and whenever possible and appropriate, give the public in the areas capable of being affected an opportunity to participate in relevant procedures with the aim of making known its views and concerns on prevention and preparedness measures, and shall ensure that the opportunity given to the public of the affected Party is equivalent to that given to the public of the Party of origin.
3. The Parties shall, in accordance with their legal systems and, if desired, on a reciprocal basis provide natural or legal persons who are being or are capable of being adversely affected by the transboundary effects of an industrial accident in the territory of a Party, with access to, and treatment in the relevant administrative and judicial proceedings, including the possibilities of starting a legal action and appealing a decision affecting their rights, equivalent to those available to persons within their own jurisdiction.

Article 10

Industrial accident notification systems

1. The Parties shall, with the aim of obtaining and transmitting industrial accident notifications containing information needed to counteract transboundary effects, provide for the establishment and operation of compatible and efficient industrial accident notification systems at appropriate levels.
2. In the event of an industrial accident, or imminent threat thereof, which causes or is capable of causing transboundary effects, the Party of origin shall ensure that affected Parties are, without delay, notified at appropriate levels through the industrial accident notification systems. Such notification shall include the elements contained in Annex IX hereto.
3. The Parties concerned shall ensure that, in the event of an industrial accident or imminent threat thereof, the contingency plans prepared in accordance with Article 8 are activated as soon as possible and to the extent appropriate to the circumstances.

Article 11

Response

1. The Parties shall ensure that, in the event of an industrial accident, or imminent threat thereof, adequate response measures are taken, as soon as possible and using the most efficient practices, to contain and minimize effects.
2. In the event of an industrial accident, or imminent threat thereof, which causes or is capable of causing transboundary effects, the Parties concerned shall ensure that the effects are assessed—where appropriate, jointly for the purpose of taking adequate response measures. The Parties concerned shall endeavour to coordinate their response measures.

Article 12

Mutual assistance

1. If a Party needs assistance in the event of an industrial accident, it may ask for assistance from other Parties, indicating the scope and type of assistance required. A Party to whom a request for assistance is directed shall promptly decide and inform the requesting Party whether it is in a position to render the assistance required and indicate the scope and terms of the assistance that might be rendered.
2. The Parties concerned shall cooperate to facilitate the prompt provision of assistance agreed to under paragraph 1 of this Article, including, where appropriate, action to minimize the consequences and effects of the industrial accident, and to provide general assistance. Where Parties do not have bilateral or multilateral agreements which cover their arrangements for providing mutual assistance, the assistance shall be rendered in accordance with Annex X hereto, unless the Parties agree otherwise.

Article 13

Responsibility and liability

The Parties shall support appropriate international efforts to elaborate rules, criteria and procedures in the field of responsibility and liability.

Article 14

Research and development

The Parties shall, as appropriate, initiate and cooperate in the conduct of research into, and in the development of methods and technologies for the prevention of, preparedness for and response to industrial accidents. For these purposes, the Parties shall encourage and actively promote scientific and technological cooperation, including research into less hazardous processes aimed at limiting accident hazards and preventing and limiting the consequences of industrial accidents.

Article 15

Exchange of information

The Parties shall, at the multilateral or bilateral level, exchange reasonably obtainable information, including the elements contained in Annex XI hereto.

Article 16

Exchange of technology

1. The Parties shall, consistent with their laws, regulations and practices, facilitate the exchange of technology for the prevention of, preparedness for and response to the effects of industrial accidents, particularly through the promotion of:
 - (a) Exchange of available technology on various financial bases;

- (b) Direct industrial contacts and cooperation;
- (c) Exchange of information and experience;
- (d) Provision of technical assistance.

2. In promoting the activities specified in paragraph 1, subparagraphs (a) to (d) of this Article, the Parties shall create favourable conditions by facilitating contacts and cooperation among appropriate organizations and individuals in both the private and the public sectors that are capable of providing technology, design and engineering services, equipment or finance.

Article 17

Competent authorities and points of contact

1. Each Party shall designate or establish one or more competent authorities for the purposes of this Convention.
2. Without prejudice to other arrangements at the bilateral or multilateral level, each Party shall designate or establish one point of contact for the purpose of industrial accident notifications pursuant to Article 10, and one point of contact for the purpose of mutual assistance pursuant to Article 12. These points of contact should preferably be the same.
3. Each Party shall, within three months of the date of entry into force of this Convention for that Party, inform the other Parties, through the secretariat referred to in Article 20, which body or bodies it has designated as its point(s) of contact and as its competent authority or authorities.
4. Each Party shall, within one month of the date of decision, inform the other Parties, through the secretariat, of any changes regarding the designation(s) it has made under paragraph 3 of this Article.
5. Each Party shall keep its point of contact and industrial accident notification systems pursuant to Article 10 operational at all times.
6. Each Party shall keep its point of contact and the authorities responsible for making and receiving requests for, and accepting offers of assistance pursuant to Article 12 operational at all times.

Article 18

Conference of the Parties

1. The representatives of the Parties shall constitute the Conference of the Parties of this Convention and hold their meetings on a regular basis. The first meeting of the Conference of the Parties shall be convened not later than one year after the date of the entry into force of this Convention. Thereafter, a meeting of the Conference of the Parties shall be held at least once a year or at the written request of any Party, provided that, within six months of the request being communicated to them by the secretariat, it is supported by at least one third of the Parties.
2. The Conference of the Parties shall:
 - (a) Review the implementation of this Convention;
 - (b) Carry out advisory functions aimed at strengthening the ability of Parties to prevent, prepare for and respond to the transboundary effects of industrial accidents, and at facilitating the provision of technical assistance and advice at the request of Parties faced with industrial accidents;
 - (c) Establish, as appropriate, working groups and other appropriate mechanisms to consider matters related to the implementation and development of this Convention and, to this end, to prepare appropriate studies and other documentation and submit recommendations for consideration by the Conference of the Parties;

- (d) Fulfil such other functions as may be appropriate under the provisions of this Convention;
- (e) At its first meeting, consider and, by consensus, adopt rules of procedure for its meetings.

3. The Conference of the Parties, in discharging its functions, shall, when it deems appropriate, also cooperate with other relevant international organizations.

4. The Conference of the Parties shall, at its first meeting, establish a programme of work, in particular with regard to the items contained in Annex XII hereto. The Conference of the Parties shall also decide on the method of work, including the use of national centres and cooperation with relevant international organizations and the establishment of a system with a view to facilitating the implementation of this Convention, in particular for mutual assistance in the event of an industrial accident, and building upon pertinent existing activities within relevant international organizations. As part of the programme of work, the Conference of the Parties shall review existing national, regional and international centres, and other bodies and programmes aimed at coordinating information and efforts in the prevention of, preparedness for and response to industrial accidents, with a view to determining what additional international institutions or centres may be needed to carry out the tasks listed in Annex XII.

5. The Conference of the Parties shall, at its first meeting, commence consideration of procedures to create more favourable conditions for the exchange of technology for the prevention of, preparedness for and response to the effects of industrial accidents.

6. The Conference of the Parties shall adopt guidelines and criteria to facilitate the identification of hazardous activities for the purposes of this Convention.

Article 19

Right to vote

1. Except as provided for in paragraph 2 of this Article, each Party to this Convention shall have one vote.
2. Regional economic integration organizations as defined in Article 27 shall, in matters within their competence, exercise their right to vote with a number of votes equal to the number of their member States which are Parties to this Convention. Such organizations shall not exercise their right to vote if their member States exercise theirs, and vice versa.

Article 20

Secretariat

The Executive Secretary of the Economic Commission for Europe shall carry out the following secretariat functions:

- (a) Convene and prepare meetings of the Parties;
- (b) Transmit to the Parties reports and other information received in accordance with the provisions of this Convention;
- (c) Such other functions as may be determined by the Parties.

Article 21

Settlement of disputes

1. If a dispute arises between two or more Parties about the interpretation or application of this Convention, they shall seek a solution by negotiation or by any other method of dispute settlement acceptable to the parties to the dispute.
2. When signing, ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a Party may declare in writing to the Depositary that, for a dispute not resolved in accordance with paragraph 1 of this Article, it accepts one or both of the following means of dispute settlement as compulsory in relation to any Party accepting the same obligation:
 - (a) Submission of the dispute to the International Court of Justice;
 - (b) Arbitration in accordance with the procedure set out in Annex XIII hereto.
3. If the parties to the dispute have accepted both means of dispute settlement referred to in paragraph 2 of this Article, the dispute may be submitted only to the International Court of Justice, unless the parties to the dispute agree otherwise.

Article 22

Limitations on the supply of information

1. The provisions of this Convention shall not affect the rights or the obligations of Parties in accordance with their national laws, regulations, administrative provisions or accepted legal practices and applicable international regulations to protect information related to personal data, industrial and commercial secrecy, including intellectual property, or national security.
2. If a Party nevertheless decides to supply such protected information to another Party, the Party receiving such protected information shall respect the confidentiality of the information received and the conditions under which it is supplied, and shall only use that information for the purposes for which it was supplied.

Article 23

Implementation

The Parties shall report periodically on the implementation of this Convention.

Article 24

Bilateral and multilateral agreements

1. The Parties may, in order to implement their obligations under this Convention, continue existing or enter into new bilateral or multilateral agreements or other arrangements.
2. The provisions of this Convention shall not affect the right of Parties to take, by bilateral or multilateral agreement where appropriate, more stringent measures than those required by this Convention.

Article 25

Status of Annexes

The Annexes to this Convention form an integral part of the Convention.

Article 26

Amendments to the Convention

1. Any Party may propose amendments to this Convention.
2. The text of any proposed amendment to this Convention shall be submitted in writing to the Executive Secretary of the Economic Commission for Europe, who shall circulate it to all Parties. The Conference of the Parties shall discuss proposed amendments at its next annual meeting, provided that such proposals have been circulated to the Parties by the Executive Secretary of the Economic Commission for Europe at least ninety days in advance.
3. For amendments to this Convention other than those to Annex I, for which the procedure is described in paragraph 4 of this Article:
 - (a) Amendments shall be adopted by consensus of the Parties present at the meeting and shall be submitted by the Depositary to all Parties for ratification, acceptance or approval;
 - (b) Instruments of ratification, acceptance or approval of amendments shall be deposited with the Depositary. Amendments adopted in accordance with this Article shall enter into force for Parties that have accepted them on the ninetieth day following the day of receipt by the Depositary of the sixteenth instrument of ratification, acceptance or approval;
 - (c) Thereafter, amendments shall enter into force for any other Party on the ninetieth day after that Party deposits its instruments of ratification, acceptance or approval of the amendments.
4. For amendments to Annex I:
 - (a) The Parties shall make every effort to reach agreement by consensus. If all efforts at consensus have been exhausted and no agreement reached, the amendments shall, as a last resort, be adopted by a nine-tenths majority vote of the Parties present and voting at the meeting. If adopted by the Conference of the Parties, the amendments shall be communicated to the Parties and recommended for approval;
 - (b) On the expiry of twelve months from the date of their communication by the Executive Secretary of the Economic Commission for Europe, the amendments to Annex I shall become effective for those Parties to this Convention which have not submitted a notification in accordance with the provisions of paragraph 4 (c) of this Article, provided that at least sixteen Parties have not submitted such a notification;
 - (c) Any Party that is unable to approve an amendment to Annex I of this Convention shall so notify the Executive Secretary of the Economic Commission for Europe in writing within twelve months from the date of the communication of the adoption. The Executive Secretary shall without delay notify all Parties of any such notification received. A Party may at any time substitute an acceptance for its previous notification and the amendment to Annex I shall thereupon enter into force for that Party;
 - (d) For the purpose of this paragraph “Parties present and voting” means Parties present and casting an affirmative or negative vote.

Article 27

Signature

This Convention shall be open for signature at Helsinki from 17 to 18 March 1992 inclusive, and thereafter at United Nations Headquarters in New York until 18 September 1992, by States members of the Economic Commission for Europe, as well as States having consultative status with the Economic Commission for Europe pursuant to paragraph 8 of Economic and Social Council resolution 36 (IV) of 28 March 1947, and by regional economic integration organizations constituted by sovereign States members of the Economic Commission for Europe to which their member States have transferred competence in respect of matters governed by this Convention, including the competence to enter into treaties in respect of these matters.

Article 28

Depositary

The Secretary-General of the United Nations shall act as the Depositary of this Convention.

Article 29

Ratification, acceptance, approval and accession

1. This Convention shall be subject to ratification, acceptance or approval by the signatory States and regional economic integration organizations referred to in Article 27.
2. This Convention shall be open for accession by the States and organizations referred to in Article 27.
3. Any organization referred to in Article 27 which becomes Party to this Convention without any of its member States being a Party shall be bound by all the obligations under this Convention. In the case of such organizations, one or more of whose member States is a Party to this Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under this Convention concurrently.
4. In their instruments of ratification, acceptance, approval or accession, the regional economic integration organizations referred to in Article 27 shall declare the extent of their competence with respect to the matters governed by this Convention. These organizations shall also inform the Depositary of any substantial modification to the extent of their competence.

Article 30

Entry into force

1. This Convention shall enter into force on the ninetieth day after the date of deposit of the sixteenth instrument of ratification, acceptance, approval or accession.
2. For the purposes of paragraph 1 of this Article, any instrument deposited by an organization referred to in Article 27 shall not be counted as additional to those deposited by States members of such an organization.
3. For each state or organization referred to in Article 27 which ratifies, accepts or approves this Convention or accedes thereto after the deposit of the sixteenth instrument of ratification, acceptance, approval or accession, this

Convention shall enter into force on the ninetieth day after the date of deposit by such State or organization of its instrument of ratification, acceptance, approval or accession.

Article 31

Withdrawal

1. At any time after three years from the date on which this Convention has come into force with respect to a Party, that Party may withdraw from this Convention by giving written notification to the Depositary. Any such withdrawal shall take effect on the ninetieth day after the date of the receipt of the notification by the Depositary.
2. Any such withdrawal shall not affect the application of Article 4 to an activity in respect of which a notification has been made pursuant to Article 4, paragraph 1, or a request for discussions has been made pursuant to Article 4, paragraph 2.

Article 32

Authentic texts

The original of this Convention, of which the English, French and Russian texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

In witness whereof the undersigned, being duly authorized thereto, have signed this Convention.

Done at Helsinki, this seventeenth day of March one thousand nine hundred and ninety-two.

Annex I

Hazardous substances for the purposes of defining hazardous activities¹

Where a substance or mixture named in Part II also falls within one or more categories in Part I, the threshold quantity given in Part II shall be used.

For the identification of hazardous activities, Parties shall take into consideration the actual or anticipated hazardous properties and/or quantities of all hazardous substances present or of hazardous substances which it is reasonable to foresee may be generated during loss of control of an activity, including storage activities, within a hazardous activity.

Part I.

Categories of substances and mixtures not specifically named in Part II

| <i>Category in accordance with the United Nations Globally Harmonized System (GHS) of Classification and Labelling of Chemicals</i> | <i>Threshold quantity (metric tons)</i> |
|---|---|
| 1. Acute toxic, Category 1, all exposure routes ² | 20 |
| 2. Acute toxic: Category 2, all exposure routes ³ Category 3, inhalation exposure route ⁴ | 200 |
| 3. Specific Target Organ Toxicity (STOT) — Single Exposure (SE) STOT, Category 1 ⁵ | 200 |
| 4. Explosives — unstable explosives or explosives, where the substance, mixture or article falls under division 1.1, 1.2, 1.3, 1.5 or 1.6 of chapter 2.1.2 of the GHS criteria or substances or mixtures having explosive properties according to Test series 2 of Part I of the United Nations <i>Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria</i> (Manual of Tests and Criteria) and do not belong to the hazard classes Organic peroxides or Self-reactive substances and mixtures ^{6,7} | 50 |
| 5. Explosives, where the substance, mixture or article falls under division 1.4 of chapter 2.1.2 of the GHS ^{7,8} | 200 |
| 6. Flammable gases, Category 1 or 2 ⁹ | 50 |
| 7. Aerosols, ¹⁰ Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1 | 500 (net) |
| 8. Aerosols, ¹⁰ Category 1 or 2, not containing flammable gases Category 1 or 2 nor flammable liquids Category 1 ¹¹ | 50 000 (net) |
| 9. Oxidizing gases, category 1 ¹² | 200 |
| 10. Flammable liquids: Flammable liquids, Category 1, or Flammable liquids, Category 2 or 3, maintained at a temperature above their boiling point, ¹³ or Other liquids with a flash point $\leq 60^{\circ}\text{C}$, maintained at a temperature above their boiling point ¹⁴ | 50 |
| 11. Flammable liquids: Flammable liquids, Category 2 or 3, where particular processing conditions, such as high pressure or high temperature, may create industrial accident hazards, ¹⁵ or Other liquids with a flash point $\leq 60^{\circ}\text{C}$ where particular processing conditions, such as high pressure or high temperature, may create industrial accident hazards ¹⁴ | 200 |
| 12. Flammable liquids, Categories 2 or 3, not covered by 10 and 11 ¹⁶ | 50 000 |

Convention
on the Transboundary Effects of Industrial Accidents

| <i>Category in accordance with the United Nations Globally Harmonized System (GHS) of Classification and Labelling of Chemicals</i> | <i>Threshold quantity (metric tons)</i> |
|--|---|
| 13. Self-reactive substances and mixtures and organic peroxides: Self-reactive substances and mixtures, Type A or B, or Organic peroxides, Type A or B ¹⁷ | 50 |
| 14. Self-reactive substances and mixtures and organic peroxides: Self-reactive substances and mixtures, Type C, D, E or F, or Organic peroxides, Type C, D, E, or F ¹⁸ | 200 |
| 15. Pyrophoric liquids and solids, Category 1 | 200 |
| 16. Oxidizing liquids and solids, Category 1, 2 or 3 | 200 |
| 17. Hazardous to the aquatic environment, Category Acute 1 or Chronic 1 ¹⁹ | 200 |
| 18. Hazardous to the aquatic environment, Category Chronic 2 ²⁰ | 500 |
| 19. Substances and mixtures which react violently with water, such as acetyl chloride, titanium tetrachloride | 500 |
| 20. Substances and mixtures which in contact with water emit flammable gases, Category 1 ²¹ | 500 |
| 21. Substances and mixtures which in contact with water liberate toxic gas (substances and mixtures which in contact with water or damp air evolve gases classified for acute toxicity in category 1, 2 or 3, such as aluminium phosphide or phosphorus pentasulphide) | 200 |

Part II.
Named substances

| <i>Substance</i> | <i>Threshold quantity (metric tons)</i> |
|---|---|
| 1a. Ammonium nitrate ²² | 10 000 |
| 1b. Ammonium nitrate ²³ | 5 000 |
| 1c. Ammonium nitrate ²⁴ | 2 500 |
| 1d. Ammonium nitrate ²⁵ | 50 |
| 2a. Potassium nitrate ²⁶ | 10 000 |
| 2b. Potassium nitrate ²⁷ | 5 000 |
| 3. Arsenic pentoxide, arsenic (V) acid and/or salts | 2 |
| 4. Arsenic trioxide, arsenious (III) acid and/or salts | 0.1 |
| 5. Bromine | 100 |
| 6. Chlorine | 25 |
| 7. Nickel compounds in inhalable powder form: nickel monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide | 1 |
| 8. Ethyleneimine | 20 |
| 9. Fluorine | 20 |
| 10. Formaldehyde (concentration ≥ 90 %) | 50 |
| 11. Hydrogen | 50 |
| 12. Hydrogen chloride (liquefied gas) | 250 |
| 13. Lead alkyls | 50 |
| 14. Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas ²⁸ | 200 |
| 15. Acetylene | 50 |
| 16. Ethylene oxide | 50 |
| 17. Propylene oxide | 50 |
| 18. Methanol | 5 000 |
| 19. 4, 4'-Methylene bis (2-chloraniline) and/or salts, in powder form | 0.01 |
| 20. Methyl isocyanate | 0.15 |
| 21. Oxygen | 2 000 |
| 22. Toluene diisocyanate (2,4 -Toluene diisocyanate and 2,6 -Toluene diisocyanate) | 100 |
| 23. Carbonyl dichloride (phosgene) | 0.75 |
| 24. Arsine (arsenic trihydride) | 1 |
| 25. Phosphine (phosphorus trihydride) | 1 |
| 26. Sulphur dichloride | 1 |
| 27. Sulphur trioxide | 75 |
| 28. Polychlorodibenzofurans and polychlorodibenzodioxins (including tetrachlorodibenzodioxin (TCDD)), calculated in TCDD equivalent ²⁹ | 0.001 |

| <i>Substance</i> | <i>Threshold quantity (metric tons)</i> |
|---|---|
| 29. The following carcinogens or the mixtures containing the following carcinogens at concentrations above 5% by weight: 4-Aminobiphenyl and/or its salts, Benzotrichloride, Benzidine and/or salts, Bis (chloromethyl) ether, Chloromethyl methyl ether, 1,2-Dibromoethane, Diethyl sulphate, Dimethyl sulphate, Dimethylcarbamoyl chloride, 1,2-Dibromo-3-chloropropane, 1,2-Dimethylhydrazine, Dimethylnitrosamine, Hexamethylphosphorotriamide, Hydrazine, 2-Naphthylamine and/or salts, 4-Nitrodiphenyl, and 1,3 Propanesultone | 2 |
| 30. Petroleum products and alternative fuels: (a) Gasolines and naphthas; (b) Kerosenes (including jet fuels); (c) Gas oils (including diesel fuels, home heating oils and gas oil blending streams); (d) Heavy fuel oils; (e) Alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d) | 25 000 |
| 31. Anhydrous ammonia | 200 |
| 32. Boron trifluoride | 20 |
| 33. Hydrogen sulphide | 20 |
| 34. Piperidine | 200 |
| 35. Bis(2-dimethylaminoethyl) (methyl)amin | 200 |
| 36. 3-(2-Ethylhexyloxy)propylamin | 200 |
| 37. Mixtures of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing < than 5% active chlorine and not classified under any of the other hazard categories in Part 1 of annex I. ³⁰ | 500 |
| 38. Propylamine ³¹ | 2 000 |
| 39. Tert-butyl acrylate ³¹ | 500 |
| 40. 2-Methyl-3-butenenitrile ³¹ | 2 000 |
| 41. Tetrahydro-3,5-dimethyl-1,3,5,-thiadiazine-2-thione (dazomet) ³¹ | 200 |
| 42. Methyl acrylate ³¹ | 2 000 |
| 43. 3-Methylpyridine ³¹ | 2 000 |
| 44. Bromo-3-chloropropane ³¹ | 2 000 |

Notes

¹ Criteria according the United Nations Globally Harmonized System (GHS) of Classification and Labelling of Chemicals (ST/SG/AC.10/30/Rev.4). Parties should use these criteria when classifying substances or mixtures for the purposes of Part I of this annex, unless other legally binding criteria have been adopted in the national legislation. Mixtures shall be treated in the same way as the pure substance, provided they remain within concentration limits set according to their properties in accordance with the GHS unless a percentage composition or other description is specifically given.

² According to the criteria in chapters 3.1.2 and 3.1.3 of GHS.

³ According to the criteria in chapters 3.1.2 and 3.1.3 of GHS.

⁴ Substances that fall within acute toxic Category 3 via the oral route shall fall under entry 2 acute toxic in those cases where neither acute inhalation toxicity classification nor acute dermal toxicity classification can be derived, for example due to lack of conclusive inhalation and dermal toxicity data.

⁵ Substances that have produced significant toxicity in humans, or that, on the basis of evidence from studies in experimental animals can be presumed to have the potential to produce significant toxicity in humans following single exposure. Further guidance is given in figure 3.8.1. and table 3.8.1 of part 3 of GHS.

- ⁶ Testing for explosive properties of substances and mixtures is only necessary if the screening procedure according to appendix 6, part 3, of the Manual of Tests and Criteria identifies the substance or mixture as potentially having explosive properties.
- ⁷ The hazard class Explosives includes explosive articles. If the quantity of the explosive substance or mixture contained in the article is known, that quantity shall be considered for the purposes of this Convention. If the quantity of the explosive substance or mixture contained in the article is not known, then, for the purposes of this Convention, the whole article shall be treated as explosive.
- ⁸ If Explosives of division 1.4 are unpacked or repacked, they shall be assigned to the entry 4 (Explosive), unless the hazard is shown to still correspond to division 1.4, in accordance with GHS.
- ⁹ According to the criteria in chapter 2.2.2 of GHS.
- ¹⁰ Aerosols are classified according to the criteria in chapter 2.3 of GHS and the Manual of Tests and Criteria, Part III, section 31 referred to therein.
- ¹¹ In order to use this entry, it must be documented that the aerosol dispenser does not contain flammable gas Category 1 or 2 nor flammable liquid Category 1.
- ¹² According to the criteria in chapter 2.4.2 of GHS.
- ¹³ According to the criteria in chapter 2.6.2 of GHS.
- ¹⁴ Liquids with a flash point of more than 35°C may be regarded as non-flammable liquids for some regulatory purposes (e.g., transport) if negative results have been obtained in sustained combustibility test L.2, in part III, section 32 of the Manual of Tests and Criteria. This is, however, not valid under elevated conditions such as high temperature or pressure, and therefore such liquids are included in this entry.
- ¹⁵ According to the criteria in chapter 2.6.2 of GHS.
- ¹⁶ According to the criteria in chapter 2.6.2 of GHS.
- ¹⁷ According to the criteria in chapters 2.8.2 and 2.15.2.2 of GHS.
- ¹⁸ According to the criteria in chapters 2.8.2 and 2.15.2.2 of GHS.
- ¹⁹ According to the criteria in chapter 4.1.2 of GHS.
- ²⁰ According to the criteria in chapter 4.1.2 of GHS.
- ²¹ According to the criteria in chapter 2.12.2 of GHS.
- ²² Ammonium nitrate (10,000): fertilizers capable of self-sustaining decomposition.
This applies to ammonium nitrate-based compound/composite fertilizers (compound/composite fertilizers containing ammonium nitrate with phosphate and/or potash), which are capable of self-sustaining decomposition according to the Trough Test (see Manual of Tests and Criteria, part III, subsection 38.2), and in which the nitrogen content as a result of ammonium nitrate is:
- (a) Between 15.75% and 24.5% by weight (15.75% and 24.5% nitrogen content by weight as a result of ammonium nitrate correspond to 45% and 70% ammonium nitrate, respectively) and which either contain not more than 0.4% total combustible/organic materials or fulfil the requirements of an appropriate test of resistance to detonation (e.g., 4-inch-steel-tube test);
 - (b) 15.75% by weight or less and unrestricted combustible materials.
- ²³ Ammonium nitrate (5,000): fertilizer grade.
This applies to straight ammonium nitrate-based fertilizers and to ammonium nitrate-based compound/composite fertilizers in which the nitrogen content as a result of ammonium nitrate is:
- (a) More than 24.5% by weight, except for mixtures of straight ammonium nitrate-based fertilizers with dolomite, limestone and/or calcium carbonate with a purity of at least 90%;
 - (b) More than 15.75% by weight for mixtures of ammonium nitrate and ammonium sulphate;
 - (c) More than 28% (28% nitrogen content by weight as a result of ammonium nitrate corresponds to 80% ammonium nitrate) by weight for mixtures of straight ammonium nitrate-based fertilizers with dolomite, limestone and/or calcium carbonate with a purity of at least 90%;
- and which fulfil the requirements of an appropriate test of resistance to detonation (e.g., 4-inch-steel-tube test).
- ²⁴ Ammonium nitrate (2,500): technical grade.
This applies to:
- (a) Ammonium nitrate and mixtures of ammonium nitrate in which the nitrogen content as a result of ammonium nitrate is:
 - (i) Between 24.5% and 28% by weight and which contain not more than 0.4% combustible substances;
 - (ii) More than 28% by weight, and which contain not more than 0.2% combustible substances;

Convention

on the Transboundary Effects of Industrial Accidents

(b) Aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 80% by weight.

²⁵ Ammonium nitrate (50): “off-specs” material and fertilizers not fulfilling the requirements of an appropriate test of resistance to detonation (e.g., 4-inch-steel-tube test).

This applies to:

(a) Material rejected during the manufacturing process and to ammonium nitrate and mixtures of ammonium nitrate, straight ammonium nitrate-based fertilizers and ammonium nitrate-based compound/composite fertilizers referred to in notes 23 and 24 that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use because they no longer comply with the specifications in notes 23 and 24;

(b) Fertilizers referred to in note 22 (a) and note 23 which do not fulfil the requirements of an appropriate test of resistance to detonation (e.g., 4-inch-steel-tube test).

²⁶ Potassium nitrate (10,000): composite potassium nitrate-based fertilizers (in prilled/granular form) which have the same properties as pure potassium nitrate.

²⁷ Potassium nitrate (5,000): composite potassium nitrate-based fertilizers (in crystalline form) which have the same hazardous properties as pure potassium nitrate.

²⁸ Upgraded biogas: for the purpose of the implementation of the Convention, upgraded biogas may be classified under entry 14 of Part 2 of annex I where it has been processed in accordance with applicable standards for purified and upgraded biogas ensuring a quality equivalent to that of natural gas, including the content of methane, and which has a maximum of 1% oxygen.

²⁹ Polychlorodibenzofurans and polychlorodibenzodioxins.

The quantities of polychlorodibenzofurans and polychlorodibenzodioxins are calculated using the following World Health Organization (WHO) human and mammalian toxic equivalency factors (TEF) for dioxins and dioxin-like compounds as re-evaluated in 2005:

WHO 2005 TEF

| <i>Dioxins</i> | <i>TEF</i> | <i>Furans</i> | <i>TEF</i> |
|---------------------|------------|---------------------|------------|
| 2,3,7,8-TCDD | 1 | 2,3,7,8-TCDF | 0.1 |
| 1,2,3,7,8-PeCDD | 1 | 2,3,4,7,8-PeCDF | 0.3 |
| 1,2,3,4,7,8-HxCDD | 0.1 | 1,2,3,7,8-PeCDF | 0.03 |
| 1,2,3,6,7,8-HxCDD | 0.1 | 1,2,3,4,7,8-HxCDF | 0.1 |
| 1,2,3,7,8,9-HxCDD | 0.1 | 1,2,3,7,8,9-HxCDF | 0.1 |
| 1,2,3,4,6,7,8-HpCDD | 0.01 | 2,3,4,6,7,8-HxCDF | 0.1 |
| OCDD | 0.0003 | 1,2,3,7,8,9-HxCDF | 0.1 |
| | | 1,2,3,4,6,7,8-HpCDF | 0.01 |
| | | 1,2,3,4,7,8,9-HpCDF | 0.01 |
| | | OCDF | 0.0003 |

Abbreviations: Hx = hexa, Hp = hepta, O = octa, Pe = penta, T = tetra.

Reference: Martin Van den Berg and others, “The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds”, *Toxicological Sciences*, vol. 93, No. 2 (October 2006), pp. 223–241.

³⁰ Provided that the mixture in the absence of sodium hypochlorite would not be classified as aquatic acute, Category 1.

³¹ In cases where this dangerous substance falls within the category 10 flammable liquids or category 11 flammable liquids, for the purposes of the Convention the lowest qualifying quantities shall apply.

Annex II

Inquiry commission procedure pursuant to Articles 4 and 5

1. The requesting Party or Parties shall notify the secretariat that it or they is (are) submitting question(s) to an inquiry commission established in accordance with the provisions of this Annex. The notification shall state the subject matter of the inquiry. The secretariat shall immediately inform all Parties to the Convention of this submission.
2. The inquiry commission shall consist of three members. Both the requesting party and the other party to the inquiry procedure shall appoint a scientific or technical expert and the two experts so appointed shall designate by common agreement a third expert, who shall be the president of the inquiry commission. The latter shall not be a national of one of the parties to the inquiry procedure, nor have his or her usual place of residence in the territory of one of these parties, nor be employed by any of them, nor have dealt with the case in any other capacity.
3. If the president of the inquiry commission has not been designated within two months of the appointment of the second expert, the Executive Secretary of the Economic Commission for Europe shall, at the request of either party, designate the president within a further two-month period.
4. If one of the parties to the inquiry procedure does not appoint an expert within one month of its receipt of the notification by the secretariat, the other party may inform the Executive Secretary of the Economic Commission for Europe, who shall designate the president of the inquiry commission within a further two-month period. Upon designation, the president of the inquiry commission shall request the party which has not appointed an expert to do so within one month. If it fails to do so within that period, the president shall inform the Executive Secretary of the Economic Commission for Europe who shall make this appointment within a further two-month period.
5. The inquiry commission shall adopt its own rules of procedure.
6. The inquiry commission may take all appropriate measures in order to carry out its functions.
7. The parties to the inquiry procedure shall facilitate the work of the inquiry commission and in particular shall, using all means at their disposal:
 - (a) Provide the inquiry commission with all relevant documents, facilities and information;
 - (b) Enable the inquiry commission, where necessary, to call witnesses or experts and receive their evidence.
8. The parties and the experts shall protect the confidentiality of any information they receive in confidence during the work of the inquiry commission.
9. If one of the parties to the inquiry procedure does not appear before the inquiry commission or fails to present its case, the other party may request the inquiry commission to continue the proceedings and to complete its work. Absence of a party or failure of a party to present its case shall not constitute a bar to the continuation and completion of the work of the inquiry commission.
10. Unless the inquiry commission determines otherwise because of the particular circumstances of the matter, the expenses of the inquiry commission, including the remuneration of its members, shall be borne equally by the parties to the inquiry procedure. The inquiry commission shall keep a record of all its expenses and shall furnish a final statement thereof to the parties.
11. Any Party which has an interest of a factual nature in the subject-matter of the inquiry procedure and which may be affected by an opinion in the matter may intervene in the proceedings with the consent of the inquiry commission.
12. The decisions of the inquiry commission on matters of the procedure shall be taken by majority vote of its members. The final opinion of the inquiry commission shall reflect the view of the majority of its members and shall include any dissenting view.

13. The inquiry commission shall present its final opinion within two months of the date on which it was established, unless it finds it necessary to extend this time-limit for a period which should not exceed two months.

14. The final opinion of the inquiry commission shall be based on accepted scientific principles. The final opinion shall be transmitted by the inquiry commission to the parties to the inquiry procedure and to the secretariat.

Annex III

Procedures pursuant to Article 4

1. A Party of origin may request consultations with another Party, in accordance with paragraphs 2 to 5 of this Annex, in order to determine whether that Party is an affected Party.
2. For a proposed or existing hazardous activity, the Party of origin shall, for the purposes of ensuring adequate and effective consultations, provide for the notification at appropriate levels of any Party that it considers may be an affected Party as early as possible and no later than when informing its own public about that proposed or existing activity. For existing hazardous activities such notification shall be provided no later than two years after the entry into force of this Convention for a Party of origin.
3. The notification shall contain, inter alia:
 - (a) Information on the hazardous activity, including any available information or report, such as information produced in accordance with Article 6, on its possible transboundary effects in the event of an industrial accident;
 - (b) An indication of a reasonable time within which a response under paragraph 4 of this Annex is required, taking into account the nature of the activity,and may include the information set out in paragraph 6 of this Annex.
4. The notified Parties shall respond to the Party of origin within the time specified in the notification, acknowledging receipt of the notification and indicating whether they intend to enter into consultation.
5. If a notified Party indicates that it does not intend to enter into consultation, or if it does not respond within the time specified in the notification, the provisions set down in the following paragraphs of this Annex shall not apply. In such circumstances, the right of a Party of origin to determine whether to carry out an assessment and analysis on the basis of its national law and practice is not prejudiced.
6. Upon receipt of a response from a notified Party indicating its desire to enter into consultation, the Party of origin shall, if it has not already done so, provide to the notified Party:
 - (a) Relevant information regarding the time schedule for analysis, including an indication of the time schedule for the transmittal of comments;
 - (b) Relevant information on the hazardous activity and its transboundary effects in the event of an industrial accident;
 - (c) The opportunity to participate in evaluations of the information or any report demonstrating possible transboundary effects.
7. An affected Party shall, at the request of the Party of origin, provide the latter with reasonably obtainable information relating to the area under the jurisdiction of the affected Party capable of being affected, where such information is necessary for the preparation of the assessment and analysis and measures. The information shall be furnished promptly and, as appropriate, through a joint body where one exists.
8. The Party of origin shall furnish the affected Party directly, as appropriate, or, where one exists, through a joint body with the analysis and evaluation documentation as described in Annex V, paragraphs 1 and 2.
9. The Parties concerned shall inform the public in areas reasonably capable of being affected by the hazardous activity and shall arrange for the distribution of the analysis and evaluation documentation to it and to authorities in the relevant areas. The Parties shall ensure them an opportunity for making comments on, or objections to, the hazardous activity and shall arrange for their views to be submitted to the competent authority of the Party of origin, either directly to that authority or, where appropriate, through the Party of origin, within a reasonable time.

10. The Party of origin shall, after completion of the analysis and evaluation documentation, enter without undue delay into consultations with the affected Party concerning, inter alia, the transboundary effects of the hazardous activity in the event of an industrial accident, and measures to reduce or eliminate its effects. The consultations may relate to:

- (a) Possible alternatives to the hazardous activity, including the no-action alternative, and possible measures to mitigate transboundary effects at the expense of the Party of origin;
- (b) Other forms of possible mutual assistance for reducing any transboundary effects;
- (c) Any other appropriate matters.

The Parties concerned shall, on the commencement of such consultations, agree on a reasonable time-frame for the duration of the consultation period. Any such consultations may be conducted through an appropriate joint body, where one exists.

11. The Parties concerned shall ensure that due account is taken of the analysis and evaluation, as well as of the comments received pursuant to paragraph 9 of this Annex and of the outcome of the consultations referred to in paragraph 10 of this Annex.

12. The Party of origin shall notify the affected Parties of any decision on the activity, along with the reasons and considerations on which it was based.

13. If, after additional and relevant information concerning the transboundary effects of a hazardous activity and which was not available at the time consultations were held with respect to that activity, becomes available to a Party concerned, that Party shall immediately inform the other Party or Parties concerned. If one of the Parties concerned so requests, renewed consultations shall be held.

Annex IV

Preventive measures pursuant to Article 6

The following measures may be carried out, depending on national laws and practices, by Parties, competent authorities, operators, or by joint efforts:

1. The setting of general or specific safety objectives;
2. The adoption of legislative provisions or guidelines concerning safety measures and safety standards;
3. The identification of those hazardous activities which require special preventive measures, which may include a licensing or authorization system;
4. The evaluation of risk analyses or of safety studies for hazardous activities and an action plan for the implementation of necessary measures;
5. The provision to the competent authorities of the information needed to assess risks;
6. The application of the most appropriate technology in order to prevent industrial accidents and protect human beings and the environment;
7. The undertaking, in order to prevent industrial accidents, of the appropriate education and training of all persons engaged in hazardous activities on-site under both normal and abnormal conditions;
8. The establishment of internal managerial structures and practices designed to implement and maintain safety regulations effectively;
9. The monitoring and auditing of hazardous activities and the carrying out of inspections.

Annex V

Analysis and evaluation

1. The analysis and evaluation of the hazardous activity should be performed with a scope and to a depth which vary depending on the purpose for which they are carried out.
2. The following table illustrates, for the purposes of the related Articles, matters which should be considered in the analysis and evaluation, for the purposes listed:

| <i>Purpose of analysis</i> | <i>Matters to be considered</i> |
|---|---|
| Emergency planning under Article 8 | <ol style="list-style-type: none">(1) The quantities and properties of hazardous substances on the site;(2) Brief descriptive scenarios of a representative sample of industrial accidents possibly arising from the hazardous activity, including an indication of the likelihood of each;(3) For each scenario:<ol style="list-style-type: none">(a) The approximate quantity of a release;(b) The extent and severity of the resulting consequences both for people and for the non-human environment in favourable and unfavourable conditions, including the extent of resulting hazard zones;(c) The time-scale within which the industrial accident could develop from the initiating event;(d) Any action which could be taken to minimize the likelihood of escalation.(4) The size and distribution of the population in the vicinity, including any large concentrations of people potentially in the hazard zones;(5) The age, mobility and susceptibility of that population. |
| Decision-making on siting under Article 7 | <p>In addition to items (1) to (5) above:</p> <ol style="list-style-type: none">(6) The severity of the harm inflicted on people and the environment, depending on the nature and circumstances of the release;(7) The distance from the location of the hazardous activity at which harmful effects on people and the environment may reasonably occur in the event of an industrial accident;(8) The same information not only for the present situation but also for planned or reasonably foreseeable future developments. |
| Information to the public under Article 9 | <p>In addition to items (1) to (4) above:</p> <ol style="list-style-type: none">(9) The people who may be affected by an industrial accident. |

Purpose of analysis

Matters to be considered

Preventive measures
under Article 6

In addition to items (4) to (9) above, more detailed versions of the descriptions and assessments set out in items (1) to (3) will be needed for preventive measures. In addition to those descriptions and assessments, the following matters should also be covered:

- (10) The conditions and quantities in which hazardous materials are handled;
 - (11) A list of the scenarios for the types of industrial accidents with serious effects, to include examples covering the full range of incident size and the possibility of effects from adjacent activities;
 - (12) For each scenario, a description of the events which could initiate an industrial accident and the steps whereby it could escalate;
 - (13) An assessment, at least in general terms, of the likelihood of each step occurring, taking into account the arrangements in (14);
 - (14) A description of the preventive measures in terms of both equipment and procedures designed to minimize the likelihood of each step occurring;
 - (15) An assessment of the effects that deviations from normal operating conditions could have, and the consequent arrangements for safe shut-down of the hazardous activity or any part thereof in an emergency, and of the need for staff training to ensure that potentially serious deviations are recognized at an early stage and appropriate action taken;
 - (16) An assessment of the extent to which modifications, repair work and maintenance work on the hazardous activity could place the control measures at risk, and the consequent arrangements to ensure that control is maintained.
-

Annex VI

Decision-making on siting pursuant to Article 7

The following illustrates the matters which should be considered pursuant to Article 7:

1. The results of risk analysis and evaluation, including an evaluation pursuant to Annex V of the physical characteristics of the area in which the hazardous activity is being planned;
2. The results of consultations and public participation processes;
3. An analysis of the increase or decrease of the risk caused by any development in the territory of the affected Party in relation to an existing hazardous activity in the territory of the Party of origin;
4. The evaluation of the environmental risks, including any transboundary effects;
5. An evaluation of the new hazardous activities which could be a source of risk;
6. A consideration of the siting of new, and significant modifications to existing hazardous activities at a safe distance from existing centres of population, as well as the establishment of a safety area around hazardous activities, within such areas, developments which would increase the populations at risk, or otherwise increase the severity of the risk, should be closely examined.

Annex VII

Emergency preparedness measures pursuant to Article 8

1. All contingency plans, both on- and off-site, should be coordinated to provide a comprehensive and effective response to industrial accidents.
2. The contingency plans should include the actions necessary to localize emergencies and to prevent or minimize their transboundary effects. They should also include arrangements for warning people and, where appropriate, arrangements for their evacuation, other protective or rescue actions and health services.
3. Contingency plans should give on-site personnel, people who might be affected off site and rescue forces, details of technical and organizational procedures which are appropriate for response in the event of an industrial accident capable of having transboundary effects and to prevent and minimize effects on people and the environment, both on and off site.
4. Examples of matters which could be covered by on-site contingency plans include:
 - (a) Organizational roles and responsibilities on site for dealing with an emergency;
 - (b) A description of the action which should be taken in the event of an industrial accident, or an imminent threat thereof, in order to control the condition or event, or details of where such a description can be found;
 - (c) A description of the equipment and resources available;
 - (d) Arrangements for providing early warning of industrial accidents to the public authority responsible for the off-site emergency response, including the type of information which should be included in an initial warning and the arrangements for providing more detailed information as it becomes available;
 - (e) Arrangements for training personnel in the duties they will be expected to perform.
5. Examples of matters which could be covered by off-site contingency plans include:
 - (a) Organizational roles and responsibilities off-site for dealing with an emergency, including how integration with on-site plans is to be achieved;
 - (b) Methods and procedures to be followed by emergency and medical personnel;
 - (c) Methods for rapidly determining the affected area;
 - (d) Arrangements for ensuring that prompt industrial accident notification is made to affected or potentially affected Parties and that that liaison is maintained subsequently;
 - (e) Identification of resources necessary to implement the plan and the arrangements for coordination;
 - (f) Arrangements for providing information to the public including, where appropriate, the arrangements for reinforcing and repeating the information provided to the public pursuant to Article 9;
 - (g) Arrangements for training and exercises.
6. Contingency plans could include the measures for: treatment, collection, clean-up, storage, removal and safe disposal of hazardous substances and contaminated material, and restoration.

Annex VIII

Information to the public pursuant to Article 9

1. The name of the company, address of the hazardous activity and identification by position held of the person giving the information;
2. An explanation in simple terms of the hazardous activity, including the risks;
3. The common names or the generic names or the general danger classification of the substances and preparations which are involved in the hazardous activity, with an indication of their principal dangerous characteristics;
4. General information resulting from an environmental impact assessment, if available and relevant;
5. The general information relating to the nature of an industrial accident that could possibly occur in the hazardous activity, including its potential effects on the population and the environment;
6. Adequate information on how the affected population will be warned and kept informed in the event of an industrial accident;
7. Adequate information on the actions the affected population should take and on the behaviour they should adopt in the event of an industrial accident;
8. Adequate information on arrangements made regarding the hazardous activity, including liaison with the emergency services, to deal with industrial accidents, to reduce the severity of the industrial accidents and to mitigate their effects;
9. General information on the emergency services' off-site contingency plan, drawn up to cope with any off-site effects, including the transboundary effects of an industrial accident;
10. General information on special requirements and conditions to which the hazardous activity is subject according to the relevant national regulations and/or administrative provisions, including licensing or authorization systems;
11. Details of where further relevant information can be obtained.

Annex IX

Industrial accident notification systems pursuant to Article 10

1. The industrial accident notification systems shall enable the speediest possible transmission of data and forecasts according to previously determined codes using compatible data-transmission and data-treatment systems for emergency warning and response, and for measures to minimize and contain the consequences of transboundary effects, taking account of different needs at different levels.
2. The industrial accident notification shall include the following:
 - (a) The type and magnitude of the industrial accident, the hazardous substances involved (if known), and the severity of its possible effects;
 - (b) The time of occurrence and exact location of the accident;
 - (c) Such other available information as necessary for an efficient response to the industrial accident.
3. The industrial accident notification shall be supplemented at appropriate intervals, or whenever required, by further relevant information on the development of the situation concerning transboundary effects.
4. Regular tests and reviews of the effectiveness of the industrial accident notification systems shall be undertaken, including the regular training of the personnel involved. Where appropriate, such tests, reviews and training shall be performed jointly.

Annex X

Mutual assistance pursuant to Article 12

1. The overall direction, control, coordination and supervision of the assistance is the responsibility of the requesting Party. The personnel involved in the assisting operation shall act in accordance with the relevant laws of the requesting Party. The appropriate authorities of the requesting Party shall cooperate with the authority designated by the assisting Party, pursuant to Article 17, as being in charge of the immediate operational supervision of the personnel and the equipment provided by the assisting Party.
2. The requesting Party shall, to the extent of its capabilities, provide local facilities and services for the proper and effective administration of the assistance, and shall ensure the protection of personnel, equipment and materials brought into its territory by, or on behalf of, the assisting Party for such a purpose.
3. Unless otherwise agreed by the Parties concerned, assistance shall be provided at the expense of the requesting Party. The assisting Party may at any time waive wholly or partly the reimbursement of costs.
4. The requesting Party shall use its best efforts to afford to the assisting Party and persons acting on its behalf the privileges, immunities or facilities necessary for the expeditious performance of their assistance functions. The requesting Party shall not be required to apply this provision to its own nationals or permanent residents or to afford them the privileges and immunities referred to above.
5. A Party shall, at the request of the requesting or assisting Party, endeavour to facilitate the transit through its territory of duly notified personnel, equipment and property involved in the assistance to and from the requesting Party.
6. The requesting Party shall facilitate the entry into, stay in and departure from its national territory of duly notified personnel and of equipment and property involved in the assistance.
7. With regard to acts resulting directly from the assistance provided, the requesting Party shall, in respect of the death of or injury to persons, damage to or loss of property, or damage to the environment caused within its territory in the course of the provision of the assistance requested, hold harmless and indemnify the assisting Party or persons acting on its behalf and compensate them for death or injury suffered by them and for loss of or damage to equipment or other property involved in the assistance. The requesting Party shall be responsible for dealing with claims brought by third parties against the assisting Party or persons acting on its behalf.
8. The Parties concerned shall cooperate closely in order to facilitate the settlement of legal proceedings and claims which could result from assistance operations.
9. Any Party may request assistance relating to the medical treatment or the temporary relocation in the territory of another Party of persons involved in an accident.
10. The affected or requesting Party may at any time, after appropriate consultations and by notification, request the termination of assistance received or provided under this Convention. Once such a request has been made, the Parties concerned shall consult one another with a view to making arrangements for the proper termination of the assistance.

Annex XI

Exchange of information pursuant to Article 15

Information shall include the following elements, which can also be the subject of multilateral and bilateral cooperation:

- (a) Legislative and administrative measures, policies, objectives and priorities for prevention, preparedness and response, scientific activities and technical measures to reduce the risk of industrial accidents from hazardous activities, including the mitigation of transboundary effects;
- (b) Measures and contingency plans at the appropriate level affecting other Parties;
- (c) Programmes for monitoring, planning, research and development, including their implementation and surveillance;
- (d) Measures taken regarding prevention of, preparedness for and response to industrial accidents;
- (e) Experience with industrial accidents and cooperation in response to industrial accidents with transboundary effects;
- (f) The development and application of the best available technologies for improved environmental protection and safety;
- (g) Emergency preparedness and response;
- (h) Methods used for the prediction of risks, including criteria for the monitoring and assessment of transboundary effects.

Annex XII

Tasks for mutual assistance pursuant to Article 18, paragraph 4

1. *Information and data collection and dissemination:*

(a) Establishment and operation of an industrial accident notification system that can provide information on industrial accidents and on experts, in order to involve the experts as rapidly as possible in providing assistance;

(b) Establishment and operation of a data bank for the reception, processing and distribution of necessary information on industrial accidents, including their effects, and also on measures applied and their effectiveness;

(c) Elaboration and maintenance of a list of hazardous substances, including their relevant characteristics, and of information on how to deal with those in the event of an industrial accident;

(d) Establishment and maintenance of a register of experts to provide consultative and other kinds of assistance regarding preventive, preparedness and response measures, including restoration measures;

(e) Maintenance of a list of hazardous activities;

(f) Production and maintenance of a list of hazardous substances covered by the provisions of Annex I, Part I.

2. *Research, training and methodologies:*

(a) Development and provision of models based on experience from industrial accidents, and scenarios for preventive, preparedness and response measures;

(b) Promotion of education and training, organization of international symposia and promotion of cooperation in research and development.

3. *Technical assistance:*

(a) Fulfilment of advisory functions aimed at strengthening the ability to apply preventive, preparedness and response measures;

(b) Undertaking, at the request of a Party, of inspections of its hazardous activities and the provision of assistance in organizing its national inspections according to the requirements of this Convention.

4. *Assistance in the case of an emergency:* Provision, at the request of a Party, of assistance by, inter alia, sending experts to the site of an industrial accident to provide consultative and other kinds of assistance in response to the industrial accident.

Annex XIII

Arbitration

1. The claimant Party or Parties shall notify the secretariat that the Parties have agreed to submit the dispute to arbitration pursuant to Article 21, paragraph 2 of this Convention. The notification shall state the subject-matter of arbitration and include, in particular, the Articles of this Convention, the interpretation or application of which is at issue. The secretariat shall forward the information received to all Parties to this Convention.
2. The arbitral tribunal shall consist of three members. Both the claimant Party or Parties and the other Party or Parties to the dispute shall appoint an arbitrator, and the two arbitrators so appointed shall designate by common agreement the third arbitrator, who shall be the president of the arbitral tribunal. The latter shall not be a national of one of the parties to the dispute, nor have his or her usual place of residence in the territory of one of these parties, nor be employed by any of them, nor have dealt with the case in any other capacity.
3. If the president of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the Executive Secretary of the Economic Commission for Europe shall, at the request of either party to the dispute, designate the president within a further two-month period.
4. If one of the parties to the dispute does not appoint an arbitrator within two months of the receipt of the request, the other party may so inform the Executive Secretary of the Economic Commission for Europe, who shall designate the president of the arbitral tribunal within a further two-month period. Upon designation, the president of the arbitral tribunal shall request the party which has not appointed an arbitrator to do so within two months. If it fails to do so within that period, the president shall inform the Executive Secretary of the Economic Commission for Europe, who shall make this appointment within a further two-month period.
5. The arbitral tribunal shall render its decision in accordance with international law and in accordance with the provisions of this Convention.
6. Any arbitral tribunal constituted under the provisions set out herein shall draw up its own rules of procedure.
7. The decisions of the arbitral tribunal, both on procedure and on substance, shall be taken by majority vote of its members.
8. The tribunal may take all appropriate measures to establish the facts.
9. The parties to the dispute shall facilitate the work of the arbitral tribunal and, in particular shall, using all means at their disposal:
 - (a) Provide the tribunal with all relevant documents, facilities and information;
 - (b) Enable the tribunal, where necessary, to call witnesses or experts and receive their evidence.
10. The parties to the dispute and the arbitrators shall protect the confidentiality of any information they receive in confidence during the proceedings of the arbitral tribunal.
11. The arbitral tribunal may, at the request of one of the parties, recommend interim measures of protection.
12. If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to render its final decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings.
13. The arbitral tribunal may hear and determine counter-claims arising directly out of the subject-matter of the dispute.
14. Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the expenses of the tribunal, including the remuneration of its members, shall be borne equally by the parties to the dispute.

The tribunal shall keep a record of all its expenses and shall furnish a final statement thereof to the parties to the dispute.

15. Any Party to this Convention which has an interest of a legal nature in the subject-matter of the dispute and which may be affected by a decision in the case, may intervene in the proceedings with the consent of the tribunal.

16. The arbitral tribunal shall render its award within five months of the date on which it is established unless it finds it necessary to extend the time-limit for a period which should not exceed five months.

17. The award of the arbitral tribunal shall be accompanied by a statement of reasons. It shall be final and binding upon all parties to the dispute. The award will be transmitted by the arbitral tribunal to the parties to the dispute and to the secretariat. The secretariat will forward the information received to all Parties to this Convention.

18. Any dispute which may arise between the parties concerning the interpretation or execution of the award may be submitted by either party to the arbitral tribunal which made the award or, if the latter cannot be seized thereof, to another tribunal constituted for this purpose in the same manner as the first.