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**ECONOMIC COMMISSION FOR EUROPE**

**CONFERENCE OF THE PARTIES  
TO THE CONVENTION ON THE TRANSBOUNDARY  
EFFECTS OF INDUSTRIAL ACCIDENTS**

First meeting, 22-24 November 2000  
(Item 3 (a) of the provisional agenda)

**DRAFT DECISION**

**ON THE REPORTING OF PAST INDUSTRIAL ACCIDENTS**

**The Conference of the Parties,**

Recalling the provisions of annex XII, paragraphs 1 (b) and 2 (a), to the UN/ECE Convention on the Transboundary Effects of Industrial Accidents,

Acknowledging that the analysis of past industrial accidents and their causes may contribute to preventing similar accidents from happening in the future,

Recognizing the need to develop effective scenarios for prevention, preparedness and response measures based on experience from past industrial accidents,

1. **Establishes** the **UN/ECE Past Industrial Accident Reporting System** for the purpose of receiving, processing and distributing the necessary information on past industrial accidents having occurred in the UN/ECE member countries;
2. **Invites** all Parties to the Convention and other UN/ECE member countries to report past industrial accidents using the **UN/ECE Past Industrial Accident Reporting System**;
3. **Decides** that reporting past industrial accidents with transboundary effects shall be mandatory for all Parties to the Convention;
4. **Welcomes** the proposal of the European Commission to make available and operate the **UN/ECE Past Industrial Accident Reporting System** within the framework of its existing **EU-Major Accident Reporting System (MARS)** and accepts it;
5. **Adopts** the terms of reference 1/ as contained in the annex to this draft decision for the cooperation between the United Nations Economic Commission for Europe and the European Commission's Directorate General - Joint Research Centre;
6. **Decides** to periodically review the process of reporting past industrial accidents as well as the conclusions drawn and lessons learnt from past accidents, and make this information available to all UN/ECE member countries.

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1/ The draft terms of reference are expected to be approved by the Committee of Competent Authorities (CCA) responsible for the implementation of Directive 96/82/EC („Seveso II Directive“) at its 4<sup>th</sup> meeting on 27-29 September 2000 in Marseilles, France.

Annex

**DRAFT TERMS OF REFERENCE**

FOR THE COOPERATION BETWEEN THE

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UN/ECE)  
AND THE  
EUROPEAN COMMISSION'S DIRECTORATE GENERAL - JOINT RESEARCH  
CENTRE (DG-JRC)

ON THE ESTABLISHMENT AND OPERATION OF  
THE UN/ECE PAST INDUSTRIAL ACCIDENT REPORTING SYSTEM

Given that these draft terms of reference refer to the accident reporting under the European Community's „Seveso II Directive“ and the UN/ECE Convention on the Transboundary Effects of Industrial Accidents, they are subject to approval by the Committee of Competent Authorities (CCA) responsible for the implementation of the „Seveso II Directive“ at its 4<sup>th</sup> meeting on 27-29 September 2000 in Marseilles, France, and to adoption by the Conference of the Parties to the Convention at its 1<sup>st</sup> meeting on 22-24 November 2000 in Brussels, Belgium.

**Preamble**

1. These draft terms of reference define the cooperation between the United Nations Economic Commission for Europe (UN/ECE) and the European Commission's Directorate General - Joint Research Centre (DG-JRC) on establishing and operating *the UN/ECE Past Industrial Accident Reporting System* in the context of the UN/ECE Convention on the Transboundary Effects of Industrial Accidents. The underlying basis for this cooperation is the willingness to openly exchange accident information between all UN/ECE member countries.
2. The UN/ECE is represented by the Convention's secretariat (UN/ECE secretariat).
3. The DG-JRC is represented by the Major Accident Hazards Bureau (MAHB).
4. The UN/ECE member countries are strongly invited to report past industrial accidents that have occurred on their territory as specified in this document, and thus actively support the *UN/ECE Past Industrial Accident Reporting System*.

**General provisions**

5. The UN/ECE secretariat shall facilitate the successful implementation of the UN/ECE Past Industrial Accidents Reporting System by providing the services specified in this document.

6. MAHB shall (a) develop and provide to all UN/ECE member countries a software tool capable of registering and evaluating past industrial accidents reported within the framework of the Convention, and (b) operate the resulting UN/ECE Past Industrial Accidents Reporting System.

### **Specific provisions**

7. The UN/ECE secretariat will ask each UN/ECE member country to nominate a **contact point for accident reporting** (name of person, affiliation, postal address, telephone number, E-mail address) and inform MAHB of the nominations and of any subsequent changes in contact details. The contact point shall be responsible for sending accident report files to the designated person at MAHB (see para. 19).

8. MAHB shall develop and provide the UN/ECE member countries with the new electronic version of its Major Accident Reporting System (MARS), the "**MARS 4.0 software**". This software will consist of one central database operated at MAHB and locally distributed databases operated in the UN/ECE member countries. The MARS 4.0 software will be made available on CD-ROM to UN/ECE member countries by the MAHB through the UN/ECE secretariat.

9. To distinguish the reporting to MARS 4.0 by EU Member States under the "Seveso II Directive" (*EU-Major Accident Reporting System*) from the reporting to MARS 4.0 by UN/ECE member countries (*UN/ECE Past Industrial Accident Reporting System*), the MARS 4.0 software will include a limited number of additional data fields, e.g. for the addition of the ISO country name and for the characterization of transport accidents (which are not formally covered by the "Seveso II Directive").

10. To ensure consistency between existing and new data, 1/ the "**criteria**" for reporting past industrial accidents should be the ones in Annex VI to the 'Seveso II Directive' (see appendix I to these draft terms of reference). New events can be reported by UN/ECE member countries under "fulfilling mandatory Seveso II criteria" (as stated in Annex VI, part I), under "fulfilling voluntary Seveso II criteria" (as stated in Annex VI, part II), or under "fulfilling other criteria" (e.g. transport accidents, or other accidents that do not fulfil the reporting criteria but which are regarded as being of particular interest for preventing major accidents and limiting their consequences).

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1/ "Existing" events already reported by the EU Member States (using MARS 3.0 software) are currently subdivided into accidents reported under the "Seveso I Directive", under the "Seveso II Directive" and under "other". "New" events will be reported by the EU Member States following the procedure described in paragraph 10, also using the MARS 4.0 software.

11. UN/ECE member countries should send accident reports to MARS 4.0 using electronic format (either E-mail or diskettes). The structure of the MARS "Report Profile" and the MARS "Short Report" are shown in paper format in appendix II to these draft terms of reference 2/. MAHB will make no provisions to be able to process reports submitted in paper copy.

12. Accident reports to be sent to MAHB under the *UN/ECE Past Industrial Accident Reporting System* shall be written in English 3/. Reports established in Russian shall be sent to the UN/ECE secretariat, which will facilitate their translation into English 4/ and send them to MAHB for insertion in the database.

13. UN/ECE member countries shall endeavour to prepare **high-quality accident reports**. If the information reported is inconsistent or unclear, MAHB can request further information and clarification from the reporting country through the UN/ECE secretariat and modify the information in the original reports received. UN/ECE member countries' reporting authorities can request modification of their reports in the database if they do not agree with the MAHB assessment. If there are continuing concerns about the quality of a report, MAHB will consider keeping reports out of the database in order to maintain the quality of the database.

14. MAHB will **distribute a complete set of all accident reports** (and/or updates, as appropriate) in electronic format to all UN/ECE member countries in the course of the meetings of the Conference of the Parties 5/. MAHB will distribute there all information on accidents received from UN/ECE member countries reported under "fulfilling Seveso II mandatory criteria", "fulfilling Seveso II voluntary criteria" and under "fulfilling other criteria". Moreover, in the course of meetings of the Conference of the Parties, MAHB will give a **presentation on general trends** in the accidents reported by the UN/ECE member countries. To balance the exchange of information between EU Member States and other UN/ECE member countries, this distribution will start as soon as accidents from the latter countries begin to be reported to MAHB in the MARS 4.0 electronic format.

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2/ The reporting form for the MARS 4.0 software shall be in English and Russian only. The EU and UN/ECE logos will jointly appear on all electronic forms.

3/ This does not affect the existing arrangements with EU Member States concerning languages for reporting accidents, as required by Seveso II.

4/ The delegation of Poland, at the third meeting of the open-ended group, established by the Signatories to prepare the first meeting of the Conference of the Parties (Rome, 8-9 June 2000), expressed the willingness of its country to take on the task of translating accident reports into English.

5/ The data distributed by MAHB will be in English only. If there is a wish to distribute or publish data also in Russian, the UN/ECE secretariat will facilitate the relevant translations.

15. At any time, the UN/ECE secretariat can request MAHB to perform specific data analyses of the events reported. For such tasks, the UN/ECE secretariat will agree with the MAHB on the financial aspects on a case-by-case basis.

16. MAHB reserves the right to use the accidents data reported under the *UN/ECE Past Industrial Accident Reporting System* for any other data analysis projects it might be interested in. In this case, MAHB will inform the UN/ECE secretariat of its intentions.

### **Constitution**

17. The cooperation of UN/ECE with DG-JRC in the development and operation of an *UN/ECE Past Industrial Accident Reporting System* is formally constituted from the day of signature of the draft terms of reference. The *UN/ECE Past Industrial Accident Reporting System* is practically constituted from the day of distribution of the final version of MARS 4.0 to the UN/ECE member countries, after which they should start reporting accidents.

### **Reporting**

18. MAHB shall report to the UN/ECE secretariat under the above-described conditions.

19. The contact details of the two entities responsible for this activity are:

*for the UN/ECE secretariat:*

Mr. Sergiusz Ludwiczak  
Secretary to the Convention on the Transboundary  
Effects of Industrial Accidents  
United Nations Economic Commission for Europe  
Environment and Human Settlements Division  
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*for the MAHB:*

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European Commission, DG-JRC-MAHB  
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E-mail: [christian.kirchsteiger@jrc.it](mailto:christian.kirchsteiger@jrc.it)

**Duration**

20. The initial duration of this cooperation, starting from the date of signature of these draft terms of reference, will be limited to the end of the current EU Research Framework Programme (31 December 2002).

21. In a sufficient period of time prior to the end of the initial duration of the cooperation, the functioning of the "*UN/ECE Past Industrial Accident Reporting System*" should be reviewed by a "Review Group" consisting of interested UN/ECE member countries. Following this review, the cooperation can either expire or be continued on the same or new terms of reference, as appropriate.

**Costs**

22. MAHB will develop the *UN/ECE Past Industrial Accident Reporting System* at no cost to the UN/ECE secretariat. If the operation of the *UN/ECE Past Industrial Accident Reporting System* involves costs for MAHB which are not covered by its budget, a revision of these draft terms of reference will be discussed.

Done at \_\_\_\_\_ on \_\_\_\_\_

**For the UN/ECE:**

**For the DG-JRC:**

Mr. Kaj Barlund  
Director  
United Nations  
Economic Commission for Europe  
Environment and Human Settlements  
Division

Dr. David R. Wilkinson  
Director  
European Commission  
DG-JRC  
Institute for Systems Informatics  
and Safety

## **Appendix I**

### *ANNEX VI to Directive 96/82/EC ("Seveso II Directive")*

#### **CRITERIA FOR THE NOTIFICATION OF AN ACCIDENT TO THE COMMISSION AS PROVIDED FOR IN ARTICLE 15 (1) [OF THE DIRECTIVE]**

I. Any accident covered by paragraph 1 or having at least one of the consequences described in paragraphs 2, 3, 4 and 5 must be notified to the Commission.

##### **1. Substances involved**

Any fire or explosion or accidental discharge of a dangerous substance involving a quantity of at least 5% of the qualifying quantity laid down in column 3 of Annex I [to the Directive].

##### **2. Injury to persons and damage to real estate**

An accident directly involving a dangerous substance and giving rise to one of the following events:

- a death,
- six persons injured within the establishment and hospitalized for at least 24 hours,
- one person outside the establishment hospitalized for at least 24 hours,
- dwelling(s) outside the establishment damaged and unusable as a result of the accident,
- the evacuation or confinement of persons for more than 2 hours (persons x hours): the value is at least 500,
- the interruption of drinking water, electricity, gas or telephone services for more than 2 hours (persons x hours): the value is at least 1 000.

##### **3. Immediate damage to the environment**

*permanent or long-term damage to terrestrial habitats:*

- 0.5 ha or more of a habitat of environmental or conservation importance protected by legislation,
  - 10 or more hectares of more widespread habitat, including agricultural land,
- significant or long-term damage to freshwater and marine habitats <sup>1/</sup>*

- 10 km or more of river or canal,
- 1 ha or more of a lake or pond,
- 2 ha or more of delta,
- 2 ha or more of a coastline or open sea,

*significant damage to an aquifer or underground water <sup>1/</sup>*

- 1 ha or more.

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<sup>1/</sup> In assessing damage, reference could be made where appropriate to Directives 75/440/EEC, 76/464/EEC and Directives adopted for its application in relation to certain substances, namely, Directives 76/160/EEC, 78/659/EEC, 79/923/EEC, or to the Lethal Concentration (LC) for 50 % of the species representative of the environment affected as defined by Directive 92/32/EEC for the criterion 'dangerous for the environment'.



**4. Damage to property**

damage to property in the establishment: at least ECU 2 million,

damage to property outside the establishment: at least ECU 0,5 million.

**5. Cross-border damage**

Any accident directly involving a dangerous substance giving rise to effects outside the territory of the Member State concerned.

II. Accidents or 'near misses' which Member States regard as being of particular technical interest for preventing major accidents and limiting their consequences and which do not meet the quantitative criteria above should be notified to the Commission.

## Appendix II

### **STRUCTURE OF THE DRAFT UN/ECE PAST INDUSTRIAL ACCIDENT REPORTING PROFILE**

#### **I. STRUCTURE OF THE REPORT PROFILE**

##### **1. Introduction**

The Report Profile is designed to provide sufficient information to unambiguously identify an accident, e.g. in terms of the name and address of the industrial establishment where the accident occurred, date of accident etc. It also assigns to the accident a unique identification code, by which the accident can be identified in a unique way.

##### **2. Data Variables in Report Profile**

###### **2.1 GENERAL INFORMATION**

###### **A. Identification of Report**

- Accident Code (automatically assigned)
- Affected Neighbouring Countries:
  - Neighbour 1
  - Neighbour 2
  - Neighbour 3

###### **B. Date of Reports**

- Short Report
- [ - Full Report (not applicable under UN/ECE Convention) ]
- Reporting Authority:
  - Name
  - Address
  - Country
- Authority Contact:
  - Name
  - Phone
  - fax
  - Email

###### **C. Date/Time of Major Occurrence:**

- Start Date
- Time
- Finish Date
- Time

D. Establishment:

[ - Seveso Plant Code (not applicable under UN/ECE Convention)]

- Name of the Plant
- Address of the Plant
- Type of Industry
  - General chemicals manufacture
  - Petrochemical, refining, processing
  - Plastics and rubber manufacture
  - Pesticides, pharmaceuticals, other fine chemicals
  - Power supply and distribution (electric, gas, etc.)
  - Water and sewage (collection, supply, treatment)
  - Waste treatment, disposal
  - Wholesale and retail storage and distribution (includes LPG bottling and bulk distribution, tank storage farms, cold storage distribution warehousing, etc.)
  - Handling and transportation centres (ports, airports, lorry parks, marshalling yards, etc.)
  - Ceramics (bricks, pottery, glass, cement, plaster, etc.)
  - Metal refining and processing (includes foundries, electrochemical refining, plating, etc.)
  - Electronics and electrical engineering
  - Shipbuilding, shipbreaking, ship repair
  - General engineering, manufacturing and assembly
  - Agriculture
  - Medical, research, education (includes hospitals, universities, colleges, etc.)
  - Textiles, clothing and footwear
  - Paper manufacture, printing, publishing
  - Food and drink
  - Timber and furniture
  - Building and works of engineering construction
  - Fairgrounds/amusements
  - Other

[ - Seveso II Status (not applicable under UN/ECE Convention)]

## 2.2 ADDITIONAL COMMENTS

## **II. STRUCTURE OF THE SHORT REPORT**

### **1. Introduction**

The Short Report has the purpose of collecting the basic information describing an accident event in terms of its type, substances directly involved, immediate source(s), suspected cause(s), immediate effects, emergency measures taken and immediate lessons learned. It is designed in a way that permits its completion within a few days after the accident occurred. It serves as a synopsis of the accident and should give a concise overview of all the important characterizing elements of the accident event.

## **2. Data Variables in the Short Report**

### A. Accident Type(s)

Selections are to be made between release, water contamination, fire, explosion, transport and other. A concise description of the accident should be included, giving as much free text details as possible. The reasons for reporting, e.g. major accident with 10 severe injuries inside establishment, or near-miss, etc., should be given in the description.

### B. Substance(s) Directly Involved

Selections are to be made between toxic, ecotoxic, flammable, explosive and other, always according to Annex I of the Seveso II Directive. The name, CAS number and estimates of the quantities of the most important dangerous substances involved in the accident as well as any relevant information on their characteristics, e.g. whether liquid, powder, etc., should be mentioned in the description field.

### C. Immediate Source(s) of Accident

Selections are to be made between storage, process, transfer and other. A detailed description of the system / component in which the accident occurred should also be given. It shall be noted that the storage, process, transfer and other activities are to be understood as the activities related to the immediate accident source and not necessarily as the overall activities of the establishment. Concerning the precise definitions of these activities, loading and unloading activities are part of transfer activities. Transfer includes always on-site transfer (transport) activities only.

### D. Suspected Cause(s)

Selections are to be made between plant or equipment, human, environmental and other. In the free text field, a detailed description of the nature of the failure (human, technical), subtype of error, intervention, malfunction, etc. should be given, together with an indication of how certain the identification of the causes is (preliminary analysis, root cause analysis, etc.). It should clearly be distinguished between immediate and underlying causes of an accident.

### E. Immediate Effects

Selections are to be made between human deaths, human injuries, ecological harm, national heritage loss, material loss, community disruption and other. A detailed description of the consequences of the accident should be made by trying to be as quantitative as possible (X number of persons injured, Y% of surrounding area contaminated, etc.). Clear distinction should be made between on-site and off-site effects.

#### F. Emergency Measures Taken

Selections are to be made between on-site systems, external services, sheltering, evacuation, contamination, restoration and other. Details on the extent, duration, exact type of measures taken or envisaged, as well as on their effectiveness in implementation should be included in the free text field. A clear distinction should be made between on-site and off-site measures.

#### G. Immediate Lessons Learned

Any lessons learned on the prevention, mitigation of the consequences or other should be indicated here. A detailed discussion should be made in the free text field on the exact nature of the lessons learned, and whether any of them were already implemented or are going to be implemented in the future.