

Structure of and recent changes to Annex I of the Convention

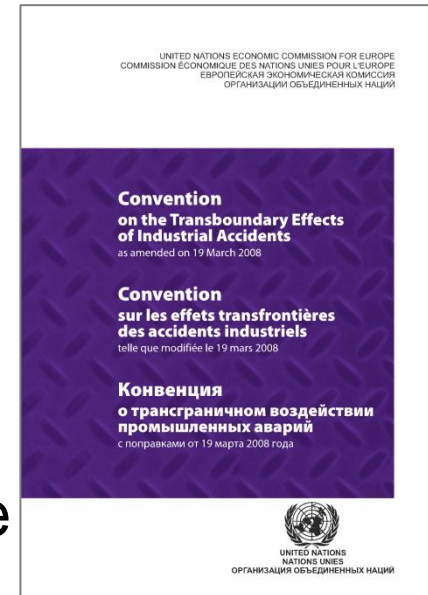
Claudia Kamke, UNECE Industrial Accidents Convention secretariat
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Annex I of the Convention

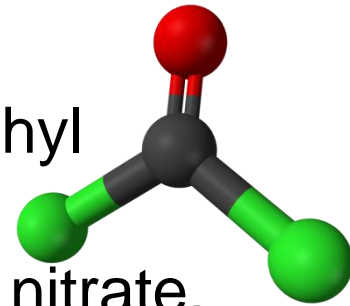
- “Hazardous activity” means any activity in which one or more hazardous substances are present or may be present in quantities at or in excess of the threshold quantities listed in Annex I hereto, and which is capable of causing transboundary effects
- Annex I on **Hazardous substances for the purposes of defining hazardous activities**
 - Defines and provides qualifying criteria for hazardous substances
 - Hazard categories and named hazardous substances in the scope of the Convention
 - Threshold (qualifying) quantities



Structure of Annex



- Part I. Categories of substances and mixtures not specifically named in Part II
- Part II. Named substances
 - Substances of high concern, such as TDI, methyl isocyanate, phosgene, chlorine
 - Widely used substances , such as ammonium nitrate, LPG and other petroleum products
- Where a substance or mixture named in Part II also falls within a category in Part I, the threshold quantity set out in Part II shall be used



Changes in Annex I

- In 2012, Conference of the Parties requested the Working Group on the Development to draft a revised annex I to:
 - bring it into line with the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (ST/SG/AC.10/30/Rev.4)
 - to maintain consistency with corresponding EU legislation (Seveso III Directive)
- In 2014, Conference of the Parties adopted the revised annex I
- Entry into force – December 2015



Changes in Annex I

- Changes in the hazard criteria (cut-off values)
- Introduction of new hazard categories (flammable aerosols, organic peroxides)
- Changes in some of the quantity thresholds
- Inclusion of new substances in the list of named substances



Changes in structure of Annex I

Part I.

Categories of substances and preparations not specifically named in Part II

<i>Category</i>	<i>Threshold quantity (metric tons)</i>
1. Flammable ²	50 000
2a. Highly flammable ^{3 (a), (b)}	200
2b. Highly flammable ^{3 (c)}	50 000
3. Extremely flammable ⁴	50
4. Toxic ⁵	200
5. Very toxic ⁶	20
6. Oxidizing ⁷	200
7a. Explosive, where the substance, preparation or article falls under Division 1.4 of the GHS criteria ⁸	200
7b. Explosive, where the substance, preparation or article falls under Division 1.1, 1.2, 1.3, 1.5 or 1.6 of the GHS criteria ⁸	50
8a. Dangerous for the environment — “Toxic to aquatic organisms” ⁹	500
8b. Dangerous to the environment — “Very toxic to aquatic organisms” ¹⁰	200

OLD

Changes in structure of Annex I

Part I.

Categories of substances and mixtures not specifically named in Part II

Category in accordance with the United Nations Globally Harmonized System (GHS) of Classification and Labelling of Chemicals *Threshold quantity (metric tons)*

- | | | |
|----|--|-----|
| 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 |

NEW

Changes in Annex I Part I

* *Inhalation route only*

Previous Annex I

- Toxic and very toxic
 - 4. Toxic – 200 t.
 - 5. Very toxic – 20 t.
- **Cut-off values**
 - Toxic
LD50 (oral, mg/kg) $25 < LD50 < 200$
LD50 (dermal, mg/kg) $50 < LD50 < 400$
LC50 (inhalation, mg/l) $0.5 < LC50 < 2$
 - Very toxic
LD50 (oral, mg/kg) $LD50 < 25$
LD50 (dermal, mg/kg) $LD50 < 50$
LC50 (inhalation, mg/l) $LC50 < 0.5$

Current Annex I

Acute toxicity, Cat. 1, 2 and 3*

- ACUTE TOXIC Category 1 – 20 t.
- ACUTE TOXIC Category 2 and 3* - 200 t.

Cut-off values

- ACUTE TOXIC Category 1
LD50 (oral, mg/kg) $LD50 < 5$
LD50 (dermal, mg/kg) $LD50 < 50$
LC50 (inhalation vapours, mg/l) $LC50 < 0.5$
LC50 (inhalation gases, ppmV) $LC50 < 100$
LC50 (dusts and mists, mg/l) $LC50 < 0.05$
- ACUTE TOXIC Category 2 and 3*
LD50 (oral, mg/kg) $5 < LD50 < 50$
LD50 (dermal, mg/kg) $50 < LD50 < 200$
LC50 (inhalation vapours, mg/l) $0.5 < LC50 < 2$
LC50 (inhalation gases, ppmV) $100 < LC50 < 500$
LC50 (dusts and mists, mg/l) $0.05 < LC50 < 0.5$

Challenges in implementing revised Annex I

- Adopted revision represents an important change to the Convention
- Expertise on chemicals and GHS usually distributed across several authorities
- To implement the new criteria, competent authorities need to coordinate and cooperate with other authorities
- Network of experts and decision-makers

Questions or comments?

