# **Economic and Social Council**

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# **Economic Commission for Europe**

Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents

#### Thirteenth meeting

Geneva, 27–29 November 2024 Item 6 (a) of the provisional agenda Implementation of the Convention: tenth report and decision on the implementation of the Convention (2019–2022)

# Tenth report on the implementation of the Convention (2019–2022)

### Report by the Working Group on Implementation

#### **Summary**

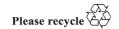
At its eleventh meeting (Geneva, 7–9 December 2020), the Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents requested the Working Group on Implementation to prepare the tenth report on the Convention's implementation for the Conference of the Parties at its thirteenth meeting.<sup>a</sup>

Pursuant to paragraph 4 of its terms of reference (ECE/CP.TEIA/32/Add.1), the Working Group shall: (a) monitor the Convention's implementation; (b) prepare the report on the Convention's implementation, including conclusions, on the basis of the individual country reports, in line with the Convention (art. 23); and (c) make draft recommendations to strengthen the Convention's implementation on the basis of the report and submit them, through the Bureau, to the Conference of the Parties for adoption.

The present document contains the tenth report on the implementation of the Convention, prepared on the basis of the national reports submitted by the deadline for the period 2019–2022. The Conference of the Parties will be invited to review and adopt the report.

Parties are invited to share any comments regarding the accuracy of factual information on their country in the draft report with the secretariat at least four weeks in advance of the thirteenth meeting of the Conference of the Parties (via email to eceteia.conv@un.org), that is to say, by 30 October 2024.

<sup>a</sup> ECE/CP.TEIA/42, para. 25.



#### Introduction

- 1. In accordance with the Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention), Parties have an obligation to report periodically on the Convention's implementation (art. 23) and the Conference of the Parties is required to review said implementation (art. 18 (2) (a)). At its first meeting (Brussels, 22–24 November 2000), the Conference established the Working Group on Implementation and adopted its terms of reference to assist with this review.<sup>1</sup>
- 2. At its ninth meeting (Ljubljana, 28–30 November 2016), the Conference amended the Working Group's terms of reference (ECE/CP.TEIA/32/Add.1, decision 2016/3) to, among other aspects, extend the term of office of the members to four years and strengthen the Group's mandate to engage with countries on implementation issues. It also amended reporting requirements (ECE/CP.TEIA/32/Add.1, decision 2016/2) to extend the reporting period to four years as of 2019. The present report is the first implementation report covering a four-year period.
- 3. At its eleventh meeting (Geneva, 7–9 December 2020), the Conference adopted the ninth report on implementation (ECE/CP.TEIA/2020/5) and elected or re-elected the following Working Group members for the period 2021–2024: Mr. Pavel Chukharev² (Belarus); Ms. Reelika Kuusik (Estonia); Ms. Laura Vizbule³ (Latvia); Ms. Nicolette Bouman (Netherlands); Mr. Vitalii Mutaf (Republic of Moldova); Ms. Anna Tsarina (Russian Federation); Ms. Sanja Stamenkovic (Serbia); Ms. Mária Šebestová (Slovakia); Ms. Helena Fridh (Sweden); and Mr. Raphaël Gonzalez (Switzerland).⁴ At its forty-first meeting (Geneva (online), 23 February 2021), the Working Group elected Ms. Fridh as its Chair and Mr. Chukarev and Mr. Gonzalez as its Vice-Chairs for the period 2021–2024.⁵ At its forty-fourth meeting (Geneva (online), 1–2 February 2022), the Working Group elected Ms. Tsarina as Vice-Chair, replacing Mr. Chukarev in that function.⁶
- 4. During the biennium 2021–2022, the Working Group, among other activities, held six meetings, including a Special session: Seminar on good practices and lessons learned in implementing the Convention on the Transboundary Effects of Industrial Accidents (Geneva (hybrid), 3–4 February 2022),<sup>7</sup> engaged with countries on implementation issues, and monitored the Strategic Approach of the Assistance and Cooperation Programme.
- 5. During the biennium 2023–2024, the Working Group held its forty-seventh to fiftieth meetings (Geneva (hybrid), 13–14 February 2023, 14 February 2023, 8 31 January–1 February 2024, and 29–30 May 2024, respectively). It finalized and circulated the reporting format and guidelines for the tenth reporting round, analysed national implementation reports, compiled good practices, held teleconferences or exchanges with Albania, Armenia, Bosnia and Herzegovina, Georgia and Tajikistan, refined the e-tool, developed questions to integrate natural hazard-triggered technological disasters (Natech) and tailings management facilities (TMFs) risks into self-assessments and action plans, initiated the development of an interactive network on implementation and of a guide to good practices on implementation, and considered the need to update the Guidelines to facilitate the identification of hazardous activities for the purposes of the Convention.<sup>9</sup>

<sup>&</sup>lt;sup>1</sup> ECE/CP.TEIA/2, annex III, decision 2000/2 and appendix.

<sup>&</sup>lt;sup>2</sup> Mr. Pavel Chukharev changed posts in November 2021 and was subsequently replaced by Ms. Tatyana Lógutova.

<sup>&</sup>lt;sup>3</sup> Ms. Laura Vizbule changed posts in October 2021; Latvia has not identified a replacement.

<sup>&</sup>lt;sup>4</sup> ECE/CP.TEIA/42, para. 27.

<sup>&</sup>lt;sup>5</sup> CP.TEIA/2021/WGI.1/Minutes, para. 5, available at https://unece.org/info/events/event/352284.

<sup>&</sup>lt;sup>6</sup> CP.TEIA/2022/WGI.1/Minutes, para. 28, available at https://unece.org/environmental-policy/events/forty-forth-meeting-working-group-implementation.

<sup>&</sup>lt;sup>7</sup> See ECE/CP.TEIA/2022/5, paras. 13–16 and annex.

<sup>&</sup>lt;sup>8</sup> Joint meeting with Bureau.

<sup>&</sup>lt;sup>9</sup> Available at

https://unece.org/DAM/env/documents/2019/TEIA/ENG\_Guidelines\_to\_facilitate\_the\_identification \_of\_hazardous\_activities\_for\_the\_purposes\_of\_the\_UNECE\_Industrial\_Accidents\_Convention\_\_Loc ation\_Criteria\_.pdf. Amended by decision 2018/1 (ECE/CP.TEIA/38/Add.1).

# I. Reporting

- 6. In accordance with decision 2016/2, the Working Group updated the reporting format and guidelines for the tenth reporting round. The key updates included creating word limits, locking the reporting format, referencing respective articles and annexes of the Convention, reformatting tables and questions, adding examples to the guidelines and introducing new questions on: identification of hazardous activities; risk and Natech risk assessment; and information to and participation of the public.
- 7. The secretariat initiated the tenth reporting round on the Convention's implementation by sending letters, accompanied by the updated reporting format and guidelines, to Parties on 31 March 2023. The secretariat also sent letters inviting non-Parties benefiting from Assistance and Cooperation Programme activities to submit a national implementation report. In accordance with decision 2016/2, the deadline for the submission of national reports for the tenth round (2019–2022) was 31 October 2023.

#### A. Submission of reports

- 8. During the Working Group's forty-ninth meeting, when it reviewed the national reports for the tenth reporting round, the Convention had 42 Parties: 41 member States of the United Nations Economic Commission for Europe (ECE) and the European Union.
- 9. In all, 31 Parties submitted reports by the deadline: Armenia, Austria, Belarus, Belgium, Bulgaria, Cyprus, Czechia, Denmark, Estonia, European Union, Finland, Germany, Hungary, Italy, Latvia, Lithuania, Luxembourg, Monaco, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine and United Kingdom of Great Britain and Northern Ireland. Three Parties submitted reports after the deadline but before the Working Group's forty-ninth meeting: Azerbaijan (15 January 2024), Netherlands (21 December 2023) and Montenegro (7 December 2023). Eight Parties had not submitted reports before that meeting: Albania, Bosnia and Herzegovina, Croatia, France, Greece, Kazakhstan, Russian Federation and Spain. 12
- 10. At the High-level Commitment Meeting (Geneva, 14–15 December 2005), four Assistance and Cooperation Programme countries, albeit not Parties, committed to reporting on the Convention's implementation hereafter "committed countries" —. <sup>13</sup> Only Georgia submitted a report by the deadline. Kyrgyzstan submitted a report late but in advance of the Working Group's forty-ninth meeting. Tajikistan and Uzbekistan had not submitted reports before that meeting.
- 11. In line with decision 2016/2, the Working Group analysed the 31 reports submitted by the deadline<sup>11</sup> 30 by Parties and one by a committed country for preparation of the present report. All reports were made available on a password-protected website accessible to Parties and committed countries.<sup>14</sup>

#### B. Reporting trends

12. The Working Group commended the 31 Parties and one committed country that had submitted timely reports. It welcomed the timely submission of Ukraine, given its accession to the Convention during the reporting period, and the timely submissions of Denmark, Estonia, Georgia and Luxembourg, as those Parties had submitted their reports late for the

<sup>&</sup>lt;sup>10</sup> Georgia, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

Italy submitted its report by deadline but due to a technical problem, it was not received by secretariat and therefore not included in analysis.

<sup>&</sup>lt;sup>12</sup> France and Croatia submitted their reports on 27 February 2024 and 8 July 2024, respectively.

<sup>&</sup>lt;sup>13</sup> Georgia, Kyrgyzstan, Tajikistan and Uzbekistan.

National reports are available at https://wiki.unece.org/display/TEIA/Implementation+Reports. Access information is available via each country's Convention focal point. Secretariat can be contacted for reminder of login information.

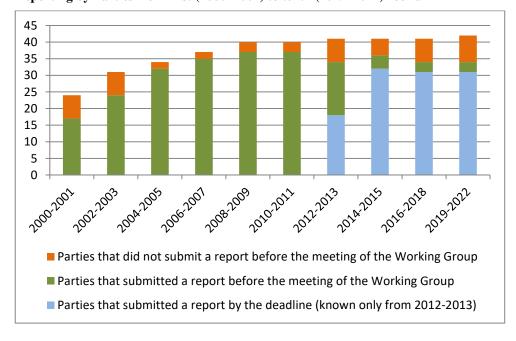
ninth round. It also welcomed the timely submission of the reports of seven Assistance and Cooperation Programme beneficiary countries: Armenia, Belarus, Georgia, North Macedonia, Republic of Moldova, Serbia and Ukraine.

- 13. The Working Group noted with concern the lower level of reporting compared to the ninth round (see figure): 73 per cent of Parties compared to 76 per cent submitted on time and 69 per cent of Parties and committed countries compared to 70 per cent submitted on time. It expressed regret at the failure by 11 Parties and 3 committed countries to submit reports by the deadline. It noted with concern that Albania, Bosnia and Herzegovina, Greece, Kazakhstan, Spain, the Russian Federation and Uzbekistan failed to submit reports, despite having done so in the ninth round, and Croatia and France, which submitted reports on time in the ninth round, failed to submit by the deadline. It also noted with concern that Tajikistan failed to submit a report for the seventh consecutive round; however, the Working Group expressed appreciation for the fact that Tajikistan had provided information under the Strategic Approach.
- 14. The Working Group expressed concern that 8 of the 15 countries beneficiaries of Assistance and Cooperation Programme activities had not submitted reports by the deadline, and 6 of those had not submitted by the Working Group's forty-ninth meeting. The Working Group expressed regret at the fact that it could not assess those countries' progress, notably in the Caucasus (Azerbaijan), Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, <sup>16</sup> Uzbekistan) and South-Eastern Europe (Albania, Bosnia and Herzegovina).

#### 15. The Working Group:

- (a) Stresses the need for the timely submission of reports and calls on Parties and committed countries to comply with the deadlines agreed by the Conference;
- (b) Strongly urges Parties that failed to provide their report for the present round to submit it without further delay;
- (c) Calls upon committed countries that failed to provide their report for the present round to submit it without further delay.

Figure I Reporting by Parties from first (2000–2001) to tenth (2019–2022) round



<sup>&</sup>lt;sup>15</sup> By time of submission of this report.

<sup>&</sup>lt;sup>16</sup> Turkmenistan did not express a commitment to report on the Convention's implementation; however, as a country benefiting from assistance activities, it has been invited to submit a report.

#### C. Overall quality of reporting

- 16. The Working Group noted with satisfaction that, relative to the ninth round, the quality of reporting had improved, thanks to revisions of the reporting format and guidelines. Most Parties and the committed country provided full responses to the questions with explanations and supportive references and did not copy responses from prior rounds. Many Parties appeared to work across authorities to coordinate a single national response.
- 17. The Working Group noted limitations in its analysis with related recommendations:
- (a) Parties and committed countries should review their reports for linguistic clarity prior to submission;
- (b) Parties that reported not having "hazardous activities" and marked numerous questions as "not applicable" or did not respond are encouraged to respond to all questions in future reports, particularly those that pertain to "industrial accidents" more broadly and are not limited to activities that meet annex I threshold quantities and that are capable of causing transboundary effects;
- (c) Since the locked reporting format led to difficulties in preparing coordinated responses across authorities in some countries, the Working Group should consider this when updating the format and guidelines for more efficient reporting in the eleventh round;
- (d) Although most Parties and the committed country appeared to have consulted the guidelines, Parties and other countries are reminded to do so to ensure adequate and complete reporting.

# II. Analytical findings on the implementation of the Convention<sup>17</sup>

18. The Working Group, in cooperation with the secretariat, reviewed the 31 reports, qualitatively and/or quantitatively analysed the responses, and compared data across the reports. This provided a basis to identify strengths, weaknesses and trends in implementation and to develop respective recommendations. The analytical findings and recommendations are presented in subsections A-J. Overall, this part demonstrates how the Convention has provided a means for Parties and the committed country to progress in strengthening industrial safety, environmental protection and international cooperation over the reporting period, and highlights approaches for improvements moving forward.

#### A. Policy for implementation of the Convention

- 19. The Working Group welcomed the good descriptions of policies and legislation in place for the prevention of, preparedness for and response to industrial accidents. In all, 68 per cent of reports indicated that those policies had achieved the intended results a 5 per cent increase since the prior round —, and 23 per cent indicated satisfactory results with a few shortcomings. The Republic of Moldova and Serbia indicated that the main goals were achieved. Georgia reported that its policies were partially implemented. Moreover, several countries reported that, while their legal frameworks deliver the intended results, they continuously improve laws and policies according to changing conditions. The Working Group commends the progressive improvement of laws and policies in view of changing conditions and encourages all countries to take such an approach.
- 20. The Working Group identified the following areas under the Convention that were only covered to a limited extent or not covered by legislation or other acts: land-use planning (Belarus); mutual assistance (Denmark, Serbia); and scientific and technical cooperation (Finland, Norway, Serbia, Sweden, United Kingdom of Great Britain and Northern Ireland). Many areas were not covered under the legal framework of Georgia.

See reporting format and guidelines for tenth and previous rounds at www.unece.org/env/teia/wgimplementation.html.

- 21. All reporting Parties (except Czechia, United Kingdom of Great Britain and Northern Ireland) and the committed country indicated that their policies on the Convention's implementation link to those under the Sendai Framework for Disaster Risk Reduction 2015–2030 in the area of technological hazards. The Working Group recognizes that the Convention is actively being used as a legal instrument for risk reduction under the Sendai Framework, in line with the Convention's long-term strategy until 2030, and calls on Parties and committed countries to enhance such synergies.
- 22. The Working Group noted that several Parties indicated having national coordination mechanisms for implementation e.g., working groups or national platforms for disaster risk reduction —. The Working Group supports the establishment and use of national coordination mechanisms for strengthening implementation and policy cohesion.
- 23. The Working Group noted with concern the following weaknesses or areas for improvement reported by Parties, some of which had also been reported in the ninth round:
- (a) Need to improve legislation (Armenia, Republic of Moldova, Serbia, Ukraine), specifically for tailings ponds (Czechia);
- (b) Insufficient institutional capacity or lack of experts or qualified personnel (Armenia, North Macedonia, Republic of Moldova, Serbia);
  - (c) Inadequate transboundary cooperation and/or information-sharing (Ukraine);
  - (d) Lack of financial and other resources (Armenia, North Macedonia, Serbia);
- (e) Lack of coordination amongst authorities and/or operators (North Macedonia, Serbia, Ukraine);
- (f) Need to improve information exchange on hazardous activities with transboundary effects (Romania, Slovenia);
  - (g) Lack of data and monitoring (Armenia);
- (h) Lack of guidance and expertise for compatibility studies, mainly regarding land-use planning and related decision-making criteria (Portugal);
  - (i) Need to enhance public communication across countries (Romania);
- (j) Need to elaborate and test contingency plans with neighbouring countries (Serbia);
  - (k) Need to develop an implementation road map (Ukraine).
- 24. While the Working Group acknowledges that legal and policy frameworks for implementation are in place in most countries, it invites Parties and committed countries to address the above weaknesses and areas for improvement in the next biennium and calls on other Parties to assist, as feasible.

#### B. Identification and notification of hazardous activities

- 25. The Working Group recalled that article 1 (b) defines a "hazardous activity" as 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, and which is capable of causing transboundary effects, and the Conference has adopted guidelines for determining whether an activity is capable of this. It emphasizes that, while the Convention obliges Parties to identify "hazardous activities" (art. 4) and apply the respective provisions, some provisions apply more broadly to "industrial accidents" or "industrial accidents capable of causing transboundary effects", inclusive of activities that may not constitute "hazardous activities".
- 26. From the 31 reports, 20 countries identified hazardous activities (Armenia, Austria, Belarus, Belgium, Estonia, Finland, Georgia, Germany, Hungary, Lithuania, Luxembourg, Poland, Republic of Moldova, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland,

<sup>&</sup>lt;sup>18</sup> ECE/CP.TEIA/38/Add.1, para. 18.

United Kingdom of Great Britain and Northern Ireland). Germany specified eight hazardous activities capable of causing transboundary effects in multiple countries. Serbia was seeking additional information on three hazardous activities to further assess transboundary effects. The United Kingdom reported having three hazardous activities that border Ireland — a non-Party —. The Working Group invites Parties and committed countries with hazardous activities that could have transboundary effects on non-Parties to uphold the precautionary principle and apply the article 5 voluntary extension for the protection of people and the environment. The Working Group noted with satisfaction that most of the 20 countries provided information on their hazardous activities, showing these to commonly involve ammonium nitrate, fertilizers, gases, oil or pure metals. Slovakia shared a public website on hazardous activities in its jurisdiction. The Working Group invites Parties and committed countries to provide additional information in future reports, including on possible transboundary effects, for the Conference to better understand hazards and risks and to enhance cooperation.

- 27. Nine Parties (Bulgaria, Cyprus, Czechia, Denmark, Latvia, Monaco, Norway, Portugal, Ukraine) reported not having hazardous activities. The European Union indicated 4,879 facilities under the Seveso-III Directive<sup>19</sup> that had substances meeting annex I threshold quantities, but it did not hold data on transboundary effects. North Macedonia reported 20 facilities containing substances meeting annex I threshold quantities, but transboundary effects had not been assessed. The Working Group calls on Parties and committed countries, which have not yet done so, to assess transboundary risks of activities in their jurisdiction without delay. It encourages the European Union to make information available regarding transboundary aspects in future reports.
- 28. For the first time, Parties and reporting countries were asked how many of their "hazardous activities" were TMFs. Among the 20 countries with hazardous activities, Armenia and North Macedonia reported having classified TMFs as such.<sup>20</sup> Czechia stated that tailings dams were not classified within its major accident hazard prevention legislation but were managed by a different legislative act, which requires cooperation across authorities; it reported that the main problem is classifying tailings mixtures against annex I. Germany had recently published guidance for categorizing waste under annex I to the Convention and the Seveso-III Directive. Serbia reported a new regulation on the management of mining waste to identify TMFs under the Seveso-III Directive. The number of TMFs reported as "hazardous activities" seems low compared to the identification of more than 1,000 TMFs in the ECE region through projects under the Convention, which suggested that at least 25 per cent may have transboundary effects.<sup>21</sup> The lack of information on TMFs and the above developments suggest that there may be challenges in identifying TMFs as "hazardous activities" under the Convention and the development of related guidance or updates to the Guidelines to facilitate the identification of hazardous activities<sup>9</sup> could be beneficial. The Working Group strongly urges Parties and committed countries to comply with their obligation to identify "hazardous activities", regardless of how they are covered by national law and policy, and to address challenges in identification, especially for TMFs in line with decision 2020/1 on strengthening mine tailings safety in the ECE region and beyond (ECE/CP.TEIA/42/Add.1) and the Road map for action to strengthen mine tailings safety (ECE/CP.TEIA/2022/7).
- 29. All countries with and many without hazardous activities indicated having requirements for carrying out risk assessments at hazardous activities, including to assess transboundary effects. While no predominate methodology was identified, the Working Group noted that some approaches entailed qualitative and quantitative methods, including cause, probability and scenario analyses, and consequence modelling. In many countries, risk assessments were mandatory for safety reports. Armenia mentioned that risk analysis and modelling and worst-case scenario standard operation procedures should be developed.

<sup>&</sup>lt;sup>19</sup> See https://eur-lex.europa.eu/eli/dir/2012/18/oj.

Two reports submitted after the deadline (France, Kyrgyzstan) also indicated that TMFs had been identified as "hazardous activities".

For example, 59 of the 237 TMFs identified in Central Asian countries may have potential transboundary effects. In river basins, this figure is usually much higher, e.g., 33 of the 61 TMFs identified in the Syr Darya River basin may have potential transboundary effects.

Estonia shared a newly developed risk map website. The Republic of Moldova requested additional information on methodologies. The Working Group recommends Parties and committed countries make use of the ECE publication Risk Assessment for Industrial Accident Prevention: An Overview of Risk Assessment Methods, Selected Case Studies and Available Software.<sup>22</sup>

- The Working Group noted that most countries require natural hazard-triggered technological disaster risks (Natech risks) to be integrated into risk assessments; however, some countries limit this to specific natural hazards. Natural hazards commonly mentioned were avalanches, floods, landslides, lightning, mudflows, rain, seismic activity, snow, temperature change and winds. Austria reported having prepared annual catalogues on Natech scenarios to address challenges and adapt exercises. Hungary had developed Natech guidance. Bulgaria reported having a natural hazard map. Six countries (Armenia, Czechia, Georgia, Hungary, North Macedonia, Ukraine) indicated they do not require Natech in risk assessments. The Working Group stresses the importance of managing Natech risks, given that article 2 (1) specifies that the Convention applies to "accidents caused by natural disasters" and the increasingly frequent and severe impacts of climate change. It recommends Parties and committed countries to use the Joint OECD/UN/JRC Guidance on Managing Risks from Natural Hazards to Hazardous Installations (Natech): A Guide for Senior Leaders in Industry and Public Authorities. It calls on Parties to develop and share approaches for managing risks of industrial accidents against specific types of natural hazards.
- 31. The Working Group welcomed the fact that many countries with hazardous activities had notified, before or during the reporting period, neighbouring/riparian countries of hazardous activities that could have transboundary effects. Methods included the notification template for hazardous activities, bilateral or multilateral agreements, meetings, letters or websites; 15 countries (Austria, Belarus, Belgium, Estonia, Finland, Germany, Hungary, Lithuania, Luxembourg, Poland, Republic of Moldova, Romania, Slovakia, Sweden, Switzerland) had notified all countries of hazardous activities that could affect them; Five countries (Armenia, Georgia, North Macedonia, Serbia, Slovenia) had not made notifications. The Working Group strongly urges Parties and committed countries with hazardous activities that have not done so to proceed with such notifications without delay. It recalls that the article 4 obligation to notify other Parties of hazardous activities that could affect them is not the same as the article 10 obligation to notify other Parties in the event of an accident, and calls on Parties and committed countries to comply with these two obligations separately and ensure accurate reporting in future rounds.
- 32. The Working Group noted that a mechanism for consultation with neighbouring/riparian countries was: fully operational for 14 Parties (Austria, Belgium, Czechia, Estonia, European Union, Finland, Germany, Latvia, Luxembourg, Poland, Romania, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland); adopted and covered all minimum elements for five countries (Belarus, Georgia, Hungary, North Macedonia, Slovakia); under intensive and detailed discussions for three countries (Republic of Moldova, Serbia, Ukraine); under initial discussions for introduction in one country (Armenia); and not widely known among authorities in one country (Lithuania). Slovenia indicated that consultations had not been conducted since affected countries had not expressed a need in that regard. The Working Group notes the importance of Parties with hazardous activity consulting Parties that could be affected and encourages the strengthening and sustainment of consultation mechanisms.
- 33. The Working Group stresses that many countries that do not have hazardous activities in their jurisdiction can still be affected in case of an accident in a neighbouring/riparian country. It encourages Parties and committed countries, regardless of whether they have hazardous activities, to develop notification and consultation mechanisms and/or use existing ones.

<sup>&</sup>lt;sup>22</sup> United Nations publication, ECE/CP.TEIA/45.

#### C. Prevention of industrial accidents

- 34. The Working Group noted with satisfaction that the area of prevention has a relatively high level of implementation. Four Parties indicated that they applied the article 5 voluntary extension of the Convention: Cyprus had fully aligned its legislation with the Seveso-III Directive and applies the Convention's provisions regarding hazardous activities also to lower-tier establishments; Finland implements the Convention through a decree on supervision of installations handling and storing dangerous chemicals and applies the Convention's provisions regarding hazardous activities to 33 more substances than provided in annex I; two Länder in Germany have classified some activities that do not meet annex I threshold quantities as hazardous activities; and Switzerland applies the Convention to railway lines, highways and heavy traffic roads, and gas and oil pipelines carrying dangerous goods. The Working Group welcomes the extended application of the Convention and encourages other Parties and committed countries to consider extensions to improve industrial safety and protection of people and the environment.
- 35. Many countries provided clear descriptions of preventive measures taken by competent authorities and operators. Analysis showed that systems for allocating responsibilities e.g., drawing up safety plans and safety management systems, preparing and reviewing safety reports, permitting new and modifying existing hazardous facilities, inspections, trainings, informing the public were similar in many instances and seemed effective. The Working Group welcomes this information. As Denmark and Monaco reported that such measures are not applicable, the Working Group reminds all Parties and committed countries that article 6 (1) applies to "industrial accidents" not only "hazardous activities".
- 36. Most Parties reported that their preventive policies cover security aspects. Some developments entailed: publishing guidance for security threats at facilities (Finland); covering the prevention of interventions by unauthorized persons in the Major Accidents Ordinance and related guidance (Germany); and covering security aspects in the Fire and Explosion Prevention Act and risk assessment guidance (Norway). However, in most cases, security aspects were managed by a central national strategy, system and/or authority not necessarily the same authority as for the Convention. Three Parties (Belgium, Sweden, United Kingdom of Great Britain and Northern Ireland) and Georgia reported that security was not covered. The Working Group encourages Parties and committed countries to take security into account in their preventive policies.
- 37. Many Parties reported that their preventive policies consider cybersecurity threats. While these also often stemmed from a central national strategy, system and/or authority not necessarily the same authority as for the Convention some Parties mentioned developments specific to industrial safety: the Major Accidents Ordinance entails cybersecurity and operators should register with the Federal Office for Information Security (Germany); guidance and awareness materials and a national programme to increase security of industrial information and control systems (Sweden); and guidance on cybersecurity for major hazards (United Kingdom of Great Britain and Northern Ireland). Six Parties (Belgium, Cyprus, Czechia, Finland, Luxembourg, North Macedonia) and Georgia reported that cybersecurity was not covered. The Working Group encourages Parties and committed countries to take cybersecurity into account in their preventive policies, given the increasing digitalization of industrial systems.
- 38. Twenty-one Parties indicated that their preventive measures completely deliver the intended results. Five Parties (Czechia, Germany, North Macedonia, Portugal, Slovenia) reported having satisfactory preventive measures with a few shortcomings. Three Parties (Armenia, Republic of Moldova, Serbia) stated that the main goal of their preventive measures had been achieved with many shortcomings. Ukraine indicated that its preventive measures were partially implemented due to the war. Georgia mentioned that its preventive measures do not deliver any essential result. Parties expressed needs for: legislation development (Armenia, Republic of Moldova, Serbia); improved implementation (North Macedonia); precise data for and/or regulation of criteria for decision-making (Armenia, Portugal); improved safety report evaluations and inspections (Republic of Moldova, Serbia);

and taking into account military risks (Ukraine). Furthermore, several Parties indicated that they had taken or are taking steps to improve prevention through:

- (a) More active cooperation across agencies, including for hydrometeorological and seismic protection and early warnings (Armenia);
- (b) Renewing inspection programmes (Lithuania) and monitoring inspection recommendations (Slovenia);
- (c) Hosting meetings on topical issues (Estonia, Hungary, Portugal) and awareness-raising on disaster risk management (Hungary);
- (d) Participating in training sessions and knowledge dissemination (Republic of Moldova);
- (e) Developing or updating legislation (Republic of Moldova, Serbia) and regulations for hazard classification and environmental impact assessment (Lithuania) and improving modules under existing legislation (Switzerland);
  - (f) Taking cybersecurity into account in chemical safety legislation (Finland);
- (g) Developing or updating: a safety report checklist and criteria for preventing accidents (Portugal); guidelines for safety reports and contingency plans (Lithuania); guidance on safety distancing and categorizing waste under annex I (Germany); guidelines on prevention and preparedness, ageing risk, subcontractors and ammonia risk (Hungary); safety documentation with Natech, installation ageing, monitoring and development aspects (Czechia); safety management system requirements (Portugal); and a road map for implementation (Ukraine);
  - (h) Introducing a new procedure for notifying neighbouring countries (Romania).
- 39. The Working Group welcomes the steps taken and those in progress and encourages Parties and committed countries to exchange related experiences, good practices and lessons learned to facilitate international cooperation. It recognizes the need for preventive measures to continually be reviewed and updated in view of new conditions, emerging risks and developments e.g., new technology, methodologies and knowledge —.

#### D. Emergency preparedness and response

- 40. The Working Group noted with satisfaction that emergency preparedness and response are well established under the Convention. On-site and off-site contingency plans existed in almost all countries. However, some Parties reported only having partly established on-site contingency plans (North Macedonia, Ukraine) and off-site contingency plans (Belgium, Bulgaria, Luxembourg, North Macedonia, Poland, Republic of Moldova, Serbia, Ukraine). Georgia reported not having off-site contingency plans due to the need for a public authority to oversee them. Most Parties indicated that risk assessment results are taken into account in preparing contingency plans, with many Parties indicating the same regarding Natech risks, although sometimes limited to specific natural hazards.
- 41. The Working Group welcomed the fact that most Parties indicated that their contingency plans, particularly on-site ones, were coordinated between competent authorities and operators. Some Parties established off-site contingency plans compatible and/or joint contingency plans with countries that could be affected in case of an industrial accident; however, twelve countries (Armenia, Estonia, Georgia, Germany, Hungary, Lithuania, Luxembourg, North Macedonia, Republic of Moldova, Romania, Serbia, Slovenia) reported not or only partly having such contingency plans. The Working Group urges Parties and committed countries with hazardous activities to develop and implement harmonized or joint contingency plans. Estonia, Germany, Hungary, Lithuania and Slovenia reported not having such plans for certain industrial facilities that met the location criteria, because risk scenarios indicated a lack of or insignificant transboundary effects. Given the importance of implementing article 11 (2) to mitigate the effects of industrial accidents,

some of which are not always predictable, the Working Group strongly recommends that Parties and committed countries exercise caution when taking such decisions.

42. The Working Group noted that, since the ninth round, minor changes had been made in levels of implementation according to the Working Area 4 indicators of the User-friendly version of the Benchmarks in the implementation of the Convention. Fifteen Parties (Armenia, Belarus, Belgium, Estonia, European Union, Czechia, Hungary, Latvia, North Macedonia, Republic of Moldova, Romania, Serbia, Slovenia, Switzerland, Ukraine) reported improvements in emergency preparedness and response. Seven Parties (Belarus, Belgium, North Macedonia, Republic of Moldova, Serbia, Sweden, Ukraine) reported a higher level of implementation for a mechanism for transboundary contingency plans; however, Armenia reported a lower level, with a reduction from 6 to 2 — see table —. As per article 8, the Working Group urges Parties and committed countries to ensure that contingency plans contain suitable response measures to prevent and minimize transboundary effects.

Progress stage for mechanism on transboundary contingency plans in ninth reporting round (2016–2018)

Progress stage	Countries*	Percentage
6	Austria, Belarus, Estonia, Finland, Monaco, Poland, Romania, Slovakia, Slovenia, Sweden	33
5	Germany, Hungary, North Macedonia, Rep. of Moldova, Luxembourg, Switzerland	20
4	Serbia	3
3	Belgium, Ukraine	7
2	Armenia	3
1	Georgia, Lithuania	7
N/a or no progress stage indicated	Bulgaria, Czechia, Cyprus, Denmark, Latvia, Norway, Portugal, United Kingdom	27

<sup>\*</sup> Excluding European Union.

- 43. The Working Group reiterates that Parties and committed countries that have not identified hazardous activities could still be affected by industrial accidents capable of causing transboundary effects from neighbouring/riparian countries and encourages them to ensure that respective preparedness and response mechanisms are in place to cooperate with Parties of origin.
- 44. The Working Group noted that many contingency plans had been tested, reviewed and updated as necessary. Nine countries (Armenia, Bulgaria, Georgia, Germany, Lithuania, Luxembourg, Norway, Republic of Moldova, Serbia) indicated that they had not or had only partly completed the process. Thirteen countries that reported having hazardous activities (Armenia, Austria, Estonia, Georgia, Germany, North Macedonia, Lithuania, Luxemburg, Republic of Moldova, Romania, Serbia, Slovenia, Sweden) indicated that they had not or had only partly completed testing, updating and reviewing contingency plans in cooperation with neighbouring/riparian countries. The Working Group expresses concern that testing, updating and reviewing contingency plans in cooperation with neighbouring/riparian countries remain challenging and determines there is potential for improvement for almost all Parties and committed countries.
- 45. The Working Group underscored that some Parties reported not or only partly having tested, reviewed and updated their contingency plans due to the absence of hazardous activities or due to public health measures in force to protect workers and populations against

the coronavirus disease (COVID—19) pandemic. The Working Group recognizes that some public health measures had an impact on regular implementation of certain industrial safety measures, such as on-site tests and drills, and the operations of some facilities. It urges Parties and committed countries to learn from that experience and be prepared to ensure industrial safety continuity in the event of future public health emergencies.

- 46. The Working Group noted the following challenges or needs reported by Parties:
- (a) Need for capacity-building activities and guidance due to lack of technical capacities to identify, assess and respond to major industrial accidents (Armenia);
  - (b) Language barriers in informing the public (Czechia);
- (c) Need to address possible resource shortages in case of large-scale evacuations during an accident (Estonia);
- (d) Needs for more expert involvement in preparing safety reports and contingency plans, capacity-building for inspections and assistance to further develop joint contingency plans, including with the second Danube Delta project (Republic of Moldova);
- (e) Needs for integrated accident management systems, completion of contingency plans, enhanced transboundary cooperation, including through notification procedures and assessments of accident effects (Serbia);
- (f) Challenges in responding to emergencies resulting from shelling of Ukrainian territory (Ukraine).
- 47. The Working Group encourages Parties to cooperate with each other and the secretariat to address these challenges and needs over the next biennium. It recognizes the increased risks of industrial accidents and technological disasters due to shelling.
- 48. Most Parties reported having developed national guidance on contingency planning. The Working Group noted that only four Parties (Austria, Poland, Republic of Moldova, Ukraine) reported having used the ECE Checklist for Contingency Planning for Accidents Affecting Transboundary Waters (ECE/TEIA.CP/34). To improve cooperation between neighbouring/riparian countries and share response capabilities, the Working Group recommends that Parties and committed countries this checklist, developed by the Joint Expert Group on Water and Industrial Accidents, and the OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response Third Edition.<sup>23</sup>
- 49. The Working Group, following consultation with the secretariat, noted that all Parties and committed countries have a point of contact registered with the Industrial Accident Notification (IAN) System; however, Armenia and Monaco reported that they do not, and Armenia, Belgium, Georgia and Monaco reported that they do not use the system. In line with article 10, the Working Group calls on Parties and committed countries to use notification systems, particularly the IAN System, for sending/receiving notifications regarding transboundary effects of industrial accidents and for testing exercises.

#### E. Mutual assistance

50. The Working Group welcomed the fact that all Parties and the committed country have a point of contact for mutual assistance and many provided clear information about mutual assistance procedures. The Working Group emphasizes the importance of using notification systems, particularly the IAN System, for submitting/receiving mutual assistance requests in case of any industrial accident — not only those with transboundary effects — and recommends that Parties and committed countries ensure that mutual assistance procedures are aligned with article 12.

Available at www.oecd-ilibrary.org/environment/oecd-guiding-principles-for-chemical-accident-prevention-preparedness-and-response-third-edition\_162756bf-en.

<sup>&</sup>lt;sup>24</sup> Although Cyprus and Estonia reported that they did not have a point of contract, they are registered in the IAN System and participated in the 2022 connectivity test.

- 51. The Working Group noted that most countries (except Cyprus, Ukraine, United Kingdom of Great Britain and Northern Ireland) indicated that they were parties to bilateral and/or multilateral agreements for mutual assistance and such agreements can be useful in case of an industrial accident.
- 52. The Working Group noted that the quality of reporting on mutual assistance had slightly improved compared to the ninth round. However, it recommends that sharing examples of mutual assistance procedures from past accidents, especially with transboundary aspects, could enable improvements for Parties and committed countries.

#### F. Scientific and technological cooperation and exchange of information

- 53. The Working Group noted the high quality of reporting on scientific and technological cooperation and exchange of information. Some examples provided for scientific and technological cooperation included:
- (a) Cooperation under the: Convention and/or its Assistance and Cooperation Programme (Germany, Republic of Moldova, North Macedonia, Slovenia, Switzerland); Convention on the Protection and Use of Transboundary Watercourses and International Lakes or river basin commissions (Austria, Germany, Poland); Seveso-III Directive and/or European Union Civil Protection Mechanism (Cyprus, European Union, Luxembourg, Norway, Portugal, Slovakia); Arctic Council (Norway); Trilateral Working Group for the Convention (Czechia, Germany, Poland); and cross-border cooperation programmes (Latvia, Lithuania, Romania);
- (b) Projects under the European Commission-Joint Research Centre (EC-JRC) (Republic of Moldova);
- (c) Involvement in Organisation for Economic Co-operation and Development (OECD) activities, namely the Working Party on Chemical Accidents (Finland, Slovenia, United Kingdom of Great Britain and Northern Ireland);
- (d) Bilateral and/or multilateral agreements (Armenia, Belarus, Bulgaria, Hungary, Lithuania, Serbia, Switzerland, Ukraine).
- 54. Five Parties (Denmark, Monaco, Slovakia, Sweden, United Kingdom of Great Britain and Northern Ireland) responded negatively or indicated "not applicable". Sweden mentioned that its agreements and projects were not explicitly under the Convention. The Working Group encourages Parties and committed countries to continue sharing, through their future reports, information on cooperation, exercises and reports, including transboundary aspects, for learning and innovation purposes and to improve implementation.
- 55. Most Parties and the committed country replied that they had enhanced their institutional cooperation with other national or local authorities responsible for managing disaster risk reduction aspects. Examples included:
- (a) Cooperation under the Seveso-III Directive (many Parties) and European Union institutions (European Union);
  - (b) Joint rescue team in the Lielupe River basin (Latvia);
  - (c) Organization of annual conferences (Sweden);
- (d) National meetings (many Parties) and/or international seminars, such as the European Union Network for the Implementation and Enforcement of Environmental Law seminar on lessons learned from industrial accidents (Austria);
- (e) National working groups or systems for risk analysis, civil protection and/or disaster risk reduction (Germany, Poland, Portugal, Republic of Moldova, Romania, Serbia).
- 56. Five Parties (Belgium, Czechia, Luxembourg, Monaco, United Kingdom of Great Britain and Northern Ireland) responded negatively or indicated not applicable. **The**

Working Group encourages Parties and committed countries to continue sharing information on institutional cooperation as part of their future reports.

57. The Working Group acknowledges that scientific and technical cooperation and information exchange support countries in better understanding approaches to implementation of the Convention and how it applies against emerging risks and within the context of other crises and with new technology. It encourages Parties and committed countries to support related activities, especially regarding transboundary aspects and amongst neighbouring/riparian countries.

#### G. Information to and participation of the public

- 58. The Working Group welcomed the information provided by Parties and the committed country on information to and participation of the public under article 9. It noted that countries used different approaches to ensure that adequate information is given to the public in areas capable of being affected by an industrial accident arising out of a hazardous activity, including the public within the country and in transboundary contexts. Most countries have a legislative basis for public information and related mechanisms and means in place; however, requirements for public authorities and/or operators varied. Most Parties reported that their regimes encompass all elements of information in annex VII and annex V, paragraphs 2 (1)–(4) and (9), and apply to the provision of public information in the event of an industrial accident, as per annex VIII, paragraphs 7–8. Belgium mentioned limitations to public information for security reasons. Denmark, Monaco and Portugal stated that this was not applicable. Georgia responded negatively. Ukraine reported limitations due to martial law.
- 59. The Working Group recognized that information is channelled to the public in different ways for different purposes. Some recurring channels for "hazard and risk information" included campaigns, leaflets, postal mail, social media, training and websites — e.g., text, geographic information systems platforms, interactive maps —. While some channels were permanently available to the general public — e.g., websites —, others targeted the public of concern at required intervals or during procedures — e.g., permitting of hazardous activities —. Some recurring channels for providing "information in the case of an industrial accident" included early warning systems, radio, sirens, smartphone applications, short message service (SMS) messaging, television and websites. Several countries are working to enhance information dissemination (Armenia, Latvia, Luxembourg), including through campaigns (Luxembourg), and update their legislation (Armenia, Belarus, Lithuania, Serbia). Many countries have either established or are developing smartphone applications or SMS messaging services (Austria, Belgium, Estonia, Latvia) and warning system networks (Estonia). The Working Group encourages Parties and committed countries to make use of new technology to enhance public information and recommends linking public information systems for industrial accidents and Natech events to early warning systems, including in line with the Secretary-General's Early Warning for All Initiative.
- 60. The Working Group noted that countries use different approaches to ensure that the public in their countries have opportunities to participate in establishing preventive and preparedness measures related to hazardous activities under the Convention. Many countries indicated that opportunities were embedded in legislation, environmental impact/strategic environment assessments and/or safety report processes. Some approaches entailed consultations, comments periods and hearings. Weaknesses reported included: issues with promoting public involvement (Armenia); legislation incompatible with that of neighbouring countries (Republic of Moldova); lack of public interest (Romania); insufficient public awareness (Portugal, Serbia, Slovenia); and limitations under martial law (Ukraine). Austria mentioned ongoing discussions regarding safety versus transparency due to terrorist attacks/threats on Seveso sites in Europe. Moreover, several Parties indicated that participation opportunities for the public across borders were organized through diplomatic procedures or agreements between countries. The Working Group notes with concern that some countries with hazardous activities indicated that participation opportunities do not extend to the public that could be affected across borders (Armenia) or were not

applicable (Czechia, Georgia), or the guarantee of such participation opportunities was not explicitly specified (Austria, Belarus, Estonia, Slovakia, Switzerland). Moreover, it emphasizes that fulfilment of article 9 (1) on public information does not constitute fulfilment of article 9 (2) on public participation and strongly urges Parties and committed countries to comply with and report on both obligations accordingly.

- 61. The Working Group highlighted that Parties reported different areas of law or policy that provide access to administrative and judicial proceedings to natural or legal persons who are capable of being adversely affected by an industrial accident. These ranged from administrative and environmental law procedures e.g., appealing licensing decisions, environmental impact assessments or safety report decisions to constitutional law e.g., challenging human rights infringements —. Most countries with hazardous activities indicated that such access is guaranteed on a reciprocal and equivalent basis to the public in affected countries or countries capable of being affected by possible transboundary effects, except Belarus not provided by legislation —, Georgia and Serbia only if there is reciprocity —. The Working Group stresses the importance of Parties providing, in accordance with their legal systems and, if desired, on a reciprocal basis, the public that could be adversely affected by the transboundary effects of industrial accidents with access to administrative and judicial proceedings.
- 62. The Working Group noted that most Parties suggested that information to and participation of the public is inclusive of everyone and did not expressly indicate inclusion of specific demographics, which may be exposed to different risks, need specific and distinct information on measures to take in case of an accident to mitigate potential effects, or need specific emergency and response procedures to contain damage to human health. However, the following examples demonstrate targeted approaches:
- (a) Disability inclusion in disaster risk reduction communication and information sharing to vulnerable groups and youth (Armenia);
  - (b) Protection of persons with disabilities in emergency situations (Belarus);
- (c) Mobile telephone-based public warning system ensures alerts to deaf persons (Denmark);
  - (d) Special alerts sent to schools and hospitals (Denmark, Latvia, Slovakia);
- (e) Legal requirement for information to be provided to the public in a manner tailored to the specific needs of the respective addressee group (Germany);
- (f) Local administrations having councils for elderly persons and persons with disabilities that cover industrial accident matters (Norway);
- (g) Guidelines that preparing off-site contingency plans should entail procedures targeting vulnerable groups e.g., persons with disabilities, elderly persons, children (Portugal);
- (h) Information and instructions on contingency plans provided online for persons with disabilities e.g., deaf persons and blind persons (Slovenia);
- (i) Local authorities responsible for disseminating information in different languages to persons with disabilities (Sweden).
- 63. Furthermore, Parties referred to the Convention on the Rights of Persons with Disabilities (Lithuania) and international and regional instruments and strategies (European Union) regarding such inclusivity. The Working Group commends the above examples and encourages Parties and committed countries to practice inclusive public information and participation procedures to ensure effective protection of people and their rights, including in alignment with applicable national and international law.

#### H. Decision-making on siting and land-use planning

64. The Working Group noted with satisfaction that all Parties indicated that they had policies on siting of and significant modifications to hazardous activities in accordance with

- article 7. From many Parties' descriptions (Austria, Belarus, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Lithuania, Norway, Poland, Slovakia, Slovenia, Switzerland), it appears that their policies are adequate and transparent regarding legislation, responsible authorities, territorial planning procedures, environmental assessments and project screening criteria. Poland reported having planned a major policy reform in 2023 that elaborated rules with location and construction criteria, land-use and zoning plans and safety distancing. The Working Group commends these Parties for the policies described and recommends that those countries that do not have any or adequate policies to develop or, as appropriate, update these, taking into consideration the above-mentioned Parties' good practices.
- Most countries reported that their policies take transboundary issues into account. While varying across countries, recurring approaches included special permitting procedures for installations capable of causing transboundary effects, requiring transboundary aspects in environmental impact assessments, informing the public through contact points and holding consultations with or involving affected countries in planning processes. Germany and Portugal indicated that there is no difference between domestic and transboundary issues, so special policies were not needed. Three countries identifying hazardous activities (Armenia, Belarus, Georgia) indicated that their policies do not take transboundary issues into account. The Working Group strongly urges Parties and committed countries to integrate transboundary issues into their siting and land-use planning policies in line with the Convention. It further urges Parties and committed countries, in doing so, to involve the public in the areas capable of being affected, including in neighbouring/riparian countries, and recommends using the ECE Guidance on Land-use Planning, the Siting of Hazardous Activities and Related Safety Aspects (ECE/CP.TEIA/35). As most reporting countries are also Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and Protocol on Strategic Environmental Assessment, the Working Group recommends further alignment with the obligations under those instruments.
- 66. The Working Group welcomed the fact that most Parties reported that their policies achieved the intended results. However, siting and land-use planning policies appear to be complex in many countries, with tasks delegated to multiple levels of governance and across public sectors and, as such, require coordination and expertise. The following needs and/or next steps were reported:
- (a) Knowledge improvement of hazard assessments for local authorities and communities, including through guidelines for hazards extending beyond distances indicated in land-use plans (Austria) and a review of guidance to operationalize principles, compensate for gaps and simplify risk area determination (Estonia);
  - (b) Amendment of legislation to include national security criteria (Belarus);
- (c) Particularly for distancing between new developments and existing industrial facilities: need for new developments to take risks into account (Czechia); lack of a binding requirement for local authorities to carry out planning procedures for urban developments, which can lead to safety distancing issues, so guidance is in development (Germany); need for clarity in land-use planning policy regarding appropriate siting of new developments near existing hazardous activities, so a legislative amendment was made (Lithuania) and guidance was developed in 2022 with recommendations in development (Switzerland); challenges in assessing developments sited too close to hazardous facilities (Slovenia, Sweden);
- (d) Central authority taking a more active role for quantitative risk analysis due to lack of experience in some local planning and building authorities making risk-based decisions and lack of monitoring of hazardous activities at the municipal level (Norway);
- (e) Development of regulations and methods for determining safety distances to standardize land-use planning rules (Poland);
- (f) Need for administrative capacity and to address financial restraints affecting implementation of laws (North Macedonia);
  - (g) Need for regulation of criteria for decision-making processes (Portugal);

- (h) Structural changes to address the lack of an institutional framework for the implementation of legislation (Republic of Moldova);
- (i) National meetings with mayors to reconcile hazardous facilities existing prior to implementation of the Convention and the Seveso-III Directive, including for safety distancing and communication to local communities (Romania);
- (j) Amendments of rules to transpose land-use planning policies for hazardous activities, define competent authorities' obligations and develop a methodology for determining environmental conditions and measures (Serbia);
- (k) Challenges in implementing siting policies and needs for more awareness raising, flexibility and clarity of processes for authorities to intervene (Slovenia);
- (l) Development of a road map to address challenges in the Convention's implementation (Ukraine).
- 67. The Working Group invites Parties to exchange information and knowledge on these needs and next steps. It notes with concern the recurring challenges of managing risks associated with new or existing developments sited too close to hazardous facilities and vice versa and of the related need for updating safety distancing guidelines. The Working Group recommends that Parties and the secretariat cooperate in addressing these challenges over the next biennium, including in view of the increasing number of industrial facilities being proposed near populations for energy transition purposes.
- 68. Many countries indicated that their industrial safety and land-use planning procedures were coordinated, either formally or on a case-by-case basis. The Working Group noted that such coordination is not consistent or comparable across countries, and coordination in some countries is not clearly defined (Czechia, Georgia, Lithuania, Republic of Moldova, Romania, Slovakia, Slovenia, Sweden) or was reported as not applicable (Denmark, Monaco). The Working Group draws attention to the importance of fostering such coordination, given that industrial safety and land-use planning provide complementary measures for protecting people and the environment against industrial accidents. It urges Parties and committed countries to develop and monitor coordination guidance and mechanisms. Many countries also indicated that industrial safety experts and land-use planners are required to consult and cooperate with each other. The Working Group noted that this is carried out differently across countries, for example, during environmental impact assessments (Georgia), through committees (Romania, Ukraine) or consultations (many countries). However, this is not legally required in some countries, while it may be done in practice (Czechia, Portugal, Slovenia, Sweden), or was reported as not applicable (Monaco). The Working Group encourages cooperation between experts from different fields as a means for ensuring more informed policy and decision-making.

# II. Good practices

69. The Working Group welcomed the many good practices provided in the reports submitted by the deadline focused on prevention, preparedness and response and identification and notification of hazardous activities. Fewer good practices were reported on decision-making on siting, information to and participation of the public, scientific and technical cooperation and exchange of information and mutual assistance. Less than 40 per cent of the good practices included transboundary aspects. The Working Group identified additional good practices in other sections of the reports. It encourages Parties and committed countries to consult the good practices on the Convention's website, <sup>25</sup> many of which are available in English, and those presented at the Working Group's Special Session: Seminar on good practices and lessons learned in implementing the Industrial

<sup>25</sup> See www.unece.org/environmental-policy/conventions/industrial-accidents/envteiaguidelines/tablesof-good-practices.html. Additional good practices from reports submitted late may be added later.

Accidents Convention (Geneva (hybrid), 3–4 February 2022)<sup>26</sup> and to consider their application to overcome weaknesses and improve implementation.

70. The Working Group recommends making good practices available to a broader audience, including through a forthcoming guide on good practices on implementation of the Convention and the organization of seminars, to strengthen the Convention's implementation.

#### J. Reporting on past industrial accidents

- 71. The Working Group noted that only Slovenia reported an accident capable of causing transboundary effects within the reporting period. A chemical reaction of incompatible substances occurred in a storage tank, leading to an explosion and fires. Slovenia sent Croatia an early warning notification via the IAN System, later mentioning difficulties in completing the form. Croatia confirmed receipt after two weeks. The Working Group commends Slovenia for controlling the accident, notifying Croatia via the IAN System and reporting the accident. It encourages Parties and committed countries to make full use of the IAN System and provide financial support for its upgrade and maintenance.
- 72. The Working Group noted that some countries (Germany, Slovenia, North Macedonia) did not report any accidents capable of causing transboundary effects, but indicated that they had contributed to the EC-JRC eMARS and/or eNatech databases. The European Union provided information on its lessons learned bulletin and Germany described its process for capturing lessons learned. The Working Group invites Parties and committed countries to share information with neighbouring/riparian countries on industrial accidents and Natech events, including those not capable of causing transboundary effects, and through relevant databases.

# III. Areas and activities for follow-up

- 73. The Working Group identified recurring areas where improvements could be made and activities organized to strengthen implementation. It recommends that the following steps be taken in coordination with relevant stakeholders and invites Parties to take the lead and/or contribute to these steps in the biennium 2025–2026 and beyond:
- (a) Development of the guide on good practices in implementing the Convention to cover all working areas, address weaknesses and build on past ECE guidance (e.g., Guidance on Land-use Planning, the Siting of Hazardous Activities and Related Safety Aspects ((ECE/CP.TEIA/35); Checklist for Contingency Planning);
- (b) Use of the *Implementation Guide for Central Asia on the UNECE Convention* on the *Transboundary Effects of Industrial Accidents* (ECE/CP.TEIA/39), including by countries facing implementation challenges beyond Central Asia;
- (c) Development of guidelines to further facilitate identification of TMFs as "hazardous activities";
  - (d) Exchange of knowledge and development of guidelines for safety distancing;
- (e) Building on the *Joint OECD/UN/JRC Guidance on Managing Natech Risks*, development and sharing of existing approaches to managing industrial safety against individual types of natural hazards;
- (f) Development of joint and/or harmonization of off-site contingency plans and testing, updating and reviewing contingency plans with neighbouring/riparian countries;

<sup>26</sup> See https://unece.org/environmental-policy/events/wgi-special-session-seminar-good-practices-and-lessons-learned.

- (g) Exchange of good practices regarding information to and participation of the public, including in view of new technologies and early warning systems, and approaches to ensure inclusivity of population demographics exposed to specific risks;
- (h) Organization of tailor-made assistance activities for member States with economies in transition and to share good practices at all stages of implementation.
- 74. The Working Group recommends that Assistance and Cooperation Programme beneficiaries submit requests or project proposals for assistance activities, if so desired, to address identified weaknesses or challenges. It invites all Parties and committed countries to contact the Working Group, through the secretariat, and to make use of the Convention's interactive network on implementation to discuss the specific implementation aspects under the Convention.

# IV. Overall conclusions and recommendations

- 75. The Working Group expressed appreciation for the Parties and committed country that provided data on the Convention's implementation. These data enable the Conference of the Parties to review the Convention's implementation and carry out advisory functions aimed at strengthening Parties' ability 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 (art. 18 (2)), among other things.
- 76. Following the analysis presented in section III, the Working Group has drawn overarching conclusions and recommendations regarding the Convention's implementation:
- (a) With implementation noticeably improving since the ninth round and appearing to be on an upward trajectory, the Convention proves to be an effective international legal instrument for developing national law and policy on industrial safety, environmental protection and international cooperation, and for achieving related Sendai Framework priorities for action and Sustainable Development Goals;
- (b) Further awareness should be drawn to the Convention's scope, particularly how substantive provisions apply to either "industrial accidents", "industrial accidents capable of causing transboundary effects" or "hazardous activities" (as per the Convention's definitions), and in view of fast-evolving megatrends and disruptive global emergencies e.g., climate change, the energy transition, public health emergencies —;
- (c) As the Convention crosses various legal and policy domains e.g., chemicals, climate change, disaster risk reduction, emergency services, energy, environment, health, labour, transport, water —, national coordination and cooperation across authorities and agencies is essential for ensuring strong and effective implementation;
- (d) Transboundary cooperation is a unique feature of the Convention and should be strengthened in the implementation of all working areas to ensure more effective prevention of, preparedness for and response to industrial accidents;
- (e) As the identification of hazardous activities remains challenging for many countries, approaches to assessing hazardous substances and mixtures, including for TMFs, and possible transboundary effects need to be enhanced and streamlined at the international and national levels;
- (f) New technologies provide opportunities for establishing more effective channels to provide information to the public capable of being adversely affected by industrial accidents, such as through early warning systems, interactive maps, mobile telephone applications, websites and beyond, and mechanisms to facilitate public participation in decision-making, all of which have the potential to be made available across borders;

- (g) Given the recurring challenges of managing risks associated with new or existing developments sited too close to hazardous facilities and vice versa, as well as new and expanded uses of hazardous substances and mixtures for the energy transition, the development of new guidelines for siting and land-use planning procedures, specifically elaborating safety distancing criteria, would be beneficial for industrial safety and protecting people and the environment;
- (h) Exchanges of information, knowledge and good practices in implementation, including for all of the Convention's working areas, can foster enhanced international cooperation, innovation and progress and are a means to find solutions to the challenges reported;
- (i) Given that the Convention lacks a compliance mechanism, timely reporting on and monitoring of implementation remain cornerstones for ensuring that Parties comply with their obligations, committed countries fulfil their commitments, weaknesses and good practices are identified, and relevant assistance activities are developed.
- 77. The Working Group expresses the hope that Parties and committed countries will attain higher levels of implementation moving forward and more comprehensively tackle the issues that the Convention intends to address. It recommends that Parties and committed countries use this report's findings and recommendations to achieve such progress.

Annex

# Identification and notification of hazardous activities showing changes since ninth report

						Progre.	ss stage of the mecha	_	
Parties and non- Parties	Ninth report – No. of hazardous activities	Tenth report – No. of activities with a hazardous substance meeting an annex I threshold	Tenth report – No. of hazardous activities, i.e. with a hazardous substance meeting an annex I threshold and capable of causing transboundary effects	Tenth report – No. of tailings management facilities considered hazardous activities under Convention	Notifications made to all affected Parties	Identification of hazardous activities	Notification with neighbouring countries	Consultation with neighbouring countries	Working Group comments
Albania	7 <sup>d</sup>								No report submitted <sup>a</sup>
Armenia	1	19	1	23	No	2	3	2	Provided further data on HAs. Working Group follow-up with Armenia for clarification on number of TMFs it reported as HAs.
Austria	46	169	46	0	Partially	6	6	6	Provided further data on HAs
Azerbaijan	10 <sup>d</sup>								Report submitted late: 15 January 2024 <sup>b</sup>
Belarus	7		3	0	Yes	6	6	5	Provided further data on HAs
Belgium	6	401	3	0	Yes	6	6	6	
Bosnia and Herzegovina	$0^{d}$								No report submitted <sup>a</sup>
Bulgaria	n/a	83	0	0		6			
Croatia	1								Report submitted late: 8 July 2024 <sup>b</sup>
Cyprus	n/a	9	0	0	n/a	6	n/a	n/a	

						Progre	ess stage of the mech	unism for:	_
Parties and non- Parties	- Ninth report – No. of hazardous activities	Tenth report – is No. of activities with a hazardous substance meeting an annex I threshold		Tenth report – No. of tailings management facilities considered hazardous activities under Convention	Notifications made to all affected Parties	Identification of hazardous activities	Notification with neighbouring countries	Consultation with neighbouring countries	Working Group comments
Czechia	40	210		0	Yes	2	6	6	Provided further data
Denmark	$0^{d}$	0	0	n/a	n/a		6		
Estonia	$0^{d}$	20	1	0	Yes	6	6	6	Provided further data on Has
European Union	5192*	4879	n/a	n/a	n/a	6	5 and 6	5 and 6	Commission does not hold some of data requested
Finland	1	1	1		Yes	6	6	6	Provided further data on HA
France	54								Report submitted late: 27 February 2024 <sup>b</sup>
Georgia <sup>c</sup>	$2^{d}$	2				3	5	5	Provided further data on HAs
Germany	184	1178	186	0	Yes	6	6	6	Provided further data on HAs
Greece	0								No report submitted <sup>a</sup>
Hungary	15	118	16	0	Yes	5	5	5	Provided further data on HAs
Italy	n/a								Not included in analysis
Kazakhstan									No report submitted <sup>a</sup>
Kyrgyzstan <sup>c</sup>									Report submitted late: 14 November 2023 <sup>b</sup>
Latvia	n/a	n/a	n/a	n/a	n/a	6	6	6	
Lithuania	2	2	Not clear	0	Yes	6	1	1	Provided further data on HAs

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			Progress stage of the mechanism for:				anism for:	_	
Parties and non- Parties	Ninth report – No. of hazardous activities	Tenth report – No. of activities with a hazardous substance meeting an annex I threshold		facilities considered hazardous activities under	Notifications made to all affected Parties	Identification of hazardous activities	Notification with neighbouring countries	Consultation with neighbouring countries	Working Group comments
Luxembourg	$1^{d}$	8	2	0	Yes	6	6	6	Provided further data on HAs
Monaco	n/a	0	0	0	n/a	n/a	n/a	n/a	
Montenegro									Report submitted late: 7 December 2023 <sup>b</sup>
Netherlands	54 <sup>d</sup>								Report submitted late: 21 December 2023 <sup>b</sup>
North Macedonia	19	20	Transboundary effects not yet identified	2	No	5	5	5	Transboundary effects not yet identified
Norway	n/a	96	0	n/a	n/a	6	n/a	n/a	
Poland	18	30	30	0	Yes	6	6	6	Provided further data on HAs
Portugal	n/a	0				6			
Rep. of Moldova	8*	12	3	0	Yes	5			Provided further data on HAs
Romania	7	96	6	0	Yes	6	5	6	Provided further data on HAs
Russian Federation	13								No report submitted <sup>a</sup>
Serbia	5	48	6		no	5	5	4	Proposed to obtain additional information for three facilities to determine possible transboundary effects

						Progress stage of the mechanism for:			_
Parties and non- Parties	Ninth report – No. of hazardous activities	Tenth report – No. of activities with a hazardous substance meeting an annex I threshold	substance meeting an annex I threshold and	Tenth report – No. of tailings management facilities considered hazardous activities under Convention	Notifications made to all affected Parties	Identification of hazardous activities	Notification with neighbouring countries	Consultation with neighbouring countries	Working Group comments
Slovakia	9	45	11	0	Yes	6	6	5	Provided link to database with further information on HAs
Slovenia	7	29	6	None	Yes	6	5		Provided further data on HAs
Spain	n/a								No report submitted <sup>a</sup>
Sweden	1	203	1	0	Yes	6	6	6	Provided further data on HA
Switzerland	34	29	29	None	Yes	6	6	6	Provided further data on HAs
Tajikistan <sup>c</sup>									No report submitted <sup>a</sup>
Ukraine		81	No	No		6	4	4	
United Kingdom	5	0	3 bordering Ireland (non- Party)	n/a	Yes	6	6	6	
Uzbekistan <sup>c</sup>									No report submitted <sup>a</sup>

Abbreviations: HA, hazardous activities;

Note: Empty cell indicates either no report submitted by deadline or no answer provided. Where n/a appears, there is no HA or no HA has yet been identified.

<sup>&</sup>lt;sup>a</sup> By forty-ninth Working Group meeting (Geneva, 31 January–1 February 2024).

<sup>&</sup>lt;sup>b</sup> In accordance with decision 2016/2, the Working Group assessed only national reports received within deadline (31 October 2023).

<sup>&</sup>lt;sup>c</sup> Non-Party.

<sup>&</sup>lt;sup>d</sup> These data were not included in ninth report on implementation as respective national implementation report was not submitted by deadline.