United Nations ECE/CP.TEIA/2012/3



# **Economic and Social Council**

Distr.: General 23 August 2012

Original: English

# **Economic Commission for Europe**

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

#### **Seventh meeting**

Stockholm, 14–16 November 2012 Item 5 (a) of the provisional agenda Implementation of the Convention: activities of the Working Group on Implementation and the sixth report on the Convention's implementation

# Sixth report on the implementation of the Convention (2010–2011)

#### Report by the Working Group on Implementation

#### Summary

At its first meeting, the Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents established the Working Group on Implementation to, among other tasks, prepare for each of its meetings a report on the implementation of the Convention on the basis of individual national reports (ECE/CP.TEIA/2, annex III, decision 2000/2 and CP.TEIA/2000/11, para. 4).

The present document contains the sixth such report, prepared on the basis of national reports on implementation of the Convention in the biennium 2010–2011.

The Conference of the Parties will be invited to consider and adopt the sixth report on implementation.

#### ECE/CP.TEIA/2012/3

# Contents

			Paragraphs	Page
	Intr	oduction	1–6	3
I.	Rep	orting	7–21	4
II.	Ove	erall assessment of the implementation of the Convention	22-31	6
III.	Pric	ority areas for follow-up	32–35	8
IV.	Det	ailed analysis of national implementation reports	36–116	9
	A.	Policy for implementation of the Convention	36–57	9
	В.	Identification of hazardous activities with the potential to cause transboundary effects	58–65	13
	C.	Prevention of industrial accidents	66–72	15
	D.	Emergency preparedness	73–81	16
	E.	Scientific and technological cooperation and exchange of information	82-91	17
	F.	Participation of the public	92-101	18
	G.	Decision-making on siting	102-115	20
	H.	Reporting on past industrial accidents	116	22

#### Introduction

- 1. In accordance with the Convention on the Transboundary Effects of Industrial Accidents, Parties have an obligation to report on the Convention's implementation (art. 23) and the Conference of the Parties shall review the state of implementation (art. 18, para. 2 (a)). To assist in the review process, the Conference of the Parties established the Working Group on Implementation and adopted its terms of reference (ECE/CP.TEIA/2, annex III, decision 2000/2, para. 4, and appendix).
- 2. At its sixth meeting (The Hague, 8–10 November 2010), the Conference of the Parties adopted the fifth report on implementation (ECE/CP.TEIA/2010/3). It also elected the following persons to serve as members of the Working Group on Implementation for the term lasting until its seventh meeting: Ms. Anahit Aleksandryan (Armenia); Mr. Vadim Lozhechko (Belarus); Mr. Hrvoje Buljan (Croatia); Mr. Massimo Cozzone (Italy); Mr. Gunnar Hem (Norway); Ms. Svetlana Stirbu (Republic of Moldova); Mr. Francisc Senzaconi (Romania); Mr. Tomas Trcka (Slovakia); Ms. Ann-Sofie Eriksson (Sweden); and Ms. Sandra Ashcroft (United Kingdom of Great Britain and Northern Ireland). The Working Group on Implementation elected Mr. Gunnar Hem as its Chair for the period 2011–2012.
- 3. Also at its sixth meeting, the Conference of the Parties requested the Working Group on Implementation to review the reporting guidelines before the sixth round of reporting and to adjust them as necessary to improve their clarity, inserting references to the document containing the indicators and criteria<sup>1</sup> where appropriate.
- 4. Following the decision by the Conference of the Parties, the Working Group on Implementation improved the reporting guidelines and included the reference to indicators and criteria for the Convention in both the reporting format and the guidelines. The Bureau approved the modification of the format and guidelines as prepared by the Working Group.
- 5. The Working Group held five meetings in the biennium 2010–2011. Four meetings were organized jointly with the Bureau of the Conference of the Parties and were primarily aimed at discussing activities under the Assistance Programme (Geneva, Switzerland, 20–21 January 2011; Geneva, 30 June 2011; Bonn, Germany, 10–11 November 2011; Edinburgh, United Kingdom, 29 February–1 March 2012). A separate meeting of the Working Group was held to discuss the evaluation of the national implementation reports (Geneva, 29–30 March 2012).
- 6. An open-ended task force, the Core Group, was established under the lead of the Chair of the Working Group with the aim of reviewing the self-assessments provided by countries taking part in the Convention's Assistance Programme following the implementation of the strategic approach.<sup>2</sup> The Core Group reviewed the self-assessments received from countries and provided feedback through the secretariat. One of the findings of the Core Group was that self-assessments based on the indicators and criteria, when carried out well, could also be of support in the preparation of the implementation reports.

Benchmarks for the implementation of the Convention on the Transboundary Effects of Industrial Accidents (ECE/CP.TEIA/2010/6).

<sup>&</sup>lt;sup>2</sup> The strategic approach for the Assistance Programme (ECE/CP.TEIA/2008/5) was adopted by the Conference of the Parties at its fifth meeting (ECE/CP.TEIA/19, para. 50 (a)).

## I. Reporting

- 7. The secretariat initiated the sixth reporting round on the implementation of the Convention by sending a letter on 9 September 2011 to all Parties and other United Nations Economic Commission for Europe (ECE) member countries. The letter was accompanied by the revised reporting format and guidelines in English, French and Russian.
- 8. Parties and those ECE member countries that adopted the commitment declaration at the High-level Commitment Meeting (Geneva, 14–15 December 2005) were required and other ECE member countries were invited to submit up-to-date information on their implementation of the Convention to the secretariat before 31 January 2012.
- 9. At the time of the Working Group on Implementation's eighteenth meeting (Geneva, 29–30 March 2012), 39 ECE member countries and the European Union (EU) had ratified, accepted or acceded to the Convention.
- 10. The Working Group based its sixth report on the implementation of the Convention on the national reports obtained from the following 37 Parties: Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom. Greece submitted its report on implementation only in May 2012 and the Working Group could not review it.
- 11. The EU was not expected to submit an implementation report as its individual member States are required to report.
- 12. For the first time since its accession to the Convention, on 19 May 2009, Montenegro submitted its implementation report.

#### **Conclusions and recommendations**

- 13. The Russian Federation had not delivered its national implementation report by the time the present document was finalized. The Working Group on Implementation noted with concern that the Russian Federation thus had not complied with the Convention's provision requiring reporting on implementation for three consecutive reporting rounds, despite the statement given by the delegate of the Russian Federation at the sixth meeting of the Conference of the Parties. Again, the Working Group on Implementation invites the Conference of the Parties to stress the issue of timely reporting.
- 14. The Working Group noted with disappointment that, of the six countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe not yet Parties (Bosnia and Herzegovina, Georgia, Kyrgyzstan, Tajikistan, Ukraine and Uzbekistan) but participating in the Assistance Programme and having made reporting commitments at the High-level Meeting of 2005, none had submitted the implementation report before the present report was finalized. **The Working Group expresses concern that committed countries did not report for the current round.**
- 15. The letter initiating the sixth reporting round contained a list of countries that were requested to provide either because they had not submitted the implementation report in the previous round, or because they had submitted a report containing insufficient

information to allow for assessment — <sup>3</sup> a full report containing replies to all the questions in the current reporting round. The remaining Parties were requested to provide information on updates or progress made in the previous biennium. The Working Group noted that of those countries required to make a full report in the current round, the quality of reporting had improved. Nonetheless, the Working Group invites the Conference of the Parties to keep on encouraging and monitoring that adequate information is provided through the national implementation reports. The Working Group invites the Conference of the Parties to stress the issue of timely and high-quality reporting to Parties and committed countries.

- 16. The Working Group understands that non-Parties may encounter more difficulties in complying with the reporting commitment than Parties. Nonetheless, the respective Governments committed to reporting at the High-level Meeting of 2005, and it is therefore expected that the commitment be sustained. The Working Group therefore invites the Conference of the Parties to remind these countries about their commitment to reporting and to mandate the Bureau to explore reasons and solutions for the situation.
- 17. The Working Group positively noted a general improvement in the quality of reporting received. Several countries had made their report clearer and more readable than before, and several had added more information making it therefore more complete. In particular, progress was noted in the reports from countries that needed to provide a complete report in this round.
- 18. In general terms the Parties sent reports with adequate information to the different questions. However, from time to time the answers indicated misunderstandings and that the guidelines for reporting had not been followed properly. Some reporting countries did not seem to have a full understanding of the implications of all the working areas under the Convention. The Working Group advocates a more extensive use of the guidelines in future reporting rounds to avoid misunderstandings and secure more correct reporting. Furthermore, the Working Group still sees a need for more work to be carried out towards a better understanding of the contents and implications of the Convention, especially in the case of countries with economies in transition.
- 19. The information on competent authorities and focal points was found not to be always up to date. The Working Group calls on Parties to ensure that the contact details of competent authorities (art. 17 of the Convention) and of focal points are constantly updated through the secretariat. In addition, the Working Group recommends inserting in the reporting format an additional space for information on the points of contact.
- 20. Despite the general improvement in the quality of reporting, there was still room for improvement. In particular, countries are encouraged to describe their adopted policies and measures in greater detail even if in their countries there are no activities under the scope of the Convention. This would facilitate the dissemination of good practices between ECE countries. It is recommended that countries with an advanced level of implementation, even if they do not have installations under the Convention, describe their systems so that good practices are disseminated across the entire ECE region. The Working Group recommends that consideration be given on how it and the secretariat may identify issues of common interest and facilitate such dissemination.

The Parties needing to reply fully to the questions of the implementation report were: Albania, Armenia, Azerbaijan, Denmark, Finland, Greece, Kazakhstan, Luxembourg, Montenegro, Portugal, Russian Federation and the former Yugoslav Republic of Macedonia.

21. In the present reporting round the Working Group noted that Slovenia was the only country not a beneficiary of the Assistance Programme that had used the indicators and criteria and that this was useful for the overall quality of the reporting. At the same time, the Working Group noted that some countries that were beneficiaries of the Assistance Programme found it useful to apply the indicators and criteria when replying to some of the questions. The Working Group encourages countries participating in the Assistance Programme to use the indicators and criteria and the result of their self-assessment in preparing the implementation reports. This would allow a better insight into the present state of implementation and avoid duplication of work. Furthermore, the Working Group strongly recommends all ECE reporting countries to use the indicators and criteria when assessing the effectiveness of the policies implemented.

## II. Overall assessment of the implementation of the Convention

- 22. Based on the replies provided in the implementation reports, the Working Group assessed that the level of implementation of the Convention by Parties was steadily improving. Given the fact that the Convention deals mainly with the transboundary effects of industrial accidents, the Working Group also gave attention to the policies and measures adopted in that respect. It was noted that, in general terms, it was rare to find transboundary aspects explicitly regulated through legislation. Those aspects were more often tackled in practice or through bi- or multilateral agreements by Parties.
- 23. The Working Group was of the opinion that the general improvement in reporting was due to a better and more comprehensive guidance document. As requested by the Conference of the Parties at its sixth meeting, the previous ambiguities in the guidance documents have been eliminated and reference has also been made to the indicators and criteria of the strategic approach, when relevant. Beneficiaries of the Assistance Programme have also quite recently gone through the exercise of making the first self-evaluations according to the strategic approach, which may also have facilitated reporting, as a positive side-effect.

#### **Conclusions and recommendations**

- 24. It was positively noted that the majority of the reporting Parties that were beneficiaries of the Assistance Programme had showed an increased awareness of the different aspects covered by the Convention and of the gaps in formal and practical implementation faced by individual countries. It is the opinion of the Working Group that this progress is largely due to the use of the indicators and criteria by the countries covered by the Assistance Programme and also to the participation of those countries in assistance activities not under the auspices of ECE. The Working Group would like to remind countries that the mechanism outlined in the strategic approach would also be useful when requesting assistance from other organizations outside the Convention.
- 25. As in previous reporting rounds, the Working Group could see from the reports that the enforcement of the policies introduced is one of the most important issues for implementing the Convention. This is a challenge for both countries in transition as well as the more advanced countries. **The Working Group therefore recommends once more that more attention is paid to this aspect in the future**. This work is even more important in this period of economic crisis, when the calls for budget cuts could be erroneously interpreted as calls to reduce attention to important aspects of industrial safety. In this respect the Working Group welcomes the outcome of the workshop on cost-effectiveness for major accidents prevention (Warsaw, 12 October 2011).

- 26. The Working Group further observes that cooperation between authorities within countries is not always at the desired level. Countries should therefore carefully address this aspect, which is a prerequisite for an effective implementation of the Convention. In this regard, attention should be paid to the coordination between central, regional and local authorities, e.g., those related to land-use planning and the siting of hazardous installations.
- 27. In the fifth report on implementation, the Working Group recommended that Parties put in place an operational system for identification of hazardous activities, including a mechanism for review or revision. That recommendation seems to have been generally followed up. It was noted that there had been changes in the number of hazardous activities in almost all the reporting Parties with installations falling under the scope of the Convention. That fact and the explanations provided in the national reports underpinned the impression that the mechanisms in use in the majority of the countries for the identification of hazardous activities were functioning and regularly used. The Working Group encourages Parties and committed countries to continue implementing an effective system for the identification of hazardous activities and calls for Parties and committed countries not having totally implemented such a system yet to continue with their efforts towards this result.
- 28. The Working Group sees the need for many countries to improve their follow-up of notification of hazardous activities. Good practices should be shared between countries and in particular with countries participating to the Assistance Programme. Countries still confused the notification of hazardous activities with notification of industrial accidents (in the event of an accident). This may be an item for clarification and could be addressed by the Working Group on Development.
- 29. Emergency preparedness is assessed to be at an adequate level, especially in the national context. As in previous rounds, the Working Group observed that there was still quite a margin for improvement when it comes to preparedness in a transboundary context. Although Parties and committed countries are at different levels on this aspect, the Working Group recommends that cooperation be increased between countries in the transboundary context, taking into account that transboundary cooperation also needs to be on a practical level. In fact, as indicated in some of the national implementation reports (e.g., the Netherlands), failures or gaps may be identified when jointly exercising contingency plans in a transboundary setting. Therefore the Working Group calls on Parties to strengthen their common activities also by performing tests and exercises. The Working Group would welcome the results of the work of the Joint Expert Group on Water and Industrial Accidents to develop a sound methodology for effective joint management of transboundary emergencies involving international waterways.
- 30. The Working Group appreciates the work undertaken by many Parties concerning public participation in and informing the public about the processes of establishing and implementing preventive and preparedness measures. Although some improvements are visible compared to the fifth report on implementation, and authorities indicated that they are continuously looking for more effective ways to inform the public, also in current reporting round Parties reported that the public does not take advantage of all the possibilities to gather information on industrial safety. **The Working Group strongly reiterates the importance of creating and maintaining mechanisms for informing the public. In this context, countries should take advantage of the future activities aimed at the implementation of the Seveso III Directive.<sup>4</sup> The Working Group also noted that several Parties, when replying to the question concerning making information available to**

Directive of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC.

the public, understood it only to relate to information in the event of an accident. More work should be carried out to improve the awareness of Parties in this regard. The guidelines and the report should clarify that provision of information to the public is intended to cover a wider scope than just in the event of an accident.

31. Although for the second consecutive reporting round the Working Group sees improvements in policies and procedures for siting and land-use planning, the issue remains a difficult area under the Convention. One of the reasons for the enhanced awareness on the problems linked to siting seemed to be the result of the joint seminar on land-use planning around hazardous industrial sites (November 2010). Nonetheless, it is still evident that the topic is difficult also for countries with more experience in this regard. The Working Group expects that more work will be done by EU countries on the issue following the implementation of the Seveso III Directive and calls for the EU and its member States to organize jointly with the Convention activities from which also non-EU countries could benefit.

## III. Priority areas for follow-up

- 32. The Working Group on Implementation identified several areas where countries assessed that improvements could be made. The list below contains such areas, where activities could be organized under the Convention, possibly in cooperation with other organizations. It should be noted that the areas are listed for the sake of completeness and because the issues have been highlighted by one or more countries. The Working Group is aware that it will not be possible to address them all in the coming biennium:
- (a) Despite good preparedness and response at the national level in the majority of the reporting Parties, there is a need to enhance transboundary cooperation, especially through transboundary exercises and testing in a bilateral and multilateral context;
- (b) Exchange of information and public participation remain areas where countries would benefit from exchange of good practices and guidelines. The Working Group recommends working on this issue in conjunction with the European Commission and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention);
- (c) Land-use planning and siting are difficult issues and Parties would welcome receiving guidance and good practices and exchanging experiences. Also in this case it is recommended that the Convention joins forces with the European Commission;
  - (d) Enterprises should establish a safety culture;
- (e) A major hazards control system should be established in countries, and followed up, including:
  - (i) A legislative base and enforcement mechanisms;
  - (ii) Cooperation mechanisms for competent authorities at the national level (between central authorities and between central, regional and local authorities);
- (f) Risk management in general and methodologies for risk assessment are often weak elements in industry and in public authorities and need to be addressed in a systematic and appropriate manner;
- (g) The use of identical terms to describe notification of hazardous activities to neighbouring countries (art. 4 of the Convention) and notification of industrial accidents (art. 10) has created misunderstandings and confusion. The Working Group recommends that the wording is changed to enhance clarity in the text of the Convention;

- (h) Countries participating in the Assistance Programme should continue working on strengthening the implementation of the Convention, applying systematic and continuous self-assessments and through the establishment of action plans under the strategic approach. Especially recommended is work towards an enhanced awareness of the more basic elements of the Convention and its working areas and their implications;
- (i) Suitable ways to ensure exchange of good practices among all Parties should be explored.
- 33. The Working Group also recalls that under the long-term strategy for the Convention (ECE/CP.TEIA/22, annex I) under section II on "Exchange of information", any ECE country is invited to contact the Working Group, through the secretariat, to communicate the need to discuss the implementation of specific aspects under the Convention. However, under the Assistance Programme, project proposals and assistance activities should stem from the application of the strategic approach with self-assessments and subsequent national action plans.
- 34. At their joint meeting in Edinburgh, the Bureau requested the Working Group to consider the conclusions and recommendations from the workshops and seminars organized in 2011–2012 and to identify the priority areas that needed to be implemented in the biennium 2013–2014. The Working Group identified the recommendations from the workshops and seminars and created a priority list as follows:
  - (a) Compilation of a guide on the methodology for hazard rating;
- (b) Elaboration of criteria or standards for safety and land-use planning incorporating long-term trends;
- (c) Exchange of experience and good practices among the Parties and promotion of the continuous organization of bilateral exercises for preparedness;
- (d) Addressing the risk of complacency in ensuring prevention and maintaining a high level of safety.
- 35. The Working Group recommended that the activities be carried out in coordination with relevant stakeholders.

## IV. Detailed analysis of national implementation reports

#### A. Policy for implementation of the Convention (questions 1–2)<sup>5</sup>

- 36. Although, in the sixth reporting round, many countries were only expected to provide updates on previous reports, most countries provided comprehensive descriptions of their policies for industrial accidents prevention, preparedness and response together with lists of relevant legislation, administration and procedures. The Working Group noted positively that some countries that had not presented adequate reports during the last reporting round (Finland, Denmark, Luxembourg and Portugal), had made full reports in the present round, with sufficient information for a qualified review by the group.
- 37. The Working Group particularly noted that in the present reporting round a number of countries that were beneficiaries of the Assistance Programme had provided

<sup>&</sup>lt;sup>5</sup> The reporting format and guidelines for the sixth round of implementation (and previous rounds) are available on the Convention website under the rubric "reports on the Implementation of the Convention" (http://www.unece.org/env/teia/wgimplementation.html).

comprehensive and high-quality contributions, and generally there had been a marked improvement in reporting by those countries. However, there were also examples where the reporting did not properly address the requested information, e.g., where countries provided extensive listings of legislation at different levels of seemingly minor relevance for the implementation of the Convention.

- 38. Also in the sixth reporting round, the EU member countries mainly referred to the mechanisms and legislation adopted for the implementation of the Seveso II Directive. Some countries indicated that they were not considering making major adjustments to administrative measures and legislation until the adoption of the new Seveso III Directive.
- 39. Many countries aiming at membership in or closer association with the EU were in the process of approximating to EU legislation and control procedures, which was considered a positive development. Generally, the Working Group also noted that the trend from the fifth reporting round, indicating fewer differences between ECE regions regarding the level of formal implementation, prevailed. The Working Group saw many reasons for that, not least the Assistance Programme and the follow-up of the strategic approach.
- 40. All reporting countries appointed competent authorities relating to the Convention, usually their environment ministries. It was still the case that most countries had more than one competent authority, reflecting the division of responsibilities among the national authorities. All countries seemed to have coordinated the reporting between relevant national competent authorities, although some reported that coordination between competent authorities was difficult (e.g., Lithuania). However, the national administrative set-ups and the control mechanisms adopted for enforcement of legislation for the implementation of the Convention at different levels varied considerably between countries, a fact that might be largely due to differences arising from national traditions, legislation and historical contexts. Some countries reported that they had recently made changes in their administrative set-up (e.g., Hungary, Lithuania, Croatia, Netherlands).
- 41. Considering the number of authorities involved in the practical follow-up of policies and legislation implementing the Convention, coordination at the national level is essential. Many countries have therefore established coordination mechanisms and formal agreements between different national authorities and established special procedures for such cooperation and coordination (e.g., Austria, Czech Republic, Denmark, Norway, Serbia, Spain, United Kingdom), and some indicated that there was room for further improvement.
- 42. Most countries seemed to be satisfied with their legislation and administrative systems, even if some countries provided indications of weaknesses or of potential for improvement. This particularly related to enforcement and follow-up of the Convention's requirements in practice. Some reports were still lacking in the description of the inter-relationship between legislation and control mechanisms.
- 43. Many countries (e.g., Armenia, Austria, Czech Republic, Kazakhstan, Lithuania, Norway, United Kingdom) have issued further guidance documents for different topics, such as on land-use planning, inspection, auditing of safety management systems and scenarios for emergency planning, and criteria for the limit of tolerability from hazardous sites. This was a positive development, and all Parties to the Convention should take note of this and explore possibilities for national adaptations to such publications.
- 44. A number of countries concluded formal agreements with neighbouring States relating to prevention, preparedness and response or mutual assistance, but some report that

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances.

differences in legislation, language and technical terms and procedures were a challenge. Countries should still pursue these kinds of agreements and seek practical solutions to overcome such obstacles.

- 45. Many respondents stated that clear indicators of the effectiveness of policies and legislation were hard to come by, but pointed to the low number of accidents as an indication in itself that legislation and procedures were satisfactory. However, the reports as well as the first self-assessments made under the strategic approach, provided indications that some countries participating in the Assistance Programme were still in an early phase, striving to fulfil the basic requirements of the Convention (e.g., Albania, Montenegro). Such countries were aiming for the establishment of national action plans in order to comply with the Convention's basic requirements.
- 46. Countries with economies in transition identified the following as specific weaknesses or areas for improvement:
  - (a) Inadequacy or deficiency of the legislative base;
  - (b) Lack of willingness of certain countries to establish cooperation agreements;
- (c) Insufficient institutional capacity or lack of experts and qualified personnel, including appropriate education;
  - (d) Lack of software for risk assessments;
- (e) Cumbersome administrative structures and lack of cooperative arrangements between authorities;
  - (f) Lack of integrated systems for risk management;
  - (g) Unclear division of responsibilities between public authorities at all levels;
  - (h) Updating of emergency plans and more frequent exercising;
  - (i) Insufficient safety culture within industry;
- (j) Lack of funding for introduction and development of information technology in rescue services;
  - (k) Low level of technical base and communication systems;
- Fundamental problems in fulfilling the Convention's requirements for identification, inspection, permitting and qualifications of competent authorities, for some of these countries.
- 47. It may therefore still be assumed that there is a continuous need for further tailor-made assistance activities. Beneficiary countries under the Assistance Programme should therefore seek opportunities for receiving such assistance through systematic identification of their assistance needs and to define possible projects. Western and Central European countries should explore their possibilities to engage in such projects through both in-kind and financial support, especially where they have tried and tested expertise that they can offer.
- 48. A number of Western and Central European industrialized countries also gave indications of problem areas on which they were presently focusing for improvement, e.g.:
  - (a) Methods for better regulation;
  - (b) Additional guidelines;
  - (c) Establishment of improved inspection systems;
  - (d) Standardized incident management systems;

- (e) Establishment of more effective land-use planning systems;
- (f) Methods for better cost-effectiveness, etc.;
- (g) Cross-border cooperation.
- 49. Such initiatives and improvements in policies may often be based on experience from past accidents (e.g., Buncefield)<sup>7</sup>.
- 50. Norway noted that it had recently introduced a new common, standardized incident management system for the response to large incidents, including acute pollution. The system was used by the three key public authorities responsible for incident response.
- 51. The Netherlands reported that the focus of future action lay primarily in extending the interaction between the environmental and emergency authorities and on the implementation of a special agreement with Germany based on the same principles as the one already in force with Belgium.
- 52. The Netherlands also stated that it was looking for better ways to incorporate information from neighbouring countries in contingency plans. Transboundary drills often showed failures in systems and a lack of compatibility among the various means of communication, as well as equipment.
- 53. The Working Group notes positively that countries participating in the Assistance Programme in the sixth reporting round had provided comprehensive and high-quality contributions and that reporting had improved considerably. The recent self-assessments under the strategic approach made by those countries contributed to the improved reporting. A timely follow-up to these exercises in the form of national action plans will further contribute to better policies and legislation and a systematic implementation of the Convention.
- 54. The Working Group also welcomes the present efforts by many countries to harmonize legislation and control mechanisms with those of the EU.
- 55. The Working Group notes that there are still challenges for many countries in the further improvement of enforcement and cooperation mechanisms for existing policies, legislation and control systems, and recommends that these aspects are given special attention in the elaboration of further assistance activities under the Assistance Programme. Countries should also take note of good experiences and practices in other countries, and consider adapting them to their own national conditions.
- 56. Countries with an advanced implementation level should continue to explore possibilities to engage in or finance projects with countries in transition aiming at an enhanced implementation level in transition countries.
- 57. Countries with an advanced implementation level should also further engage in activities aiming at the improvement of existing policies, legislation and guidelines and to seek new solutions to problem areas that they identify, and disseminate results from such activities through appropriate channels and mechanisms, including activities under the Assistance Programme.

A major fire broke out at the Buncefield oil storage and transfer depot, Hemel Hempstead, United Kingdom, in December 2005.

# B. Identification of hazardous activities with the potential to cause transboundary effects (questions 3–7)

- 58. Almost half of the Parties reported a different number of hazardous activities as compared with the past report, due to changes both in the number of installations and in the quantity and quality of the substances treated. This led the Working Group to conclude that the system for identification was generally functioning and regularly used to catch the differences.
- 59. Although the guidelines for reporting recommended not to mention those hazardous activities that do not fall under the Convention, there were still cases where the reports obviously indicated the total number of hazardous installations, many of which fell outside the scope of the Convention.
- 60. The Working Group found that in general identification mechanisms were improving, but in a few cases there were still difficulties in identifying from the information provided the actual number of hazardous installations falling under the Convention (e.g., Kazakhstan, the former Yugoslav Republic of Macedonia), since the information provided was about hazardous installations present in the country with no indication as to whether those were able to cause transboundary effects.
- 61. Some countries were still in the process of identifying hazardous activities falling under the Convention (Albania, Montenegro), while the Republic of Moldova, Serbia and the former Yugoslav Republic of Macedonia, in providing the number of hazardous activities identified, stated that they were still provisional, to be confirmed after deeper ongoing risk assessments.
- 62. As far as notification of hazardous activities to neighbouring countries is concerned, the Working Group observed that there was still a substantial number of Parties not completely implementing this requirement of the Convention. There were still some countries confusing the notification of hazardous activities to neighbouring countries with the notification of industrial accidents, when they occurred.
- 63. Among the 25 countries having identified hazardous activities falling under the Convention, 12 have notified them, 6 have notified them only partially and 2 countries stated that, for different reasons, they had not yet notified (Armenia, Serbia) (see table below). Five countries provided no clear answer: Azerbaijan, Spain and the former Yugoslav Republic of Macedonia did not respond, whereas Belarus and Kazakhstan referred to the notification of accidents.

# Identification of hazardous activities (HA) with the potential to cause transboundary effects (questions 4–6), showing changes in number of HA identified vs. previous report

	No. of HA (Q4 & Q5)		_	
Parties	Current report	Previou s report	Notification (Q6)	Comments
Albania	n/a	n/a	n/a	HA not yet identified
Armenia	1	21	no	
Austria	38	39	yes	
Azerbaijan	10	11	no answer	
Belarus	8	8	no answer	
Belgium	4	4	yes	

	No. of HA (Q4 & Q5)			
Parties	Current report	Previou s report	Notification (Q6)	Comments
Bulgaria	3	3	no	
Croatia	_	_	n/a	
Cyprus	_	_	n/a	
Czech Republic	60	62	partly	
Denmark	_	_	n/a	
Estonia	_	_	n/a	
Finland	4	4	partly	
France	46	52	yes	
Germany	120	120	yes	
Greece a	_	_	n/a	
Hungary	22	23	partly	
Italy	_	_	n/a	
Kazakhstan	1 649	1 504	n/a	Number of HA unclear
Latvia	_	_	n/a	
Lithuania	2	2	yes	
Luxembourg	1	_	yes	
Monaco	_	_	n/a	
Montenegro	_	No report	n/a	HA not yet identified
Netherlands	52	51	yes	
Norway	_	_	n/a	
Poland	18	17	yes	
Portugal	_	_	n/a	
Republic of Moldova	8	8	partly	
Romania	5	5	yes	
Russian Federation	_	_	_	No report
Serbia	9	9	no	Provisional list of HA, notification procedure under approval
Slovakia	11	13	yes	
Slovenia	16	16	partly	
Spain	3	3	no answer	
Sweden	1	1	yes	
Switzerland	35	30	yes	
The former Yugoslav Republic of Macedonia	10	n/a	n/a	Provisional list of HA
United Kingdom	4	3	partly	

<sup>&</sup>lt;sup>a</sup> The table contains updated information concerning the identification of hazardous activities and notification also coming from the report on implementation from Greece, although the country only sent its report after the Working Group had completed its assessment.

64. The guidelines for reporting suggested making reference, where appropriate, to the indicators and criteria established within the Assistance Programme. This suggestion was not fully followed by countries under the Assistance Programme, but a few of them, namely Kazakhstan and the Republic of Moldova, did provide references to them, where relevant. Similarly, some countries (Serbia, Republic of Moldova, the former Yugoslav Republic of Macedonia) made reference to activities carried out in the framework of the Assistance Programme.

#### Conclusions and recommendations

65. Generally, the Working Group is satisfied with the information that the Parties provided on their procedures to identify hazardous activities capable of causing transboundary effects. At the same time, the Working Group, as in the previous reporting round, still sees a need for improving the notification of hazardous activities by Parties, where necessary through providing adequate support.

#### C. Prevention of industrial accidents (questions 8–9)

- 66. The Working Group noted that, even if not requested to provide a full report on implementation, some countries had provided a good description of their prevention policies (e.g., Lithuania, Poland, the Republic of Moldova, Romania, Serbia). Some countries participating to the Assistance Programme (e.g., Azerbaijan) should provide more descriptive elements in their replies.
- 67. Countries that were instead requested to provide a full report, such as Finland, improved the quality of their reports and provided quite informative replies to the questions related to prevention.
- 68. Only in a few cases did Parties provide a list of specific measures that were taken. In general, Parties tended to mention the same measures already indicated in the previous reports, such as the verification of safety documentation, licensing procedures, facility inspections, the organization of workshops or training sessions or the preparation of guidelines. With regard to the latter, guidelines had been or were being prepared on: (a) risk assessment (Estonia); (b) safety reports (Lithuania, Portugal); (c) emergency plans (Lithuania); (d) land-use planning (Portugal, Sweden); and (e) oil terminal safety (Republic of Moldova, Romania).
- 69. Austria noted there was continuous coordination and exchange of information among the established working groups to improve preventive measures. Poland mentioned the workshop on cost-effectiveness for major accident prevention (Warsaw, 12 October 2011), organized jointly by the EU and ECE and aimed at tackling the issue of how to deal with the cost of prevention in a period of severe budget cuts. Some countries participating in the Assistance Programme also reported on assistance activities that had been carried out with other programmes (for instance, Croatia reporting on twinning projects).
- 70. When evaluating the effectiveness of the preventive measures adopted, many Parties argued that these were effective as demonstrated by the smaller number of accidents and reportable events.
- 71. Other Parties reported that there were still shortcomings that needed to be addressed, including difficulties in establishing risk-assessment methodology (Estonia and Romania); lack of secondary legislation (the former Yugoslav Republic of Macedonia); and a lack of competent human resources (Slovenia). Montenegro indicated that it did not implement preventive measures, but that the establishment of such measures would be among the priorities for the next term.

72. The Working Group noted an improvement in the implementation of preventive measures as well as in their description in the implementation report. However, some countries with advanced technology and knowledge of prevention were still not providing a satisfactory description of measures taken (for a number of reporting rounds). These countries should be encouraged to provide such descriptions, as it might be helpful for other countries looking for information on good practices.

#### D. Emergency preparedness (questions 10–15)

- 73. In the current reporting round the majority of the countries stated that on-site and off-site emergency plans were available. A few countries with economies in transition reported shortcomings in the implementation of this area. Some of the shortcomings cited were: only partial creation of on- and off-site emergency plans; the need still to identify hazardous installations (Montenegro); and the need to elaborate better legislation or the creation of by-laws. In the majority of the cases, the countries had reported the same results in the previous reporting round.
- 74. Denmark seemed to interpret the question quite strictly and replied that there were no installations under the Convention in the country, contrary to other countries in the same situation, for instance Monaco, which provided information on its preparedness measures. A few Parties, like Estonia, did not reply to this group of questions.
- 75. When on- and off-site emergency plans were available, they were reported to have been created by the operators and the competent authorities working in coordination and using risk-assessment.
- 76. Concerning the testing, review and updating of the emergency plans, the situation is almost unchanged from the last reporting period. Regular tests were run by almost all Parties. Usually the period between revisions was three years, with several updates within this period. The frequency of tests varied among countries, from more than one test per year to one test in three years. In some cases (Armenia, Azerbaijan, Cyprus, Belarus, Montenegro, the former Yugoslav Republic of Macedonia), even if the test and revision were mentioned, the information provided was not enough to understand the mechanism, frequency or testing procedure. Two Parties (Albania and Serbia) indicated that they did not have a mechanism implemented for testing and reviewing the plans. In one case (Albania) the situation remains unchanged from the previous report.
- 77. Among the Parties carrying out testing, only a small minority involved neighbouring countries in exercises. This was still an improvement compared with the situation in the previous reporting round, but it was clear that the situation could be improved.
- 78. When it came to the assessment of the effectiveness of preparedness measures, countries identified elements of success as well as areas for future work. Among the elements of success countries noted:
  - (a) Enhanced coordination between competent authorities;
  - (b) Good involvement of local and regional authorities;
- (c) Improvement of the legislative framework regarding emergency preparedness.
- 79. Among the areas where more work was needed, Parties highlighted:
  - (a) The need for experts on industrial accidents and their training;
  - (b) The need for guidance also towards improved legislation;

- (c) More extensive cooperation in testing, updating and revising emergency plans in a transboundary context.
- 80. In the sixth reporting round more countries indicated that they planned more work on preparedness in the upcoming period. An example of planned activity came from Denmark, which was planning to prepare a template for authorities and operators for such plans.
- 81. The Working Group finds that emergency preparedness is in general at an adequate level, in particular at the national level. It reiterates its encouragement to Parties to take steps to retain and further enhance preparedness and response capabilities. However, the Working Group saw little improvement in preparedness measures in a transboundary context and calls for actions by Parties, for instance, through an increased number of common activities in the field of emergency planning. Analytical and full-scale exercises in a transboundary context should also be encouraged.

# E. Scientific and technological cooperation and exchange of information (question 16)

- 82. The majority of reporting Parties said that they were involved in bilateral or multilateral projects, programmes and exchange of information. That cooperation was carried out mainly through bilateral agreements with neighbouring countries. In a few cases the agreements were multilateral. In some instances the exchange of information or cooperation was carried out within subregions, as, for instance, was the case for Nordic countries or for Commonwealth of Independent States countries. In a few instances cooperation was also reported to be carried out through participation in activities organized by international organizations such as the Organization for Economic Cooperation and Development (OECD).
- 83. According to the framework in which the cooperation was organized, concrete activities had a more or less regular frequency. For instance, in the framework of bilateral or multilateral agreements regular activities were organized (e.g., Belgium, with the Netherlands and Luxembourg or the Czech Republic with Germany). In other cases, exchange of information or cooperation was on a more ad hoc basis.
- 84. From the replies of the countries it was also evident that the kind of cooperation and exchange of information depended on the degree of autonomy that local authorities had in a country for specific matters. Thus countries could have cooperation and exchange of information at the central level, but also, and often at the same time, at the local level. An example would be the cooperation between the local authorities of eastern France, Germany and Switzerland.
- 85. An interesting case of bilateral cooperation and exchange of information was the bilateral inspections organized by the Czech Republic and Germany.
- 86. The kind of cooperation undertaken was usually not described in detail. As in previous reports, Parties were generally providing references to the Seveso II framework or to best available techniques (BATs) and the BATs reference documents of the Integrated Pollution Prevention and Control<sup>8</sup> Bureau (BREFs).
- 87. When more specific examples were provided, they referred mainly to:

<sup>&</sup>lt;sup>8</sup> See Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (IPPC Directive).

- (a) Monthly checking of notification data;
- (b) Regular exchange of information through special joint committees (usually established within bi- or multilateral agreements);
  - (c) Transboundary rescue and relief exercises;
  - (d) Exchange of experts;
- (e) Organization of seminars and meetings for personnel of civil protection authorities, etc.
- 88. Different Parties participating in the Assistance Programme mentioned the framework of the Assistance Programme as a tool to create channels for exchanging cooperation with neighbouring countries (e.g., Croatia, Republic of Moldova).
- 89. With the examples provided, the Working Group noted in general that all reporting Parties saw the importance of agreements or arrangements for cooperation in the field of information exchange, mutual assistance, emergency preparedness exercises or inspections. In some cases, for example Denmark, the reply to the question was that, since there were no installations falling under the Convention in the country, there were no mechanisms for cooperation or exchange of information with neighbouring countries.

- 90. The Working Group notes that cooperation between countries is increasing and that countries participating in the Assistance Programme were showing more awareness of the importance of cooperation. The Working Group encourages countries to continue to develop mechanisms and carry out projects for scientific and technical cooperation.
- 91. The Working Group encourages Parties to report in the future on relevant cooperation and exchange of information, even if such activities are not particularly directed at the implementation of the Convention. This would help to create and disseminate examples of good practices.

#### F. Participation of the public (questions 17–22)

- 92. Also in the present reporting round. Parties were requested to report on what opportunities the public had to participate in establishing or implementing preventive and preparedness measures.
- 93. The countries generally reported that there was the possibility for the public to access information on preventive, preparedness and response measures. Some countries, for instance, Latvia, did not reply to the question. Some of the replies did not address all the aspects described in the questionnaire and in the guidelines. In some cases there was only information that the legislation covered this aspect, without further information.
- 94. The legislative bases for the participation of the public were usually defined in national environmental protection and civil protection acts, etc. The legislation also defined the responsibilities of operators and authorities with regard to the involvement of the public. The Working Group identified the following areas in which the public was authorized to participate or to have access to information:
  - (a) Land-use planning process;
  - (b) Permitting procedures;
  - (c) Safety reports of hazardous installations (access);

- (d) Planning and updating approving of external emergency plans;
- (e) The process of environmental impact assessment.
- 95. The level of availability of the procedures listed above varies among countries. For instance, concerning the accessibility of safety reports, in some countries they are fully available on websites (e.g., in Austria), in others, the public needs to file a request in order to access them.
- 96. Compared with the previous report, the Working Group observed an increased use of new technological opportunities to reach the public. Next to the use of local media, newspapers, leaflets, brochures and posters, more and more authorities used the Internet (both central and local authorities) and blogs. Some countries provided more concrete examples, like open days at hazardous installations (Germany), the dissemination of risk maps both for professional and public use (Netherlands) or the establishment of local consultation committees to inform especially about hazardous activities (France). German representatives were also given the possibility of participating in the French local committees when the issue could involve them. Some countries provided specific information to hospitals, pharmacies, schools and kindergartens.
- 97. When replying to the question on the effectiveness of the policies to involve the public, countries generally showed satisfaction with the policies on participation of the public and few announced changes that needed to be made. Some Parties mentioned that more work would need to be undertaken following the implementation of the Seveso III Directive. In many cases Parties indicated that they faced limited interest from the public. In some instances, Parties tried to explain this lack of interest, the main elements of which were: (a) the rarity of accidents in the country somehow limited the impression in the public that accidents could happen and therefore reduced the interest in measures to be taken against them; (b) the difficulty of the topic and of the language used could be difficult for the public to understand, and might deter it from approaching the topic. EU countries also expressed the hope that more work would be done on public participation with the implementation of the Seveso III Directive.
- 98. Concerning the question of providing possibilities for the public from neighbouring countries to participate, Parties usually replied that the public was granted this possibility, without explaining how and if such a possibility was actually being used by the public. In some instances, Parties reconfirmed what had been stated in previous reports: that language differences could be an element that made the participation of the public from neighbouring countries very rare.
- 99. Few detailed comments were made on the difficulties and gaps encountered in implementing policies on public participation. In addition to the lack of interest by the public, already mentioned above, Parties reported that in some instances it was difficult to identify the population to inform because of difficulties in the use of risk assessment and the consequent difficulty in identifying the areas that could possibly be affected by accidents. Parties that were beneficiaries of the Assistance Programme were facing additional issues in implementing public participation policies, mainly connected to the implementation of the legislation adopted, often following the ratification of the Aarhus Convention.
- 100. Replies from some of the countries seemed to suggest that informing the public was understood merely as informing the population following an industrial accident.

101. The sixth reporting round saw a general improvement in the involvement of the public in the various steps linked to the safety of industrial installations (including

prevention and preparedness). Countries participating in the Assistance Programme showed more awareness than in previous reports on their level of implementation and of the difficulties faced. Despite those improvements, the Working Group sees that there is still a need for exchanging good practices to reach a higher degree of public participation in the processes of establishing and implementing preventive and preparedness measures, and it calls on Parties to organize seminars, workshops or other relevant activities in this area. The adoption of the Seveso III Directive might be an opportunity for cooperation between the EU and ECE.

#### G. Decision-making on siting (questions 23–25)

- 102. Countries were asked to provide information about siting or land-use policies and relevant legislation in connection with hazardous establishments. They were also asked to indicate how such policies and legislation took into account transboundary issues. At the same time, they were asked to describe any bilateral activities with other countries. Also for this question, countries were to do a self-evaluation of the effectiveness of policies and legislation in the area and to report whether any initiatives for possible improvements had been taken.
- 103. In general, in the present reporting round, countries' responses were more comprehensive and illustrative than in the previous round, in which a number of responses were too vague for any qualified evaluation. This was a satisfactory development. The improvement could have been partly due to a higher degree of awareness of these aspects following the ECE joint workshop on land-use planning around hazardous industrial sites, held back to back with the sixth meeting of the Conference of the Parties (The Hague, 11–12 November 2010).
- 104. Most countries reported having basic legislation and policies for land-use planning for hazardous activities and referred to laws on land-use and spatial planning, licensing or permit procedures and environmental impact assessment procedures. Some countries stated that even if they had adopted general legislation on this issue, they were still lacking secondary legislation with more specific, detailed requirements (e.g., Serbia, the former Yugoslav Republic of Macedonia).
- 105. Many countries also provided detailed descriptions of which procedures they applied. The possible transboundary effects of industrial accidents was often a consideration countries took into account in decisions on the siting of industrial facilities, even if there was not always legislation particularly addressing that aspect of siting. For some countries siting procedures had led to formalized cooperation mechanisms between neighbouring States, while other countries said that they lacked such a system. The EU countries mainly referred to legislation implementing the requirements of article 12 of the Seveso II Directive.
- 106. Since the last reporting round, a number of countries planned to adopt or had just adopted new legislation, guidelines or administrative procedures with more concrete criteria and guidance (Austria, Sweden, Switzerland, Portugal, Estonia, Germany, Poland, Spain, United Kingdom, Netherlands). The Working Group welcomes this development.
- 107. From the reports, it was evident that in the majority of countries the final decisions on siting lay mainly with regional, local or municipal authorities and they had more or less formalized consultation arrangements between local or regional authorities and authorities at the central level, for example, regarding risk assessments and advice on acceptance levels. Also in this regard, coordination between national authorities at different levels posed challenges.

- 108. Many countries referred to the application of scenarios and risk assessments as tools for decisions on land use, but methods and decision criteria often differed. Only a few countries indicated more advanced acceptance criteria for location of hazardous activities and for balancing risks and other factors. A number of countries expressed the need for more concrete risk criteria or levels of acceptable risk (Norway, Portugal, Estonia, Spain).
- 109. Albania did not answer the questions on this item. Azerbaijan indicated that it had a policy, but gave no explanation of how it functioned or evaluation of its effectiveness. Armenia seemed to have a system, but from the response it was not possible for the Working Group to assess whether it met the requirements of the Convention. Kazakhstan reported that they held annual meetings with other neighbouring Commonwealth of Independent States countries under the auspices of the Interstate Council for Industrial Safety.
- 110. The reporting was relatively limited with regard to the questions on how legislation and systems worked in practice, and on whether the expected results were achieved. Most countries said that they were content with the policies and legislation, even if some countries saw the necessity to improve them.
- 111. As in the previous reporting round, a number of countries with broad experience in such matters gave indications of practical problems in the follow-up on land-use decisions. In particular, they pointed to problems in handling different kinds of developments in the vicinity of existing hazardous establishments and in maintaining conditions and area limitations (Norway, Czech Republic, Romania). Lack of expertise within local and regional authorities in risk-related issues and inadequate monitoring of compliance with set land-use restrictions around existing installations were also highlighted. Austria pointed out that coordination of the different authorities and the need to deal with long-standing practices was always a challenge.
- 112. Also in this reporting round, the Netherlands noted the problems in balancing economy and employment considerations with safety and environmental aspects. Serbia mentioned that legislation presently only had general requirements about appropriate distances, and that there was a need to develop more detailed requirements in the Serbian planning and construction legislation. Slovenia reported that systems were not fully operational and that there was a lack of understanding and cooperation between planning and industrial safety authorities. The criteria for decision applied in Slovenia were under consideration at the time of writing this document. The revision would aim at a closer adaptation to local conditions in Slovenia. The former Yugoslav Republic of Macedonia reported a lack of mutual action of the responsible bodies, as well as lack of by-laws with more definite criteria.
- 113. The United Kingdom reported that the notion of societal risk had been introduced into assessments of risk for land-use planning purposes. Switzerland reported on development of further guidance documents connected with hazards along railway lines and also on new developments within the cooperation of countries under the auspices of the Upper Rhine Conference. Sweden also reported having initiated a project that would provide guidance in the implementation of article 12 in the Seveso Directive.

114. The Working Group is satisfied that reporting on decision-making on siting in the sixth round has improved considerably since the last reporting round. Countries have given more extensive descriptions and explanations, and more countries seemed to have in place policies and legislation in this area. There also seems to be more awareness on the issue than previously. The Working Group also welcomes initiatives aimed at improving transboundary cooperation in this regard. It also acknowledges

the outcome of the OECD workshop on Natech<sup>9</sup> Risk Management, and encourages Parties to take into consideration industrial accidents caused by natural hazards in the risk assessment and other relevant procedures linked to the siting of hazardous installations and land-use planning.

115. As the Working Group expressed earlier, land-use planning and decision-making on siting of hazardous activities are difficult issues under the Convention due to their complexity, diversity and economic impact. Even if reporting has improved and many countries now have a greater awareness of these issues, the Working Group has the impression that this is still an area where a number of countries encounter problems in meeting the Convention's requirements. Consequently, a number of countries need assistance on this topic, and the development of mechanisms for further capacity-building and exchange of good practice between ECE countries is essential. The Working Group therefore supports actions for follow-up of the workshop on this issue in The Hague in November 2010 and urges the secretariat of the Convention and the secretariat serving the ECE Committee on Housing and Land Management to take actions and engage in such activities.

#### H. Reporting on past industrial accidents (questions 26–27)

116. There were no accidents with transboundary effects reported for the period 2010–2011.

OECD workshop on natural-hazard triggered technological accidents (23–25 May 2012, Dresden, Germany).