

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

**Tenth meeting**

Geneva, 4–6 December 2018



## **Co-Chairs' Conclusions**

### **Seminar on Land-Use Planning and Industrial Safety**

Lamot Convention and Heritage Center, Mechelen, Belgium (16-17<sup>th</sup> May 2018)



*Co-organized by the UNECE Industrial Accidents Convention, the UNECE Committee on Housing and Land Management, the government of Flanders (Belgium), and the European Investment Bank (the EU bank)*

# Co-Chairs' Conclusions

## Overview

The Seminar on Land-Use Planning and Industrial Safety was co-organized by the UNECE Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention), the UNECE Committee on Housing and Land Management, the government of Flanders (Belgium), and the European Investment Bank, the EU Bank (EIB). It was held on 16-17<sup>th</sup> May 2018 at the Lamot Heritage and Conference Centre in Mechelen, Belgium.

The seminar brought together experts from the land-use planning and industrial safety communities (including authorities, consultants, industry representatives and experts in related fields) from 35 countries<sup>1</sup> to share and learn from practical experiences<sup>2</sup> of cooperation and coordination between land-use planning and industrial safety. The experiences shared were examples from UNECE countries, in relation to disaster risk reduction and industrial accident prevention, including in a transboundary context.

To differentiate and progress upon the learnings from previous seminars on land-use planning and industrial safety<sup>3</sup>, which concentrated mainly on legislation, policies and approaches, this seminar achieved its aim of focusing on real examples of countries' coordination and cooperation in practice.

The seminar was comprised of five sessions over two full days. Representatives of international organizations, government authorities, industry and private consultancies delivered presentations, which were followed by a panel discussion at the end of each session, including questions and answers between the audience and panellists. At the beginning of the seminar, an animation video was launched – 'The Benefits of Enhanced Cooperation between Land-Use Planning and Industrial Safety'<sup>4</sup>, produced by UNECE and funded by the EIB. On the final day, a practical exercise with a role play was conducted. This provided an opportunity for participants to understand and practice the best processes to be undertaken to ensure greater safety through cooperation between planners, industrial safety experts, operators and other stakeholders, within and across countries.

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<sup>1</sup> Albania, Armenia, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Kyrgyzstan, Latvia, Luxembourg, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovenia, Spain, Switzerland, Tajikistan, the former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland.

<sup>2</sup> The presentations are available on the seminar webpage: <https://www.unece.org/index.php?id=47225>

<sup>3</sup> The Joint UNECE Workshop on Safety and Land-use Planning (Geneva, Switzerland, 13 April 2016), the Joint Seminar on Land-use Planning Around Hazardous Industrial Sites (The Hague, Netherlands, 11-12 November 2010), and the International Seminar and Plenary Meeting of the European Working Group on Land-use Planning (Leuven, Belgium, 7-8 June 2007).

<sup>4</sup> Available from: <https://www.youtube.com/watch?v=i3PjrBkNXOw>

## Acknowledgements

These conclusions have been agreed by the seminar co-chairs (Mr. Bartholomew Judd, EIB; Mr. Chris Dijkens, expert; Ms. Jasmina Karba of Slovenia, Chair of the Industrial Accidents Convention; Ms. Katrien Debeuckelaere, government of Flanders, Belgium; and Mr. Sebastien Penzini, United Nations Office for Disaster Risk Reduction (UNISDR)), the government of Flanders, Belgium, and the UNECE secretariat. The UNECE secretariat servicing the seminar comprised the secretariats of the Industrial Accidents Convention and the Committee on Housing and Land Management. The secretariat of the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment (Protocol on SEA) also contributed, as did members of the Bureau of the Espoo Convention and the Protocol on SEA. A consultant to UNECE and to the European Investment Bank (Ms. Rebecca Wardle) lead the seminar preparations and follow-up work, in close cooperation with both organizations.

The UNECE secretariat appreciates the contributions made and the successful cooperation with its key partners in co-organizing this seminar: the government of Flanders, Belgium (Mr. Marc Bogaert, Ms. Katrien Debeuckelaere and Ms. Sara Berckmoes) and the European Investment Bank (Mr. Bartholomew Judd). It also appreciates the cooperation with other international organizations, in particular the United Nations Office for Disaster Risk Reduction (UNISDR) and the United Nations Human Settlements Programme (UN-HABITAT).

The active participation and contributions by participants to the seminar from all sub-regions of the UNECE was very welcome. This was made possible thanks to the financial and in-kind contributions by the government of Flanders (Belgium) which included financing to enable the participation of delegates from Eastern and South-Eastern Europe, the Caucasus and Central Asia. In addition, the organization of this seminar was possible thanks to a financial contribution by France to the UNECE Industrial Accidents Convention.

## Objectives achieved

Through the exchange of experiences, good practices and lessons learned, the objectives of the seminar objectives were achieved. The seminar successfully:

- Showcased good practices and lessons learned in coordinating land-use planning and industrial safety procedures and ensuring cooperation between planners and safety experts, in practice, and where possible, successful approaches to overcome challenges.
- Recommended ways to improve integration of the two communities (within and between countries) at the early stages of projects and programmes.
- Identified specific measures to minimize risks to the population and the environment, within and across countries, by learning from the experience of other UNECE countries and identifying good practices.

- Improved the understanding and effective implementation of the provisions of the UNECE Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention) and other relevant legal instruments.
- Promoted the implementation of the ‘UNECE Guidance on land-use planning, the siting of hazardous activities and related safety aspects’ (published in 2017)<sup>5</sup> and enhanced the participants’ understanding of its key elements.
- Enhanced the understanding of disaster risks, particularly those related to the siting and significant modifications of hazardous activities, and the consideration of industrial hazards in land-use planning.
- Considered the ways in which natural-hazard-triggered technological accidents (NATECHs) and related risks could be taken account of in land-use planning and siting decisions.
- Highlighted the relevance of land-use planning and the siting of hazardous activities to the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Industrial Accidents Convention.
- Raised awareness of the role of International Financial Institutions such as the EIB in financing projects in support of disaster risk reduction.

The fulfilment of the above objectives was evidenced by the conclusions and recommendations that emerged from the seminar. The key conclusions and the recommended follow-up activities are summarised below.

### **Integration of safety aspects into land-use planning and decision making**

1. Land-use planning and industrial safety procedures need to be formally integrated, and increased and active cooperation among experts should be initiated early in the process, for more effective industrial accident prevention within and across country borders. This will help authorities to be better equipped to response to socioeconomic development pressures, to balance the needs and demands of society, and identify risks right from the start and take appropriate action.
2. There are several ways in which countries can improve their coordination and cooperation between planning and industrial safety, such as through:
  - 2.1. Robust land-use planning procedures that require industrial safety considerations (including **risk assessments** and **formal consultations with safety authorities**<sup>6</sup>) to be **incorporated into the early stages of the planning process** for land use and development proposals<sup>7</sup>.

<sup>5</sup> The Guidance was developed under the UNECE Industrial Accidents Convention and the Espoo Convention and its Protocol on SEA, with contributions from the Committee on Housing and Land Management, and was funded by the European Investment Bank. It is available from: <http://www.unece.org/index.php?id=47851>

<sup>6</sup> For example, the United Kingdom’s Health and Safety Executive (HSE) consults with planning authorities (at the national and local levels) at an early stage in the process. Further information available from: <https://www.unece.org/environmental-policy/conventions/industrial-accidents/meetings-and-events/industrial-accidents/workshops/2018/seminar-on-land-use-planning-and-industrial-safety/docs.html>

<sup>7</sup> For example, Serbia’s safety and planning experts have been cooperating on multiple interventions to ensure that safety is adequately considered in the preparation of and decision-making on land use plans across the country. Further information available from:

- 2.2. Carrying out **training and educational programmes to build the capacity** of planners and industrial safety experts.
- 2.3. **Implementing the provisions** of the UNECE Convention on the Transboundary Effects of Industrial Accidents (**Industrial Accidents Convention**), the Convention on Environmental Impact Assessment in a Transboundary Context (**Espoo Convention**) and its Protocol on Strategic Environmental Assessment (**Protocol on SEA**)<sup>8</sup>, the **UNECE Guidance on Land-Use Planning, the Siting of Hazardous Activities and related Safety Aspects**, and the **UN Geneva Charter on Sustainable Housing**.

### **Communicating the message about industrial risks – how the technical aspects of industrial safety can be better understood and integrated into the planning context**

3. The seminar highlighted that in practice, the tools and methods used in safety/risk assessments (such as quantitative risk assessment, including societal risk) are often highly technical, complex and comprehensive, and can be difficult to communicate to the public, other experts and policy-makers at different levels (local, national and across borders). This poses a challenge to industrial safety aspects being effectively integrated into land-use planning decisions. However, the presentations revealed that many UNECE countries have been implementing measures to make the technical aspects of industrial safety easier to understand and integrate into the planning context. The seminar participants made note and agreed to promote these good practices, and to use the tools or develop similar ones in their home countries/organizations. These included<sup>9</sup>:
  - 3.1. Visual tools, such as the United Kingdom’s Health and Safety Executive’s (HSE’s) “Web app” tool that steers developers and decision makers through the process and towards other sources of information.
  - 3.2. Guidance and methodologies (such as those published by the United Kingdom’s HSE<sup>10</sup>) which are used to make advice as clear and transparent as possible.
  - 3.3. Early engagement of planners in the process, as exemplified by Denmark through their societal risk tool, by France through their PPRT planning tool, by Belgium through the merging of departments and multi-disciplinary cooperation, and the United Kingdom through the HSE’s planning tools.
  - 3.4. Commercial services (as offered by the United Kingdom’s HSE) to facilitate discussions with planners and developers.

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<https://www.unece.org/environmental-policy/conventions/industrial-accidents/meetings-and-events/industrial-accidents/workshops/2018/seminar-on-land-use-planning-and-industrial-safety/docs.html>

<sup>8</sup> For example, in Portugal the integration of industrial safety and environmental assessment experts into one unit supports cooperation to support the implementation of UNECE’s respective legal agreements.

<sup>9</sup> Further information available from: <https://www.unece.org/environmental-policy/conventions/industrial-accidents/meetings-and-events/industrial-accidents/workshops/2018/seminar-on-land-use-planning-and-industrial-safety/docs.html>

<sup>10</sup> Available from: <http://www.hse.gov.uk/landuseplanning/>

- 3.5. Internal reviews and advice on lessons learned on previous projects/processes, such as that provided by the United Kingdom's industrial safety authorities together with planning authorities.
  - 3.6. A dynamic societal risk tool (as in the case of Denmark) which is understandable and accessible for planners at the local level to use, update and take ownership of.
  - 3.7. Proactive sharing of information and knowledge.
  - 3.8. A fast and simple identification tool (e.g. Denmark's "fast identification tool"<sup>11</sup>) to easily communicate risk assessments and results to planners, mayors and other experts for a common understanding at the very beginning of the process, to be subsequently followed up by a more comprehensive risk assessment.
  - 3.9. Tools to integrate industrial risk into planning policies and/or procedures. For example, France's national safety authority has:
    - 3.9.1. established local committees for planners to consult with;
    - 3.9.2. published handbooks and technical guidance for planners/housing experts;
    - 3.9.3. organized Working Groups and civil society consultations on industrial safety matters; and
    - 3.9.4. established help desks conducted by State Services.
4. The participants made note and agreed to promote these good practices and endeavor to use these tools or develop similar ones in their home countries/organizations.

## Public information and consultation

5. The seminar participants are encouraged to develop or strengthen their planning procedures (at the national and local levels) to strive to actively engage the public and other stakeholders in the process, and to ensure that authorities provide understandable information in due time and listen and respond to the public's views. In Norway's case<sup>12</sup>, it was acknowledged that a lengthy and transparent planning and public participation process was important in order to promote sustainable land-use management in the long term.
6. Public participation and consultations on land use plans and industrial risks are ever more important in a transboundary context, and are stipulated by the provisions of the Industrial Accidents Convention (Art. 9).

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<sup>11</sup> This "fast identification tool" is used for quickly assessing and communicating basic societal risk assessments to planners, decision-makers and the public. These are conservative estimates on risk to provide stakeholders with a basic idea of the risk and whether it is acceptable or not.

<sup>12</sup> The coordination of a land-use plan with a parallel planning process for a major infrastructure project.

## Transboundary cooperation

7. Countries have adopted different risk assessment methodologies (including end values of risk or effects, or 'risk acceptability criteria') for providing advice and preparing decisions on land-use planning. Consultations (within and across borders) should take place, in order to understand the acceptability criteria and the different risk and hazard methodologies used by neighbouring countries for risk assessments and decisions on land-use planning proposals.
8. The seminar participants noted that they frequently face challenges in cooperation and coordination, particularly at the transboundary level, and agreed to progress their implementation of the legal obligations under the UNECE Industrial Accidents Convention (Art. 7) and other relevant legal instruments, including notification and sharing information with neighbouring and riparian countries about existing and proposed hazardous activities close to borders.
9. The UNECE Guidance on Land-Use Planning, the Siting of Hazardous Activities and related Safety Aspects<sup>13</sup> can support countries to improve their planning, coordination and decision-making on land use plans, siting and industrial safety, including between neighbouring countries.

## Linkages to the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Sustainable Development Goals

10. In the light of climate change and the expected increase in extreme weather events, it is essential that NATECH risks are considered and integrated into planning and safety procedures.
11. Land-use planning helps to manage and reduce technological and disaster risks, through various land-use tools such as risk-informed land-use zoning and the redevelopment or relocation of certain developments for safety purposes.
12. Therefore, effective integration of land-use planning and industrial safety is an important means to achieve the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Sustainable Development Goals (SDGs).

## International organizations

13. Representatives of UNECE bodies and other international organizations and interested actors will consider how to coordinate their efforts to actively support countries in enhancing cooperation and implementing the provisions of relevant treaties, protocols and guidelines, namely by reaching out to local level authorities and experts and industrial operators, and by engaging with experts from Eastern and South Eastern European, Caucuses and Central Asia countries in the exchange of experiences and good practices.

<sup>13</sup> Available from: <http://www.unece.org/index.php?id=47851>

## Practical session with a role play

14. The practical session with a role play strengthened the participants' understanding that dialogue with a wide range of stakeholders (within and across borders) is crucial for effective planning, risk assessment, the management of hazardous activities and preparedness for accident risks. It leads to new agreements, sharing of information on land use/spatial plans, and the joint development of emergency plans.
15. Participants recognized the need to consult and exchange information with neighbouring countries on land use/spatial plans and the use of different risk assessment methodologies, in order to gain knowledge on the use and development of land directly across borders and assessing the potential issues and ideas for industrial accident prevention and management.

## Future work and potential follow-up activities:<sup>14</sup>

16. Participants concluded that future work is needed to enhance coordination and cooperation between planners and safety experts (within and across borders), particularly in the following areas:
  - (a) Exchange of information and good practices:
    - 16.1. Further exchange of information, good practices and experiences among countries in the UNECE region could be supported by an 'Information repository on land-use planning and industrial safety including experiences, good practices and lessons learned' on the UNECE website.
    - 16.2. Another seminar could be organized to exchange experiences and good practices on land-use planning and industrial safety across the UNECE region, including a specific focus on public information and participation.
  - (b) Capacity development:
    - 16.3. As a follow-up to this seminar, sub-regional workshops or seminars could be organized by UNECE,<sup>15</sup> with the support of lead Parties/organizations, in Eastern and South Eastern Europe, the Caucasus, and Central Asia, focusing on exchanging good practices and lessons learned within and across that sub-region, and including practical sessions with a role play. These seminars would support the implementation of the UNECE Guidance on land-use planning, the siting of hazardous activities and related safety aspects in these sub-regions.
    - 16.4. Other capacity development activities, lead jointly by international organizations (including UNECE) and country representatives, could be implemented in the countries of Eastern and South Eastern Europe, the Caucasus, and Central Asia. These

<sup>14</sup> As discussed during the seminar and indicated in the evaluation forms completed by 45 seminar participants.

<sup>15</sup> Under the Industrial Accidents Convention and its Assistance Programme and the Committee on Housing and Land Management, with the contribution of the Espoo Convention and its Protocol on SEA

could include, for example, assistance projects, twinning projects, and professional exchange programmes for planning and safety experts in neighbouring countries.

(c) Education and training:

- 16.5. Education and training tools could be developed, such as online-training on different UNECE legal obligations and guidance related to land-use planning, the siting of hazardous activities and related safety aspects.

(d) Additional guidance development:

- 16.6. In order to support the implementation of the UNECE Guidance on Land-Use Planning, the Siting of Hazardous Activities and related Safety Aspects, a new, supplementary version of this guidance could be prepared that is targeted to administrations and practitioners at the local level, such as local planning authorities, city majors and other decision-making authorities.
- 16.7. In light of the good practice examples presented at the seminar, new guidance could be prepared on communicating and integrating the technical industrial safety aspects into the land-use planning context.
- 16.8. Guidance on implementing and strengthening public participation and consultation, in relation to plans or projects involving land-use planning and industrial safety issues, could be developed.