UNECE Guidance on Land-Use Planning, the Siting of Hazardous Activities and related Safety Aspects

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UNECE legal instruments

- Industrial Accidents Convention
- Protocol on Strategic Environmental Assessment (SEA Protocol)
- Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)
Obligation SEA/EIA/Espoo

- SEA and EIA national procedures vs transboundary procedures
- Espoo Convention - mostly transboundary
- SEA Protocol – national and transboundary
- Industrial Accidents Convention

- preventing adverse effects on human beings and the environment;
- promoting all measures that stipulate use of preventive measures to enable environmentaly sound and sustainable economic development.
ENVIRONMENTAL ASSESSMENT

Policies

Plans & Programmes
SEA Directive (2001/42/EC)
Protocol SEA

Projects
Espoo Convention
Levels of implementation

I LEVEL
- SEA, SEA Protocol application
- Preparation of plans and programmes, including land-use plans
- Decision on plan/programme

II LEVEL
- EIA, Espoo Convention application
- Preparation of projects
- Decision on building
Programming, planning, permitting

- Energy
- Industry
- Transport
- Telecommunication
- Tourism

- Spatial Planning
- Land use

- Waste management
- Forestry
- Fisheries
- Agriculture
- Water management
Guidance - objective

- The primary purpose of the guidance is to assist Parties in more effectively mitigating the effects of possible industrial accidents and the consequences on human health, the environment and cultural heritage within countries and across borders.
- The guidance aims to achieve this by:
  - (a) Clarifying the relevant provisions of the Industrial Accidents Convention, the Protocol on SEA and the Espoo Convention;
  - (b) Highlighting the synergies and interlinkages between these instruments;
  - (c) Providing examples of good practice and integrated approaches
Role of public authorities

- Public authorities and practitioners should take into account the provisions when developing or making decisions about:
  - (a) Land-use plans, policies or programmes (including strategic environmental assessment (SEA));
  - (b) Plans to site potentially hazardous activities (including environmental impact assessment (EIA));
  - (c) Permits that authorize activities or modifications of these activities on specific sites (including hazardous industrial activities).
Composition of Guidelines

- The guidance is composed of two parts:
  1. the guidance on policy, legal and procedural matters, which provides support and clarification to public authorities and practitioners on the requirements, interlinkages and application of the relevant ECE instruments.
  2. Document ECE/CP.TEIA/2016/9, is the technical guidance on land-use planning and the siting of hazardous activities and related safety aspects, which focuses on the risk aspects of hazardous facilities.
- Chapter II outlines the main interlinkages, synergies and complementarities between the relevant ECE instruments.
- Chapter III shares Parties’ practices in implementing the provisions related to industrial accidents, safety, EIA, SEA and consultation of the relevant authorities.
- Chapter IV constitutes the core guidance document. It provides guidance on legal, procedural and administrative aspects of the instruments, and is complemented by a table with practical advice.
The following areas where important interlinkages exist between the Industrial Accidents Convention, the Protocol on SEA, the Espoo Convention and, where relevant, the Aarhus Convention,

(a) Addressing hazardous activities;
(b) Screening;
(c) Scoping; (d) Environmental report;
(e) Access to information, public participation and access to justice;
(f) Transboundary procedure;
(g) Decisions;
(h) Monitoring
Addresing the hazardous activities in land use planning/SEA vs EIA

Existing hazardous activities vs New land use in surrounding (housing, new industry, schools, green areas, etc.)

Existing non hazardous activities and new hazardous activity plan
Interlinkages

- Industrial Accidents Convention
  - To prevent the occurrence of industrial accidents as far as possible, to mitigate or minimize their impacts and to promote active international cooperation between countries before, during and after an industrial accident.
  - Prevention and minimization of industrial accidents and their effects. Environmental and health risks identified in SEA and EIA procedures for land-use planning and siting of hazardous activities can be used to inform industrial safety planning under the Industrial Accidents Convention.

- Protocol on SEA
  - To provide for a high level of protection of the environment, including health, by:
    - (a) ensuring that environmental, including health, considerations are thoroughly taken into account in the development of plans and programmes;
    - (b) contributing to the consideration of environmental, including health, concerns in the preparation of policies and legislation;
    - (c) establishing clear, transparent and effective procedures for SEA;
    - (d) providing for public participation in SEA; and
    - (e) integrating by these means environmental, including health, concerns into measures and instruments designed to further sustainable development.
Interlinkages 2

- Informing decisions on land-use plans, programmes and policies.
- Data on industrial safety generated and exchanged under the Industrial Accidents Convention should be used to address environmental and health risks identified in SEA procedures for land-use plans, policies or programmes under the Protocol.
- Espoo Convention
- To ensure international cooperation in assessing and managing environmental impacts of proposed activities (projects) in a transboundary context.
- Informing decisions on the siting of hazardous activities.
- Data on industrial safety that is generated and exchanged under the Industrial Accidents Convention should be used to address environmental and health risks identified in EIA procedures for making decisions or authorizing permits for hazardous activities under the Espoo Convention.
A. Addressing hazardous activities

- The four treaties all contain mechanisms to address hazardous activities.
- A hazardous activity under the Industrial Accidents Convention is “any activity in which one or more hazardous substances are present or may be present in quantities at or in excess of the threshold quantities listed in annex I hereto, and which is capable of causing transboundary effects”.
- Annex I to that Convention provides a list of hazardous substances to define hazardous activities.
- Although the Espoo Convention does not define “hazardous activity”, it defines a proposed activity as “any activity or any major change to an activity subject to a decision of a competent authority in accordance with an applicable national procedure” (article 1, subpara. (v); Appendix I).

- Art. 1 Espoo- Definition
- Vii „IMPACT“ means any effect caused by proposed activity on the environment, including human health and safety......it also includes effects on socio-economic conditions resulting from alteration to those factors
A. Addressing hazardous activities

- According to the Protocol on SEA, an SEA is obligatory for plans and programmes prepared for town and country planning or land-use that set the framework for future development consent for projects (article 4, para. 2, and annex I).
- The list of projects in annex I to the Protocol on SEA is similar to the list of activities in appendix I to the Espoo Convention.
- These activities, assessed under EIA and SEA, should include hazardous activities in the meaning of the Industrial Accidents Convention.
- The Aarhus Convention refers to decisions on “specific activities” (see article 6).
- Activities under annex I (activities determined by national law to have a significant effect on the environment) require a public participation procedure. Such a procedure is also required for plans and programmes relating to the environment.
Impacts (Espoo) Art.1-Espoo

- Human health
- Flora
- Fauna
- Water
- Safety
- Soil
- Climate
- Landscape
- Historical monuments
- Cultural heritage

Seminar on Land-Use Planning and Heritage Center, Mechelen, Belgium, 16-17 May 2018
A. Screening

- Screening is undertaken at the beginning of an environmental assessment to determine whether a full assessment or procedure is formally required under the relevant regulations.
- In relation to land-use planning, safety and hazardous activities, screening is key to identify activities capable of causing transboundary effects.
A. Screening

- To determine whether a plan or programme (other than those defined in article 4, para. 2, of the Protocol on SEA) is likely to have significant environmental, including health, effects, Parties to the Protocol carry out screening (article 4, paras. 3–4):

  - case-by-case examination or by specifying types of plans and programmes, or by combining both approaches (as outlined in article 5).
SEA Screening

- Criteria for screening
  - General
  - Specific reference (SEA Directive)
  - Role of Annex V and Annex VI to the Industrial Accidents Convention

- Procedural safeguards – safety authorities as environmental authorities to be consulted on significant effects of plans and programmes

- Involvement of safety authorities in SEA screening decision and the obligation to identify hazardous activities
Screening in Espoo

- The Espoo Convention does not specify a screening procedure, but its appendix III, on general criteria to assist in the determination of the environmental significance of activities, provides screening criteria. These include a number of factors that are relevant to the safety aspects of hazardous activities, such as:
  - general references to risk,
  - size,
  - location and
defects.
C. Scoping

- Scoping is the process of identifying the precise and case-specific scope of information needed to be included in the EIA documentation or environmental report to be submitted to the competent authority.

- Scoping requires that the environmental report reflect the information needs of the decision-making body and determines the topics to be considered as well as the depth or detail of the information to be presented on each topic.

- The Industrial Accidents Convention does not specifically outline the scope of the information to be provided in the environmental report, as it is recognized that “the analysis and evaluation of the hazardous activity should be performed with a scope and to a depth which vary depending on the purpose for which they carried out”.

- However, “matters which should be considered in the analysis and evaluation” are listed under annex V, paragraph 2, in relation to emergency planning (items 1–5), decision making on siting (items 6–8 in addition to 1–5), information to the public (item 9, in addition to 1–4) and prevention measures (items 10–16 in addition to 1–9).
Appendix II to the Espoo Convention provides guidance on the minimum content of the environmental report, including a description of the proposed activity, reasonable alternatives, the potential environmental impact of the proposed activity, the mitigation measures and monitoring and management programmes.


Article 6 of the Protocol on SEA sets out the scoping procedure.
It establishes the arrangements for determining the relevant information to be included in the environmental report and the authorities to be consulted, as well as opportunities for public participation.

Article 7 sets out the content of the environmental report, which the proponent prepares for consultation among authorities, public participation and possibly also transboundary consultations.
Scoping and environmental report

- Scoping in SEA procedures
  - Information needs of the decision-making body (art. 7.2 of SEA Protocol)
  - Matters in Annex V and VI of Industrial Accidents Convention
- Practice:
  - Preparation of aims and indicators relevant for plan and programme assessment
  - Consultation with environmental authorities
  - Safety issues in scoping /environmental reports

Future land-use plane:
A.) planning land use around existing IA project location
B.) planning new land use for potential IA projects (cones, info are still mission)
D. Environmental report

- Under the Protocol on SEA and Espoo Convention, an environmental report must be prepared and submitted to the competent authority.
- The environmental report requirements are similar under these two instruments. Safety aspects of hazardous activities can be addressed in SEA environmental reports in relation to policies, plans or programmes (i.e., land-use plans or policies), in order to fulfil the requirements of the Industrial Accidents Convention.
- In addition, safety aspects of siting hazardous activities can be addressed in EIA environmental reports in relation to decisions and permits authorizing hazardous activities (projects) on specific sites.
E. Access to information, public participation and access to justice

- In adopting land-use plans or siting decisions, Parties to the Industrial Accidents Convention have to abide by specific obligations relating to the free exchange of information between Parties or between Parties and other stakeholders, such as the public (see articles 9 and 15 and annexes XI and IV, item 5).

- Article 9 of that Convention also regulates public participation and access to justice issues in relation to matters covered by the Convention, without further detailing the procedures.

- Similarly, the Espoo Convention (article 4) and its Protocol on SEA (article 5, para. 4, and articles 9 and 10) require Parties to provide for access to information by obliging them to share documentation with other Parties and the public for transboundary consultation purposes and public participation procedures. Both instruments provide for public participation and grant rights for the public to be informed, to express their views and to have those views taken into account.

- In a transboundary context, the public of affected Parties must have an opportunity to participate that is equivalent to the opportunity provided to the public of the Party of origin (see Espoo Convention, article 2, paras. 2 and 6, article 3, para. 8, and article 4, para. 2; and the Protocol on SEA, article 8).

- The Aarhus Convention is in general the instrument of reference regarding access to information, public participation and access to justice in environmental matters.

- At the same time, the provisions of the Industrial Accidents Convention also complement the obligations of the Aarhus Convention. Specifically, article 9 of the Industrial Accidents Convention requires that adequate information is given to the public in the areas capable of being affected by an industrial accident, and that they are given an opportunity to participate.
Public participation

• Early, timely and effective opportunities for public participation, when all options are open

• Draft plan and Environmental report
F. Transboundary procedure

- The Industrial Accidents and Espoo Conventions have similar transboundary procedures.
- The Industrial Accidents Convention (article 4, para. 4) specifically refers to the Espoo Convention: When a hazardous activity is subject to an environmental impact assessment in accordance with the Espoo Convention and that assessment includes an evaluation of the transboundary effects of industrial accidents, the final decision taken for the purposes of that Convention shall fulfil the relevant requirements of Industrial Accidents Convention.
- There is no formal link between the transboundary procedures of the Industrial Accidents Convention and the Protocol on SEA. However, article 10 of the Protocol requires transboundary consultations between Parties, which are triggered when one Party is developing a plan or programme that has the potential to cause significant transboundary environmental, including health, effects.
G. Decision

- Safety aspects of hazardous activities should be addressed in plans or programmes addressing land use or in decisions or permits authorizing activities or modifications of these activities on specific sites (siting decisions). Under the Industrial Accidents Convention, article 7 requires that Parties seek to establish policies on siting of hazardous activities and their modifications, as well as policies on significant developments in areas that may be affected by the transboundary effects of an industrial accident arising out of a hazardous activity. Annex VI, pursuant to article 7, outlines the matters that should be taken into consideration when making siting decisions, such as: the results of risk analysis and evaluation; consultations and public participation processes; environmental risk evaluations and any transboundary effects; and the siting of hazardous activities.
H. Monitoring

- In relation to monitoring, the Industrial Accidents Convention promotes the exchange of information between Parties, operators and competent authorities as part of multilateral and bilateral cooperation.
- This cooperation includes the sharing of programmes for monitoring, planning, research and development, as well as the methods used for the prediction of risks, including criteria for the monitoring and assessment of transboundary effects (see annex XI). Protocol on SEA (article 12) and the Espoo Convention (appendices II and V) envisage monitoring the actual effects of the plans or activities that have undergone environmental assessment.
- As stated above, the results of monitoring (relevant to hazardous industrial activities) should be shared between Parties, operators and competent authorities to fulfil the requirements of the Industrial Accidents Convention.
Decision and monitoring

- Specific requirements under Espoo and SEA Protocol regarding
  - Form
  - Content
  - Statement of reasons
  - Informing on taking the decision
- Monitoring under Espoo and SEA Protocol and flow of information under the Industrial Accidents Convention
III. Experiences and good practices of member States based on the survey findings

- EIA and SEA procedures have been used to ensure that potential environmental impacts arising from policies, plans, programmes and projects are identified and assessed at the earliest stage possible, and subsequently communicated to the decision maker, minimized and monitored.
Good practices of member States

- Good-practice examples of a fully integrated process of industrial safety planning, EIA and SEA are found:
  - Bulgaria,
  - Belgium (Flanders Region) and
  - Portugal.
IV. Guidance on legal, procedural and administrative aspects

- The SEA process should consider whether the proposed land-use plan influences or takes into account the hazardous activities addressed under the Industrial Accidents Convention. This can be done by consulting the nationally designated authorities for implementation of the Industrial Accidents Convention.
Recommendations

- The SEA screening can be required to specify whether the proposed plan or programme addresses land use related to existing or proposed installations for hazardous substances. This can be done by consulting the nationally designated authorities for implementation of the Industrial Accidents Convention.

- Detailed information about new proposed “hazardous activities” might not be available in the SEA process, but such early consultations can nevertheless specify whether the proposed land use influences or takes account of the existing or proposed installations where industrial accidents can happen.
Recommendations

- Effects caused by industrial accidents under the Industrial Accidents Convention can be considered as a subset of environmental, including health, effects under the Protocol on SEA.
Recommendations

- For an SEA of a proposed land-use plan, the nationally designated authorities for implementation of the Industrial Accidents Convention should be consulted to determine what kind of information (including the level of detail) from annex V should be provided in the environmental report in the SEA process to maximize the linkages and reduce overlaps.
Recommendations

- Depending on the advice from scoping consultations, the proponent of the landuse plan may conduct SEA and analysis and evaluation of industrial accidents separately, concurrently or jointly. Nevertheless, arrangements should be made for sharing information generated and the recommendations for reducing the effects, safe distances, etc., should be coordinated.
Recommendations
Public participation

- All information (the proposed land-use plan, the environmental report and the analysis and evaluation) should be available for public comments. There should also be a coordinated procedure for soliciting public feedback. This could be based on annex V to the SEA Protocol and annex VIII to the Industrial Accidents Convention.
Recommendations

- Consultations with relevant authorities

- The proposed land-use plan, environmental report and the analysis and evaluation can be made available for comments by the relevant authorities.
Recommendations

Decision-making

- Decision-making on the proposed plan or programme should address outcomes of any analyses and consultations conducted under the Industrial Accidents Convention along with the environmental report and outcomes of consultations under the Protocol.
Recommendations

Information on decision

- Information on the decision
- (i.e., the adopted land-use plan) should be provided jointly or in a coordinated manner, in order to reduce overlap between the information provided under article 11, para. 2, of the Protocol on SEA and under article 9, para. 1, of the Industrial Accidents Convention.
A. General obligations and approaches to their implementation

- The Industrial Accidents Convention requires that Parties develop and implement policies and strategies for reducing the risk of industrial accidents and improving preventive, preparedness and response measures (article 3, para. 2).

- Parties have to take appropriate legislative, regulatory, administrative and financial measures for the prevention of, preparedness for and response to industrial accidents (article 3, para. 4).
General obligation

- Ensure that the objectives of preventing industrial accidents and limiting the consequences of such accidents are taken into account in their land-use or other relevant policies and strategies referred to in article 3, paragraph 2, in particular through controls on:
  - (a) The siting of new hazardous activities;
  - (b) Modifications to existing hazardous activities;
  - (c) The type and location of new developments, including transport routes and residential and public use areas, which, by virtue of being in the vicinity of a hazardous activity, may increase the risk or consequences of an industrial accident
B. Substantive obligations

- To make the above legal requirements operational, they may be supplemented in the form of either legal requirements or guidance, by referring to matters set out in annex V, paragraph 2, subparagraphs (1) to (8), and annex VI to the Industrial Accidents Convention, which should be considered during the respective decision-making.

- Substantive obligations may be included in the respective decision making in different ways, alongside the obligations arising from the Espoo Convention and the Protocol on SEA, in particular by:
  - (a) Establishing a clear legal requirement obligating planning authorities to address the above matters in their decisions;
  - (b) Establishing a clear legal requirement to address the above matters in the respective EIA or SEA procedures;
  - (c) Combining the two methods (a) and (b). 58.
Substantive obligations

- In coordinated or combined procedures, the effects covered under the Industrial Accidents Convention can be reported along with the environmental report (either separately or as part of it).
- These effects should at least be summarized within the environmental report to allow their systematic consideration within the EIA or SEA process, further to the Espoo Convention and Protocol on SEA.
- Reporting the fulfilment of substantive obligations in the statement of reasons and considerations on which the decision has been based represents a standard practice in many countries. Hence, it may be useful to introduce a special requirement to this effect into the respective legal schemes.
C. Procedural obligations

Procedural obligations aimed at ensuring that industrial accidents and safety considerations are formally included in land-use decision-making may take different forms, for example by:

- (a) Involving competent safety authorities in the decision-making;
- (b) Involving competent safety authorities in the respective EIA or SEA procedures;
- (c) A combination of the two methods set out in (a) and (b).
Procedural obligations

- National frameworks where competent safety authorities’ involvement is expected in land-use, EIA or SEA procedures often provide only a general reference — “where appropriate” — to ensure their participation, without specifying concrete criteria for determining whether they should be involved.
- In the SEA or EIA procedures, when specifying which public environmental or health authorities to consult, the safety authorities should also be specified for consultation.
- The obligation in article 9, paragraph 1, of the Protocol on SEA to appoint the responsible environmental or health authorities should also include the obligation to designate competent safety authorities for the purposes of the Industrial Accidents Convention.
- Therefore, authorities designated under article 17, paragraph 1, of the Industrial Accidents Convention could be considered as the environmental authorities to be consulted during the EIA or SEA procedures.
- Under the Protocol on SEA, the environmental and health authorities must be consulted during:
  - screening (article 5, para. 2),
  - scoping (article 6, para. 2) and
  - on the draft plan or programme and environmental report (article 9, para. 2).

A similar good practice approach is taken in several national frameworks where environmental and health authorities are consulted in all the stages of the EIA procedure.

In most national frameworks, the procedural involvement of the competent safety authorities, if envisaged, in the land-use decision-making or respective EIA or SEA procedures is of a consultative nature. However, there are examples where their more prominent role further assures the inclusion of safety considerations into the procedures.
## Tranboudary SEA/EIA/Industrial Accident (IA)

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<td>Consultation with ministry for IA</td>
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Key conclusions

- Involving competent safety authorities in the respective EIA or SEA national and transboundary procedures:
  - Screening
  - Scoping
  - Environmental report
    (Involving industrial accident expert in preparation of SEA/EIA report, scennarios, safety risk assessment)
  - Public participation
  - and final decision assure that the main aim of Industriar Convention (prevention, control, minimalisation of risk, etc.) is achieved.
- SEA/EIA-case by case approach
- Good practice development
Thank you!