

UNECE CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS

OUTLINING THE “GUIDANCE ON LAND USE PLANNING, SITING AND RELATED SAFETY ASPECTS” AND SURVEY

SIXTH MEETING OF THE WORKING GROUP ON THE DEVELOPMENT OF THE CONVENTION

30TH NOVEMBER – 2ND DECEMBER 2015

PALAIS DES NATIONS – GENEVA (SWITZERLAND)



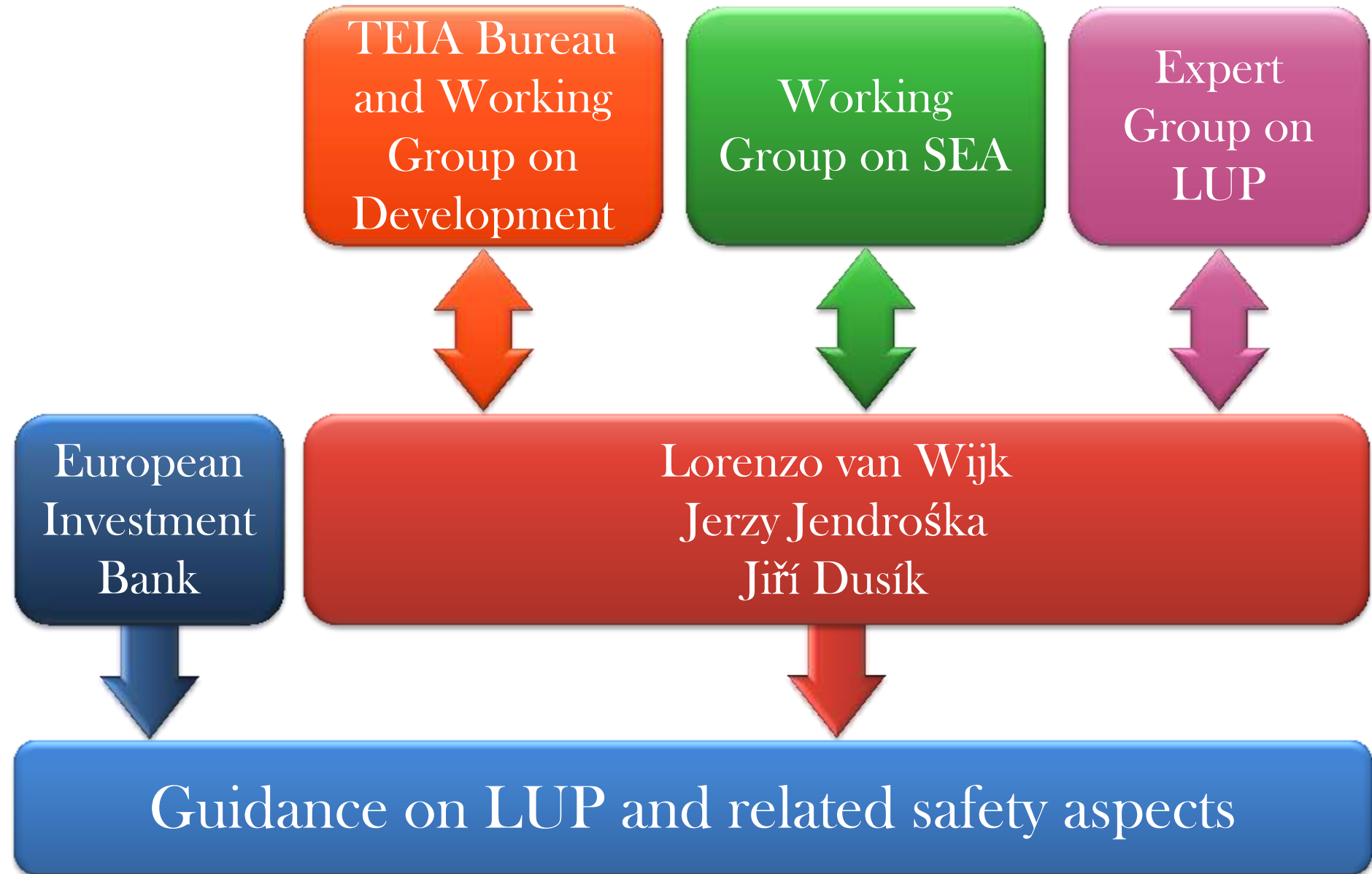
- 1) **Background to the project;**
- 2) **Presenting the outline of the Guidance;**
- 3) **Introducing the survey;**
- 4) **Next steps.**



- ▲ The CoP to the TEIA Convention requested the WG on the Development of the Convention to review a guidance document on land-use planning, drawn up with external expertise, for possible adoption at its ninth or, alternatively, tenth meeting (eighth meeting - Geneva, 3-5 December 2014).
- ▲ The CoP adopted the 2015-2016 workplan on the guidance development and the sharing of good practices on safety and land-use planning in cooperation with the SEA Protocol to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and the UNECE Committee on Housing and Land Management.
- ▲ The WG on Development was presented with and took note of the proposed approach to the development of the guidance document on safety and land-use planning (fifth meeting - Geneva, 11-13 May 2015).
- ▲ The WG on EIA and SEA, included as a joint activity the development of the guidance document in its workplan (fourth meeting - Geneva, 26-28 May 2015).



DEVELOPERS AND CONTRIBUTORS TO THE GUIDANCE





- ▲ developing a guidance on “land-use planning and related safety aspects” with regard to industrial hazardous activities to assist Parties with the implementation of the TEIA Convention and SEA Protocol;
- ▲ supporting the public authorities and practitioners involved in decision-making on land-use policies, plans and programmes, including related environmental assessment;
- ▲ sharing experience and good practices on the development and implementation of land-use policies, strategies and measures and related safety aspects - in particular to the hazardous activities siting, their significant modification and on significant developments in areas affected by the consequences of transboundary industrial accidents;
- ▲ presenting experience concerning the consultation of the environmental and health authorities and public participation;



- ▲ clarifying the legal requirements of both the TEIA Convention and SEA Protocol;
- ▲ addressing practical implementation aspects with regard to land-use planning and related safety aspects to assist the Parties to the two instruments to apply their respective provisions effectively and in a mutually consistent and complementary manner, in line with existing good practice;
- ▲ including technical background information on the risks and possible consequences of industrial accidents arising from hazardous activities to be taken into account in land-use planning and the determination of appropriate safety criteria and standards - this will also assist in determining whether a land-use plan or programme is subject to the Protocol on SEA (screening), as well as in the determination of the scope of the assessment (scoping).



- ▲ decision-making on the siting of hazardous activities and their significant modifications and developments in areas that could be affected by the transboundary effects of an industrial accident, including related relevant processes and a description of the elements and criteria to be taken into account;
- ▲ linkages between the general provisions of the TEIA Convention in article 3, paragraph 1, and land-use planning/siting procedures in article 7;
- ▲ SEA requirements and procedures, including consultation of relevant authorities and public participation, as they apply to land-use planning with regard to the siting and significant modifications of hazardous activities;
- ▲ examples of policies, legislation and measures on land-use planning, hazardous activities siting and their significant modifications, and identify good practices, with a particular emphasis on the transboundary context – these will include cases in which SEA procedures have been applied, as well as the related consultations with the relevant authorities and the public.



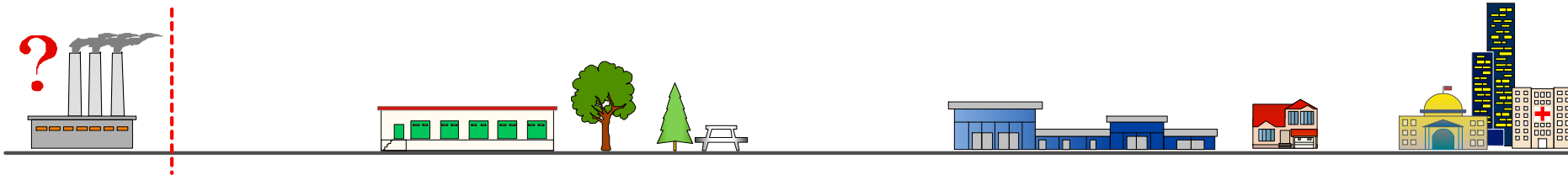
ISSUES ADDRESSED TO REACH THE OBJECTIVES (2)

- ▲ synergies between the TEIA Convention and SEA Protocol regarding land-use policies, plans and programmes and hazardous activities siting and their significant modifications in a transboundary context;
- ▲ provisions on public information and participation in land-use planning and policies in the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) and the European Union (EU) Seveso III Directive;
- ▲ provisions of the Espoo Convention, with regard to EIA of relevant planned industrial activities potentially able to have adverse transboundary impact;
- ▲ EU Directives on EIA and SEA;
- ▲ linkages with principles and guidelines to land management, as developed under the ECE Committee on Housing and Land Management.

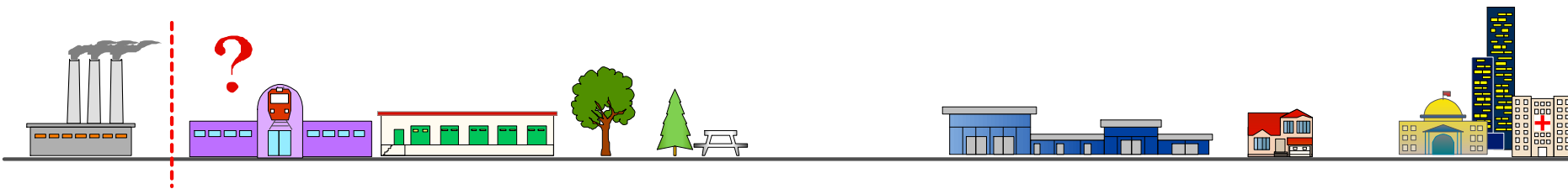


CASES ADDRESSED IN LAND-USE PLANNING (1)

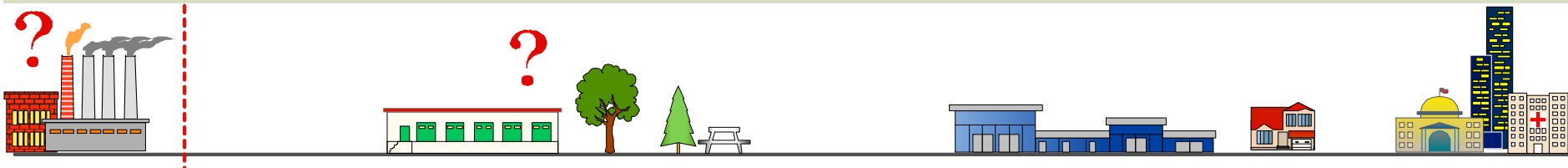
New hazardous activity within existing urbanisation



New development nearby existing hazardous activity

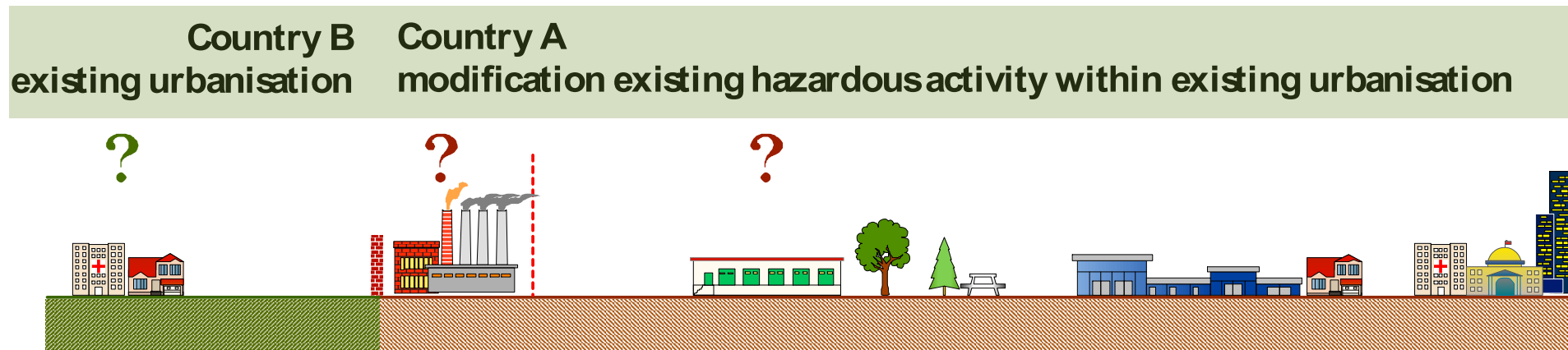
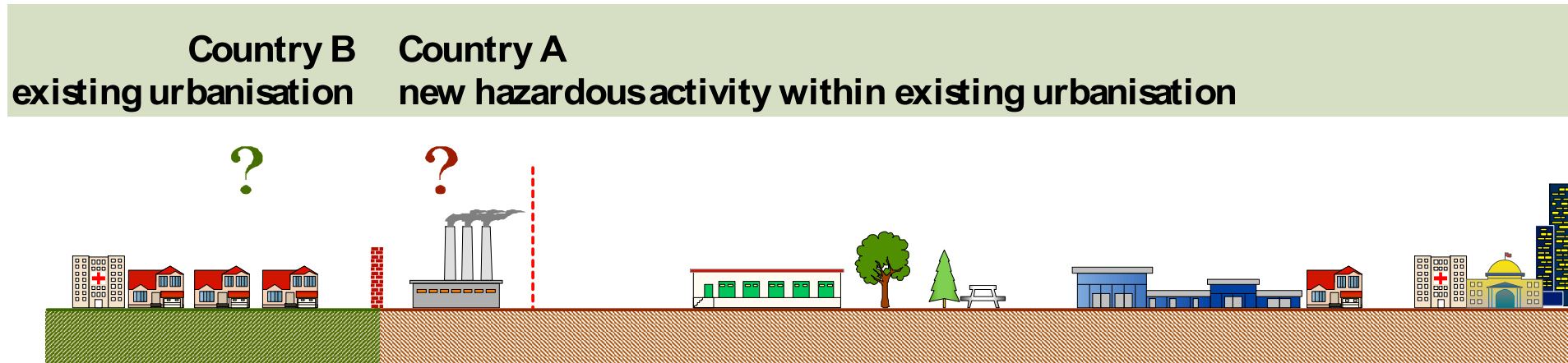


Modification existing hazardous activity within existing urbanisation



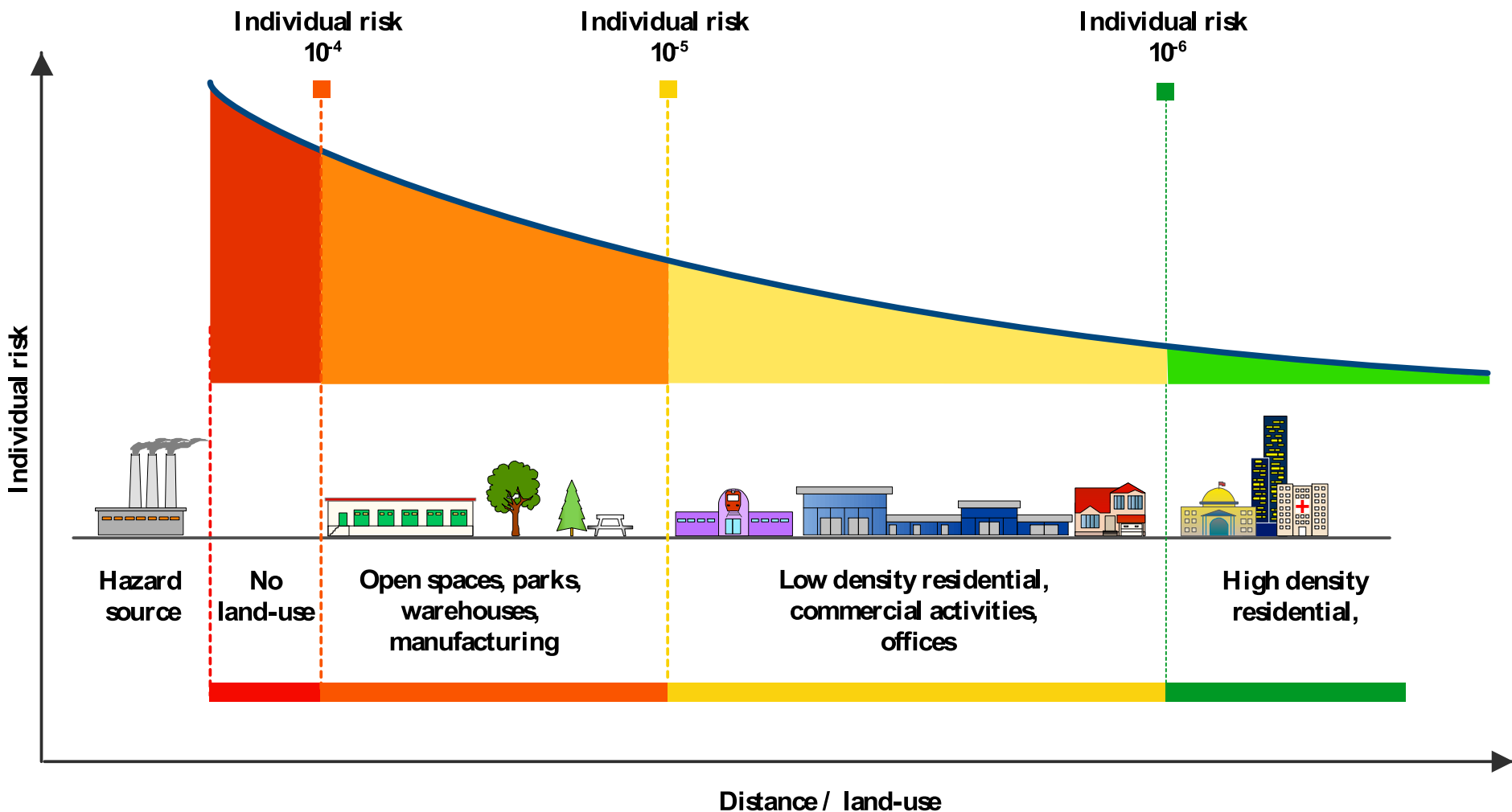


CASES ADDRESSED IN LAND-USE PLANNING (2)





EXAMPLE LAND-USE ZONING BASED ON RISK CRITERIA



(Adapted from Major Industrial Accidents Council of Canada – MIACC)



- ▲ a guidance document on land-use planning and related safety aspects is a valuable tool;
- ▲ it represents a challenge to increase the operability of the contents of the various instruments for preventing major industrial accidents and mitigating its consequences;
- ▲ not all potential accidents will be covered by technical or organizational means but some residual risk must be left to land-use restrictions;
- ▲ land-use planning has far reaching implications such as assessing the options of disposing of a land owner premises;



COMMENTS EXPERT GROUP ON OUTLINE GUIDANCE (2)

- ▲ change title of guidance from "safety and land-use planning" into "land-use planning and related safety aspects" - legislation, policies or procedures on safety are much wider in scope and timeframe insufficient to address the whole safety issue in the survey;
- ▲ importance of the question "what is the role of land-use planning within major accident prevention/consequence mitigation" in order to address the two main objectives (support of public authorities and practitioners in decision-making and clarification of the legal requirements of the TEIA Convention and SEA-Protocol with respect to land-use planning);
- ▲ is land-use planning one element amongst others to be taken into account or is it a decisive instrument, meaning that a certain development can proceed only in the case of a positive outcome of the respective assessment;
- ▲ clarifying interpretation of certain keywords essential for decision-making, e.g. what is a "significant effect" or a "significant modification"?



- ▲ describe the context that shaped the land-use planning approach so that public authorities and practitioners can select the best approach to their needs - national practices and variations of the legal systems lead to several good or best practices (e.g. country has a strong precautionary principle focused on technical prevention and acceptance of remaining risk or the country has a strong tradition of emergency response with focus on mitigation);
- ▲ land-use planning decision-making process cannot be automated but assisted by different tools since brainstorming on related safety issues involves several interacting players – final decision-making is a political decision based on the brainstorming result;
- ▲ assessing potential environment impacts rely only on expert judgement as the lack of threshold values for environmental damage does not allow a quantitative assessment;

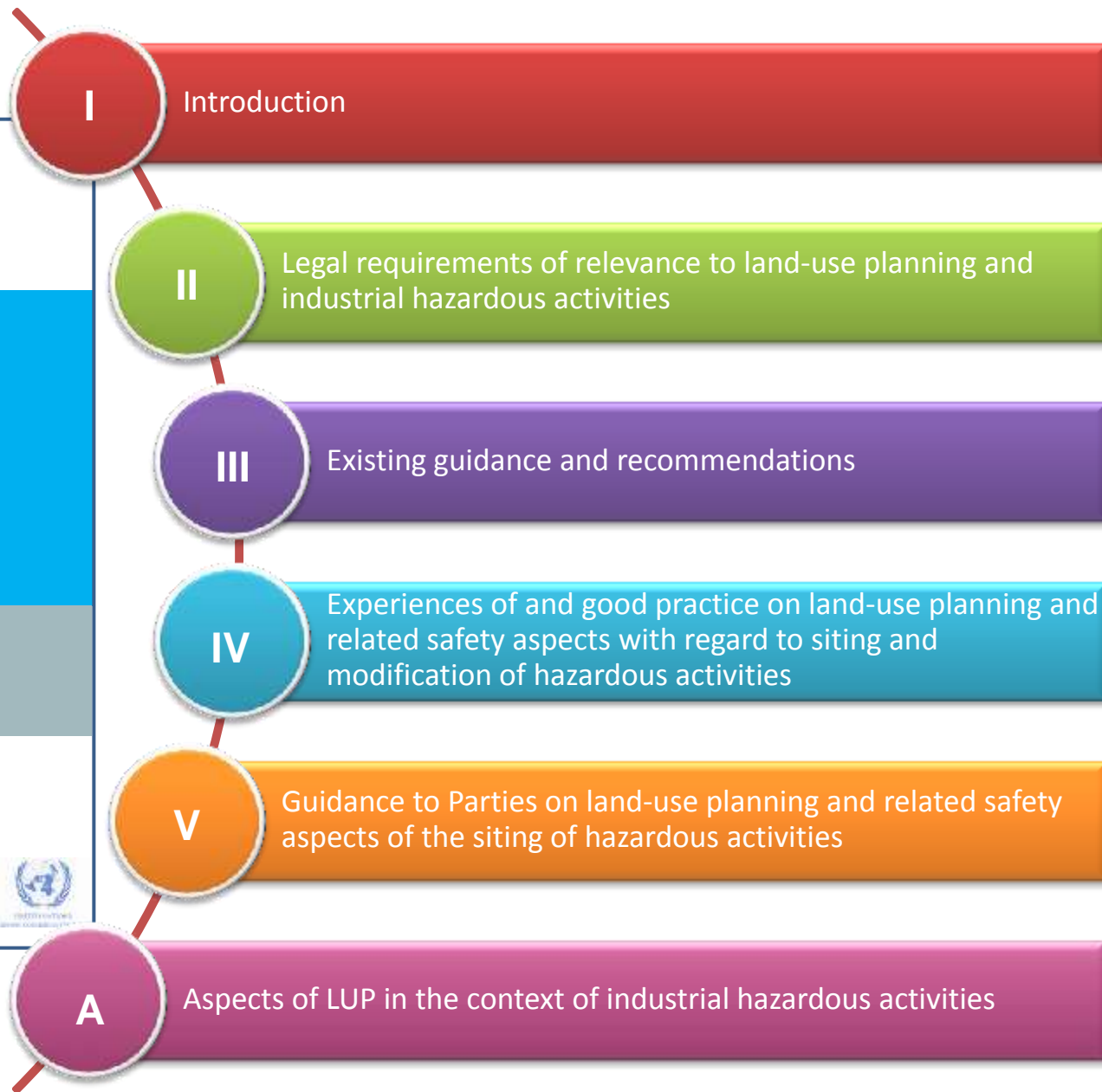


- ▲ new Sections on “new developments in the vicinity of hazardous activities” and all the “areas of attention” in land use planning that can be impacted by the effects of major accidents of hazardous activities;
- ▲ clarify in the “Harm to population” Section that the complete population will be taken into account, specifying the areas with their presence and discuss the notion of distance between population types and hazardous;
- ▲ damage to the environment must be specified in a separate section
- ▲ new Section on risk estimation and acceptance;
- ▲ domino effects should be addressed in the risk estimation or calculation of the dangerous activities part and not separately;
- ▲ highlight that there is no harmonized agreement on certain issues such as effect thresholds (note: this was one of the main obstacle in preparing EU guidances and other documents for the Seveso II Directive);
- ▲ highlight the difficulties dealing with societal risk.



Land-Use Planning
and Related Safety
Aspects

A Guidance for Public
Administration and
Practitioners





I

Introduction

- 1.1 Background
- 1.2 Goals and objectives
- 1.3 Methodology
- 1.4 Structure



II

Legal requirements of relevance to land-use planning and industrial hazardous activities

- 2.1 ECE legal instruments
 - 2.1.1 Convention on Transboundary Effects of Industrial Accidents
 - 2.1.2 Protocol on Strategic Environmental Assessment
 - 2.1.3 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)
 - 2.1.4 Interlinkages, synergies and complementarities between the Industrial Accidents Convention and the Protocol on SEA
- 2.2 EU legislation
 - 2.2.1 EU Seveso III Directive
 - 2.2.2 EU Directive on Environmental Impact Assessment
 - 2.2.3 EU Directive on Strategic Environmental Assessment
- 2.3 National legislation in ECE countries



III

Existing guidance and recommendations

- 3.1 Location criteria and guidance under the Industrial Accidents Convention
- 3.2 Convention
- 3.3 Guidance under the Protocol on SEA
- 3.4 Principles and guidelines on spatial planning under the Committee on Housing and Land Management
- 3.5 Recommendations of the joint seminar on land-use planning around hazardous industrial sites
- 3.6 European Union guidance
- 3.7 Guidance developed by UNECE Member States
- Guidance on public information and participation



IV

Experiences of and good practice on land-use planning and related safety aspects with regard to siting and modification of hazardous activities

- 4.1 Land use planning approaches
 - 4.1.1 Consequence based
 - 4.1.2 Risk based
- 4.2 Land use planning and control
 - 4.2.1 For new hazardous industrial activities
 - 4.2.2 For existing hazardous industrial activities
 - 4.2.3 Areas that could be affected by the transboundary effects of an industrial accident
- 4.3 Application of strategic environmental assessment for land-use plans and programmes
- 4.4 Experiences and good practices of ECE member States



V

Guidance to Parties on land-use planning and related safety aspects of the siting of hazardous activities

- 5.1 Guidance on legal, procedural and administrative aspects
- 5.2 Guidance on technical aspects



A

Aspects of LUP in the context of industrial hazardous activities

- A.1 Consequences/effects of industrial accidents
 - A.1.1 On human beings
 - A.1.1 On environmental receptors
 - A.1.2 On other elements of sensitivity or interest
- A.2 Stakeholders involved
 - A.2.1 Authorities
 - A.2.2 Industry
 - A.2.3 General public
 - A.2.4 Non-governmental organizations
- A.3 Elements and criteria to support decision-making on land use and safety
 - A.3.1 safety
 - A.3.1.1 Consequences
 - A.3.1.2 Fire
 - A.3.1.3 Explosion
 - A.3.2 Effects
 - A.3.2.1 Thermal radiation
 - A.3.2.2 Blast overpressure
 - A.3.2.3 Toxicity
 - A.3.3 Harm to population
 - A.3.4 Property damage or total or partial loss of value
 - A.3.5 Damage to the economy (impacts on business, infrastructure, etc.)
 - A.3.6 Criteria for risk assessment (including health effects)
 - A.3.6.1 Individual risk criteria
 - A.3.6.2 Societal risk criteria

Purpose of the survey is to:

- ▲ collect from national authorities and other interested stakeholders (such as civil society, academia, private sector or international organizations) information on legislation, policies, measures and good practices on land-use planning and safety with regard to siting of industrial hazardous activities, possible industrial accidents and their potential transboundary effects, as well as on related planning and decision-making procedures (under the TEIA and SEA legal instruments).
- ▲ distilling existing good practices (which will be presented at the workshop on 13 April 2016);
- ▲ identify countries' needs and possible challenges with respect to the implementation of the TEIA Convention and the SEA Protocol to the Convention on Environmental Impact Assessment in a Transboundary Context.



- A. Information about the respondent

- B. Information regarding inclusion of industrial accidents safety considerations into decision-making regarding land use and respective environmental assessment procedures

- C. Practical considerations on land-use planning with regarding industrial accidents safety assessment and SEA



Action	Deadline
Second draft of the guidance available to Parties for comments electronically	March 2016
Present second draft of the guidance to the TEIA Working Group on Development and the fifth meeting of the Working Group on EIA and SEA during joint event/workshop	April 2016
Prepare the final version of the Guidance	June 2016
Guidance adoption at TEIA CoP	November 2016 (alternatively the third quarter of 2018)
Guidance adoption at the MoP to the Protocol on SEA	June 2017

Thank you for your attention

