

Strategic Environmental Assessment

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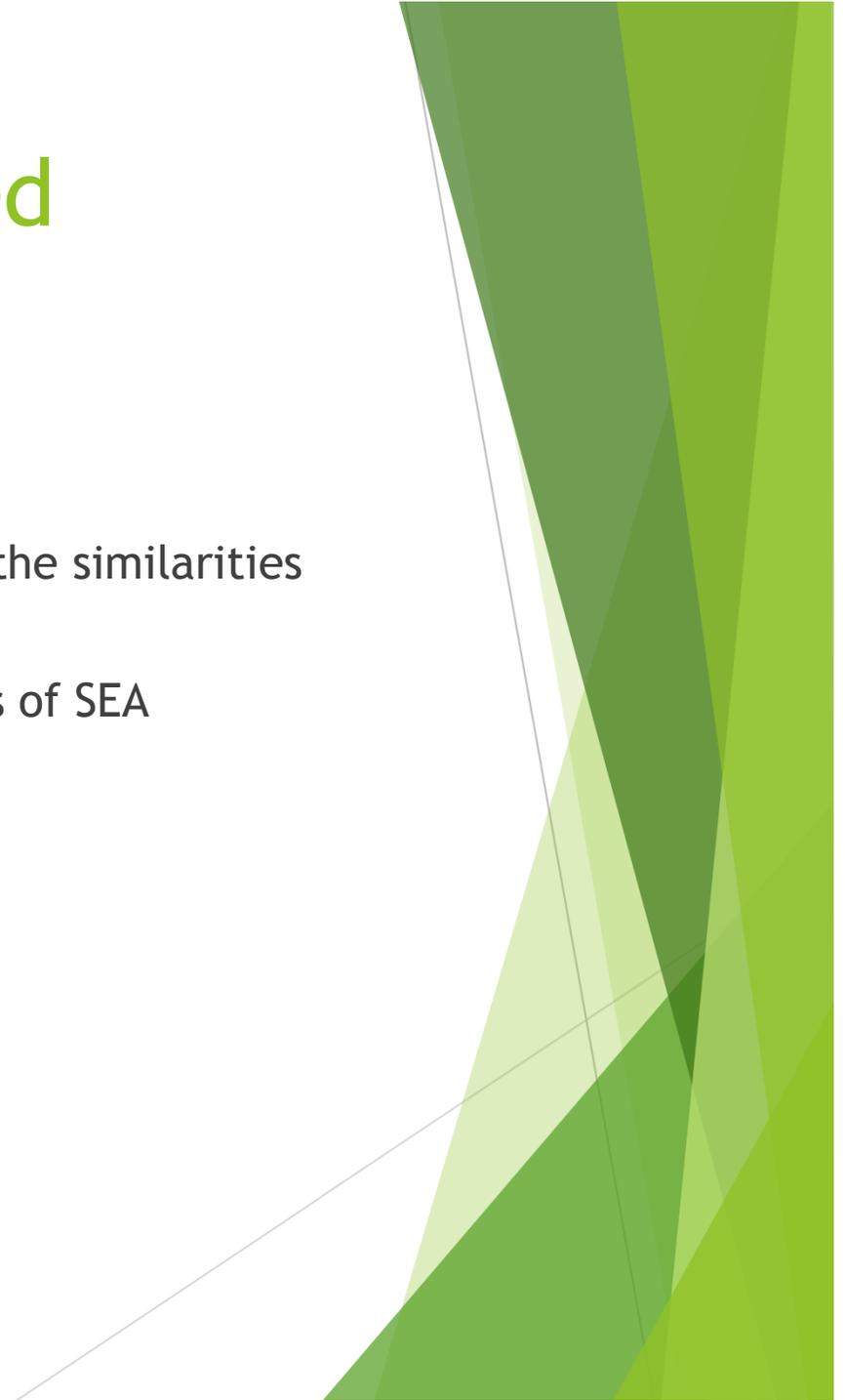
DGE Group / Hendrikson & Ko / Estonian Environment Institute

Agenda

- ▶ Role of SEA, major trends and challenges
- ▶ History, roots of SEA
- ▶ Principles of good practice
- ▶ Current issues, emerging directions
- ▶ Examples
- ▶ Resources

Some commonly asked questions

- ▶ What is SEA, what is it used for?
- ▶ How does SEA relate to EIA, what are the similarities and differences
- ▶ What are the basic principles and steps of SEA
- ▶ Who does what in SEA



SEA

- ▶ SEA is the process of evaluating the environmental impact of proposed policies, plans or programs, in order to inform decision making.

João (2005)

- ▶ *“A range of analytical and participatory approaches that aim to integrate environmental considerations into policies, plans and programs (PPPs) and evaluate the inter linkages with economic and social considerations”*

OECD (2006)

What is SEA

- ▶ Systematic, open process of analyzing impacts of policies, plans, programs and other strategic initiatives on the environment
- ▶ Undertaken to ensure that environmental considerations are taken into account and integrated into decision-making in support of sustainable development
- ▶ Applied to all strategic proposals that have a potentially significant impact on the environment
- ▶ Because of the diversity of proposals, SEA approach he s are more diverse than EIA although the same basic principles apply

History

- ▶ Rationalistic planning of 50-es (Banfield, Perloff, Margolis)
- ▶ EIA is holding the flag of rationalistic approach when planning has evolved
- ▶ Application of EIA in 70es and 80ies presumed that whole range of assessments is covered
- ▶ EU EIA directive 1985
- ▶ Term *Strategic Environmental Assessment* was used in the late 80-es and meant IA upstream of the project
- ▶ 1990 - differences in terminology, SEA procedure, decisionmaking and decisionsm, where SEA is necessary,
- ▶ 2000 - Content of SEA, EU SEA directive (2001) arguments and analysis of practice.

The frame

- ▶ the UN Convention on Biological Diversity (Rio de Janeiro, 1992);
- ▶ the UN Convention on the Law of the Seas (Montego Bay, 1982);
- ▶ **the regional Convention on EIA in a Transboundary Context (Espoo, 1991), which has a specific Protocol on SEA (Kiev, 2003);**
- ▶ Antarctic Treaty (Washington, 1959), which has an Environmental Protocol (Madrid, 1991) that institutes an international EIA system for the Antarctic.
- ▶ Other global and regional conventions include provisions for EIA and SEA. These include the Convention on Migratory Species (Bonn, 1979);
- ▶ the Convention for the Protection of the Architectural Heritage of Europe (Granada, 1985);
- ▶ the European Convention on the Protection of the Archaeological Heritage (Revised) (Valletta, 1992);
- ▶ the European Convention on Landscape (Florence, 2000);
- ▶ **the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998).**

The frame 2

EU

- ▶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of c

National SEA legislation:

- ▶ frequently amended, recently due to amendments in EIA Directive having some relevance on SEA

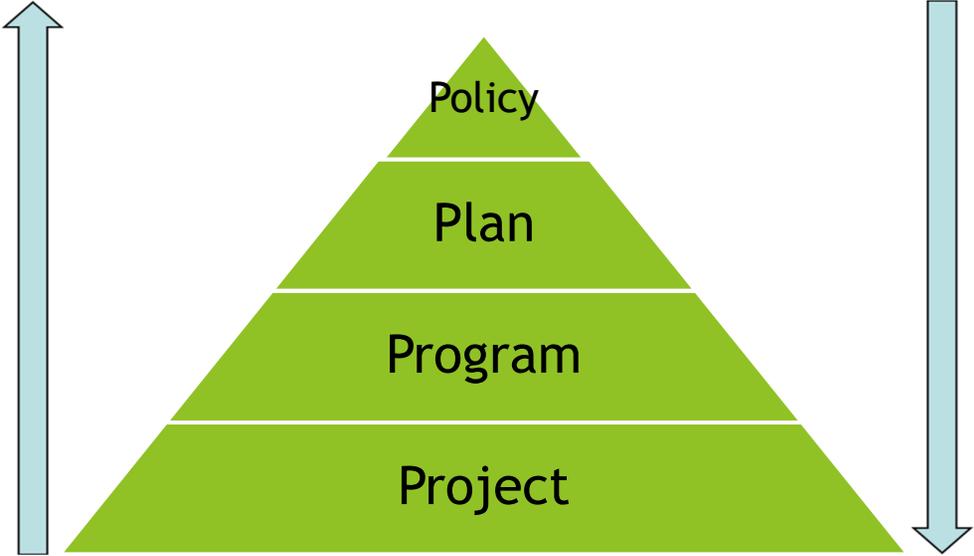
Why is SEA important, where is added value

- ▶ Focuses on upstream source of environmental problems not just their downstream impacts
- ▶ Relates on sustainable development linking strategic initiatives and subsequent projects to global principles (MDG7 or SDG-s)
- ▶ Ensures that critical resources and environmental assets are protected
- ▶ Identifies development opportunities and potentials
- ▶ Prevents costly mistakes
- ▶ Streamlines follow-up and creates links to parallel initiatives (acts as link between silos)

Hierarchy of decisions

Impact of decisions

Precision of info



SEA vs EIA

- Takes place at earlier stages of decision making process
- Multi stage process with variations e.g. policy v plans/programs
- Pro-active, out-in -front approach to development proposals
- Broad level of analysis, e.g. focus on cross sector links and issues
- Considers potential wide range of development alternatives
- Gives early warning of cumulative impacts
- Emphasis on meeting goals and safeguards for the environment
- Focus on do most good

- Takes place at the end of decision-making cycle
- Well-defined process, clear beginning and the end
- Reacts to specific development proposal
- Detailed cause-effect analysis of the impact of project components
- Considers limited range of feasible alternatives
- Limited opportunity to address cumulative impacts at project level
- Emphasis on mitigating and minimizing impacts
- Focus on do no/least harm

SEA and EIA

Strategic planning document

Policy
Programme
Plan



**Strategic
Environmental
Assessment**

Project

Permit



Environmental Impact Assessment

Many countries do not follow this division



The principal stages of SEA

- ▶ Screening- Initiation of the SEA process
- ▶ Scoping- definition of Area of Influence, likely impacts, mitigation possibilities, involved parties and process timetable, selection of approach and methods, basic principles of follow up
- ▶ Consultation and publication of Scoping report
- ▶ Preparation of SEA report- prognosis of impacts, definition of mitigation measures, risks and uncertainties and follow-up procedures
- ▶ Consultation and publication of SEA report
- ▶ Follow up

Key principles of SEA good practice

- ▶ Integrated
- ▶ Adaptive
- ▶ Relevant
- ▶ Alternatives
- ▶ Proactive
- ▶ Sustainability oriented
- ▶ Transparent
- ▶ Accountable, fair, impartial
- ▶ Cost-effective



Decision-making, role of SEA

- ▶ Normative rationalistic approach is still essence of EA
- ▶ Planning system has evolved but EA has remained largely the same
- ▶ SEA is supportive measure, the role is depending on type of strategic initiative, generally rationalistic in nature
- ▶ Depending on main discourse of the strategic initiative can be informative, structuring, communicative, regulative,
- ▶ The power of SEA varies by country (e.g. Integrated part of process or accredited review authority)

Present

- ▶ More than 50 countries are estimated to have some provisions for SEA with increasing number of developing countries,
- ▶ Different approaches in strategic planning, partly because there are different discourses / approaches
- ▶ Lack of common approach and approach is depending on level of decision-making, good SEA approach is „taylor made“.
- ▶ Main approaches and developments
 - ▶ impact-centered approach to SEA or baseline led SEA;
 - ▶ institutions-centered SEA or objectives-led SEA
 - ▶ Integrated assessment
- ▶ New SEA and SEA type procedures applied by donor agencies
- ▶ New OECD Guidance to harmonise these approaches in accordance with the Paris declaration
- ▶ SEA directive is subject of review and changes are possible

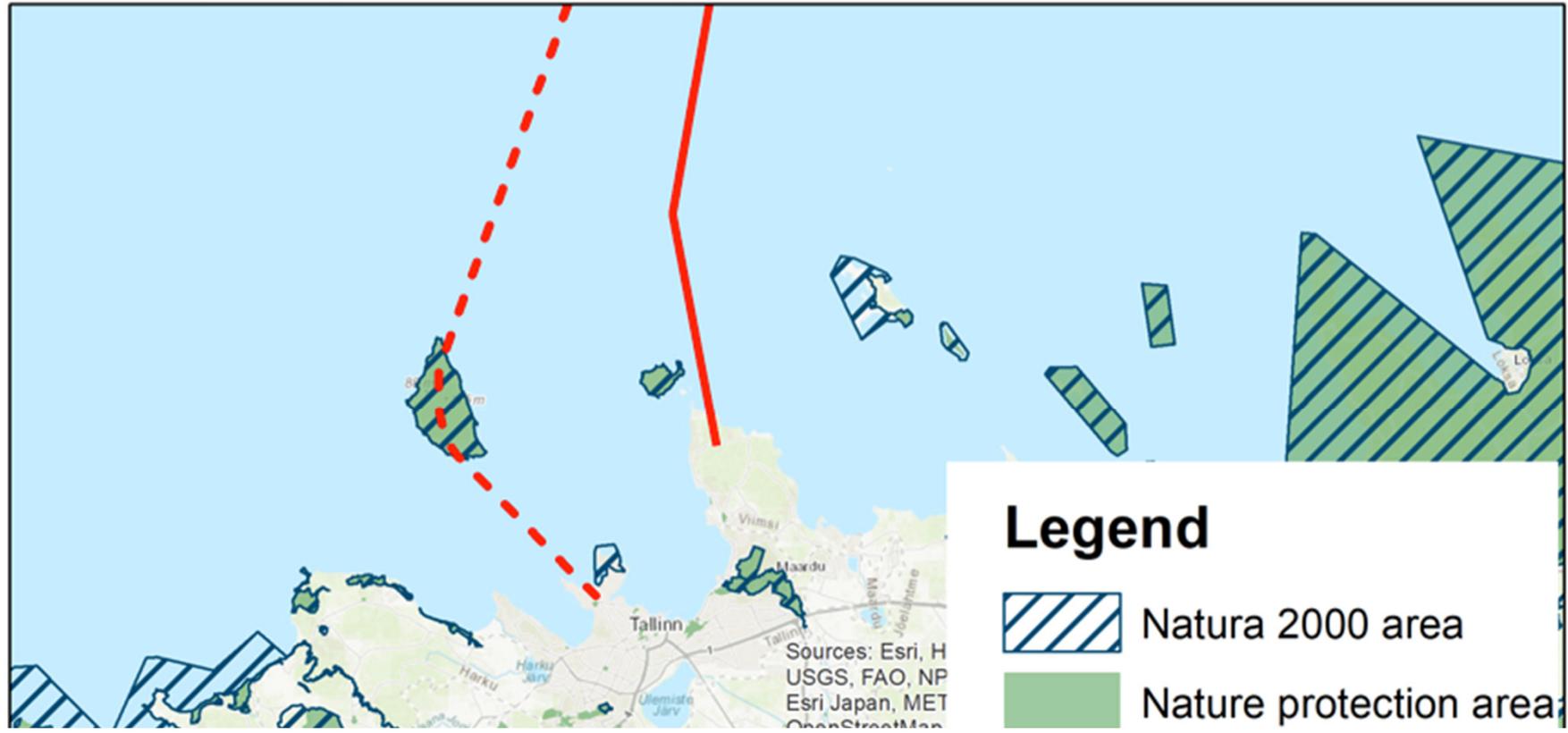
FinEst Link CBA SEA



Alternative 2

Alternative 1

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Legend

-  Natura 2000 area
-  Nature protection area

Sources: Esri, H USGS, FAO, NP Esri Japan, MET OpenStreetMap

Objective	0 variant Present ferry operated connection	0+ variant Present ferry operated connection with known improvements, Rail Baltic is built.	Tunnel option
1. Reduce traffic related noise and air pollution.	Presently the traffic related pollution and noise is high due to location of sensitive populated areas	Relocation of cargo traffic to less sensitive areas will improve harmful effects of traffic related noise and air pollution to some extent.	Noise and air pollution of passenger and cargo transport will be reduced and/or localized to less sensitive areas. Also, transport will be powered with energy that could be easily operated with renewable energy
2. Reduce transport-related emissions of	Operating the link will concentrate car traffic to harbours and	Improvements in fleet (LNG ships) and port system (relocation of cargo out of the	Use of renewables in operating the electrically powered link will provide

Aspect	0 variant	0+ variant	Tunnel option
Climate	Impact to the climate will remain similar to the current situation.	Transport demand will be increased and also CO ₂ emissions will be increased.	Impact to the climate will be greatly determined by the origin of electricity used in the construction and operation stage see (see more details in the Appendix 1). CO ₂ emission of construction stage would be 434 000 t, with Finnish electricity and 1 953 000 t, if Estonian electricity is used. It would take about 43 years of tunnel operation with Finnish electricity to save equal amount of CO ₂ emitted in the construction stage, with Estonian electricity used and about 9 and half years if Finnish electricity would be used in the construction stage.
Terrestrial habitats and Natura 2000	No significant terrestrial habitats will be affected by	With improved ferry connection and operation of Rail Baltic	With improved tunnel construction there will be few impacts due to railway system development, mainly in Estonia (Pirita SAC) where additional assessments are necessary

Resources:

www.iaia.org

<http://ec.europa.eu/environment/eia/sea-legalcontext.htm>

<https://unep.ch/etu/publications/textonubr.pdf>

<http://www.oecd.org/dac/environment-development/strategic-environmental-assessment-in-development-practice-9789264166745-en.htm>