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Awareness Raising Workshop
Strategic Environmental Assessment
Application in the Republic of Moldova

1 November 2019
Chisinau, Republic of Moldova

Action implemented by:

OECD BETTER POLICIES FOR BETTER LIVES | **UNECE** | **UN environment** | **UNIDO** | **WORLD BANK GROUP**

SEA application

Practical aspects, challenges, typical problems

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Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine

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EIA vs SEA differences

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EIA of Projects	SEA of Policies, Plans and Programmes
Takes place near the end of decision-making cycle: aims to minimise impacts	Takes place at earlier stages of decision-making cycle: aims to prevent impacts
Reactive approach to development proposal	Pro-active approach to development proposals
Considers limited number of feasible alternatives	Considers broad range of potential alternatives
Limited review of cumulative effects	Cumulative effects assessment is key to SEA
Emphasis on mitigating and minimizing impacts	Emphasis on meeting environmental objectives, maintaining natural systems
Narrow perspective, high level of detail	Broad perspective, lower level of detail to provide a vision and overall framework
Well-defined process, clear beginning and end	Multi-stage process, overlapping components, policy level is continuing, iterative
Focuses on standard agenda, treats systems of environmental deterioration	Focuses on sustainability agenda, gets at sources of environmental deterioration

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EIA vs SEA differences (2)

- Specific location vs lack of spatial specification

- Smaller territory (local impacts) vs regional/national scope

- Focus on technical analysis and (semi)quantitative evaluation vs compliance with policy objectives and expert opinion

- Product-oriented (focus on preparing an EIA Report/construction permit and developing a project) vs process-oriented (focus on promoting a careful, well-balanced planning process)

- Often use field research vs rely on aggregated data and official publications

- Produce EMP included as condition in project permit vs recommendations for future planning and permitting processes

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EIA / SEA "tiering"

- Transport policy (SEA)
  - highways or railroads
- National highway program (SEA)
  - locational alternatives
- Regional/local land use plan (SEA)
  - locational alternatives
- Stretches (EIA)
  - technological and mitigation alternatives

EIA vs SEA differences (3)

– Problems and issues

  o Different life-cycle and lack of coordination of different planning levels

  o Subprojects included in large schemes

  o Projects (EIA) requiring change of spatial plans (triggering SEA)

  o Legal nature of conditions set by higher tier EA

- SEA Screening (To determine if whether SEA is required for a specific Plan, Program, Policy… (PPP)
- Not all PPPs automatically require SEA, but only if they meet certain criteria.
  - Administrative / technical criteria
  - Significance of likely environmental effects

Criterium 1	Is the plan or programme (or the modification to it) required by legislative, regulatory or administrative provisions?
Criterium 2	Is the plan or programme subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a Government?
Criterium 3	Is the sole purpose of the plan or programme to serve national defence or civil emergencies, or is it a financial or budget plan or programme?
Criterium 4	Is the plan or programme being prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use?
Criterium 5	Does the plan or programme set the framework for future development consent for projects requiring EIA ?
Criterium 6	Does the plan or programme determine the use of a small area at a local level or is it a minor modification to a plan or programme?
Criterium 7	Is the plan or programme likely to have significant environmental effects?

Linking SEA with the elaboration of the Plan (PPP)

- To ensure that <u>SEA provides inputs early enough</u> and in appropriate form to be used in the formulation of the PPP
- To maximize cooperation with the planners -> saving time and resources for undertaking SEA
- To ensure that <u>SEA is effective</u> and meets its purpose
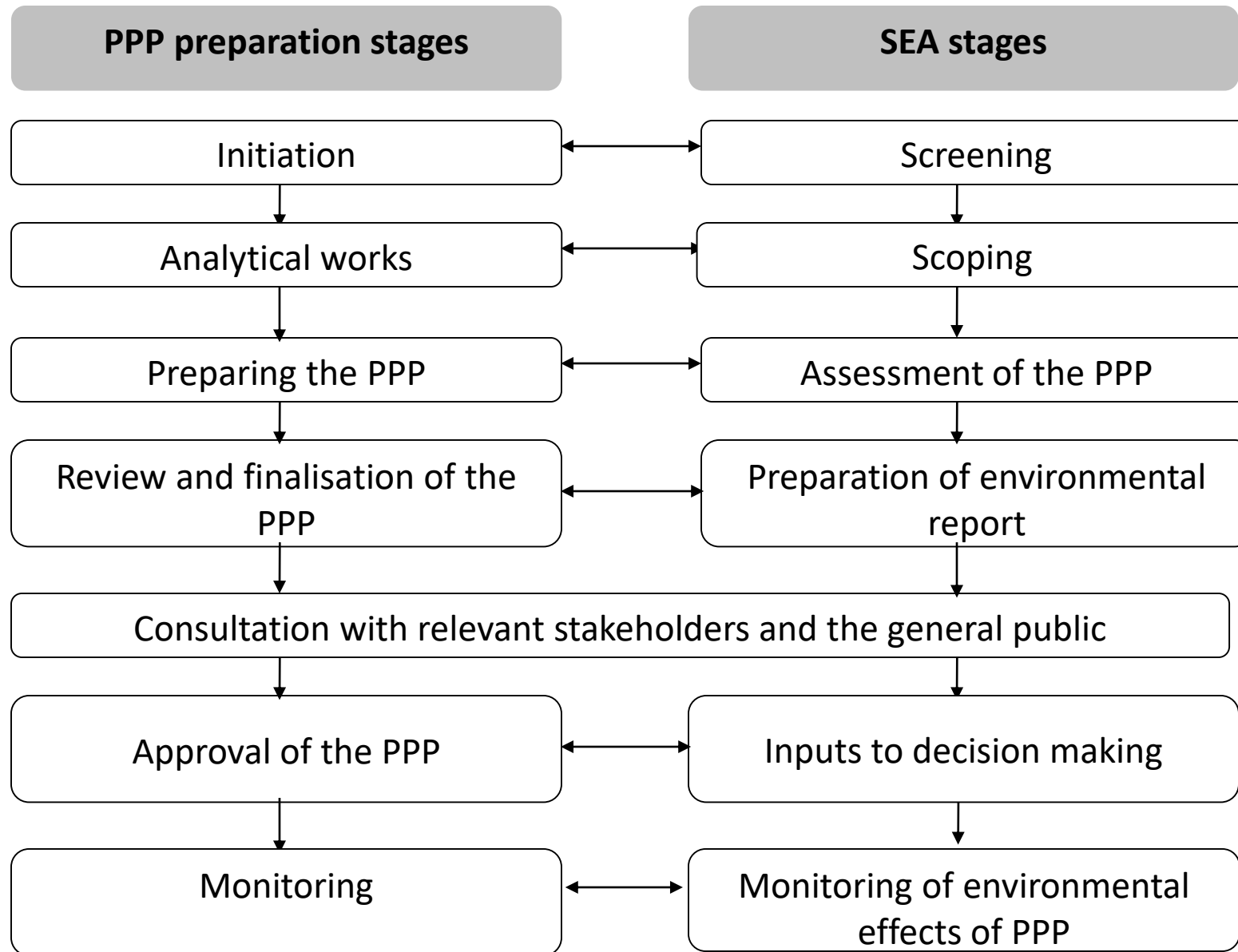- Identify realistic potential of SEA in particular case

Factors to consider

- Preparation of plan or programme
  - Internally by responsible agency
  - Outsourced (e.g. to urbanistic studio)
- Preparation of SEA
  - Internally by responsible agency
  - Outsourced (to consultancy company)

Logical Links between the PPP making and SEA process

PPP preparation stages	SEA stages
Initiation	Screening
Analytical works	Scoping
Preparing the PPP	Assessment of the PPP
Review and finalisation of the PPP	Preparation of environmental report

Consultation with relevant stakeholders and the general public

Approval of the PPP	Inputs to decision making
Monitoring	Monitoring of environmental effects of PPP

Linking SEA with the elaboration of the Plan (PPP) 2

- Each PPP-making process is different
- Optimal points for entry of SEA into PPP-making processes cannot be established without detailed knowledge of specific PPP-making systems
- SEA needs to align to the planning process (both formal or informal decision-making steps)
- SEA shall make use and contribute to any environmental analyses normally performed within specific PPP-making process (avoid duplicity work)
- SEA shall play a role in consultations with environmental & health authorities within PPP making (if they exist)

Arranging for SEA

Tendering SEA services

- ToR needs to specify
  - Steps and timeline of the PPP elaboration
  - Expected inputs by the SEA team

- Important to agree and specify with the SEA and planning team on:
  - Provision for gathering of data
  - Feedback of the assessment results i.e. optimizing the PPP based on the SEA inputs
  - Consultations with other relevant authorities and public

Arranging for SEA

General tasks for SEA team

1. To propose scope of SEA
   - Key issues (optimally in cooperation with the planning team)
   - Approach to assessments of priority issues (based on data and resources available)
   - Consultations
2. To manage assessment and to provide inputs to the planning process
   - Baseline analysis, evaluation of likely effects etc.
3. To facilitate consultations on specific issues of interest
4. To compile SEA Report
5. To prepare feedback on comments obtained
6. To fine-tune outcomes of the SEA and recommendations for decision-making

Overall coordination of SEA process???

Costs of SEA

General tasks for SEA team

Costs largely depend on

- How detailed is PP and number of its alternatives
- Data availability
- Length of the planning process
- Scope of expertise needed
- Scope of consultations with stakeholders

Most SEAs require 70-80 person-days to complete (UK study)
Czech survey: about 50% of SEAs required about 2 – 10 person days time allocation
from the planning authority side

Subsequent SEAs are less costly
- build on previous experience
- may require only standard analytical work & process management

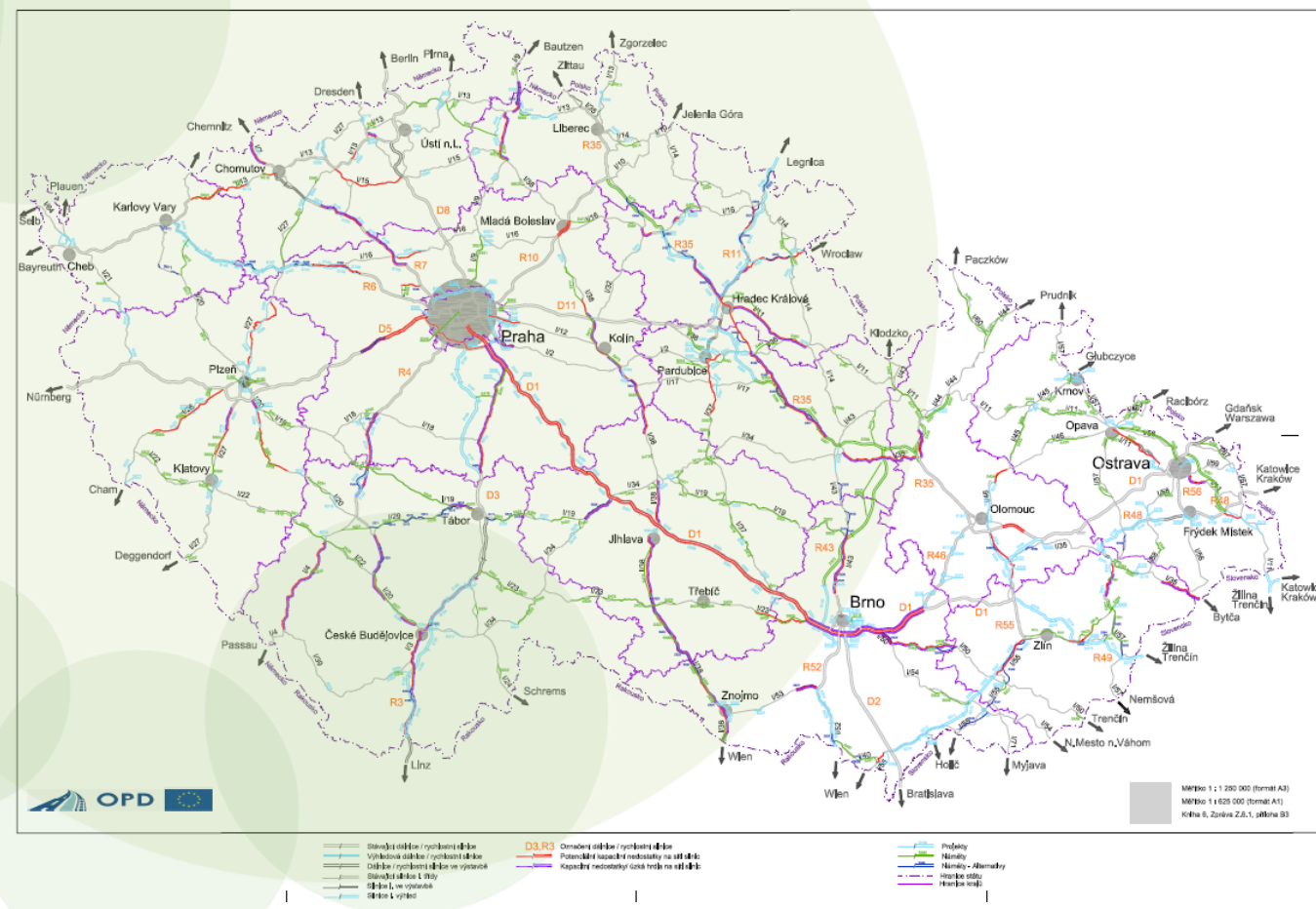Costs for SEA are marginal compared with costs of P/P implementation!!!

Kapacitní nedostatky a opatření na silniční síti (silniční síť roku 2014, dopravní intenzity roku 2050)

Case example: SEA for Sectorial Strategy for Transport Infrastructure (Czech Republic,2014)

Objectives TSS2

- Development of multi-modal transport model (prediction of future transport streams for different transportation modes)

- Identification of key measures (investments) on the transport infrastructure network in mid-term and long-term horizont including estimation of financial requirements

- Analysis of the potential sources for the financing of infrastructure projects

- Multi-criteria evaluation and prioritization of the measures on the transport infrastrucutre

Features of TSS2 important from the perspective of SEA

- TSS2 comprises both policy and investment measures

- TSS2 deals with 1270 road projects in 260 clusters, 360 railway in 90 clusters, and 20 water transport projects in 3 clusters

- Apllies Multi-criteria analysis (MCA) for selection of priority investments

  o Desirability of a project (transport, economic, social)

  o Realization obstacles (land-use planning, environmental)

  o preliminary Cost-benefit analysis

- Transport model supplies inforamtion on present and future transport intensities on network and their changes in case of implementing individual investments

- GIS data only for corridors (digital map with +/- 1 km accuracy)

SEA TSS2 Approach

- Objective-led approach on the strategic level (Strategy goals)
- Assessment of risks on the level of project clusters
  - Key issues: Air quality, Landscape and Bidodiversity, Public Health
  - Secondary issues: Soil, water, cultural heritage, climate change

- Problems and limitations
  - High number of specific projects/clusters (with various level of information available)
  - Accuracy and scale of available data
  - Level of detail of the transport model

SEA TSS2 Process

- SEA team: 3 core experts, 3 specialists (Air quality, Biodivesity & Natura 2000, and Public health, 1 short-term expert on other issues)

- SEA budget cca EUR 23,000 (TSS2 budget cca EUR 800,000)

- SEA time-span: Decemeber 2011 – September 2013

  - Screening and Scoping (April – June 2012)

    - Publishing Scoping report

    - Collection of comments

    - Notification of neighbouring countries on SEA TSS2

  - Joint submission of TSS2 final draft and SEA Report (July 2013)

    - Publishing of the documents

    - Consultation offer to the neighbouring states

  - Public hearing (18.7.2013)

  - SEA final statement issued by MoE (September 2013)

SEA TSS2 evaluation indicators

Air quality

- Changes in traffic intensities:
  - In urban areas (present and new roads, increse or reduction of intensity under 15 000 cars/day)
  - In areas with sensitive ecosystems (protected areas, forests, areas with elevation over 800 meters above sea level)
- Total emissions in „areas with low air quality"

Public Health

- Emissions in Urban areas
- Noise (izoline 60 dB)
- Socio-economic considerations (availability of transport travel to work, social and health services)
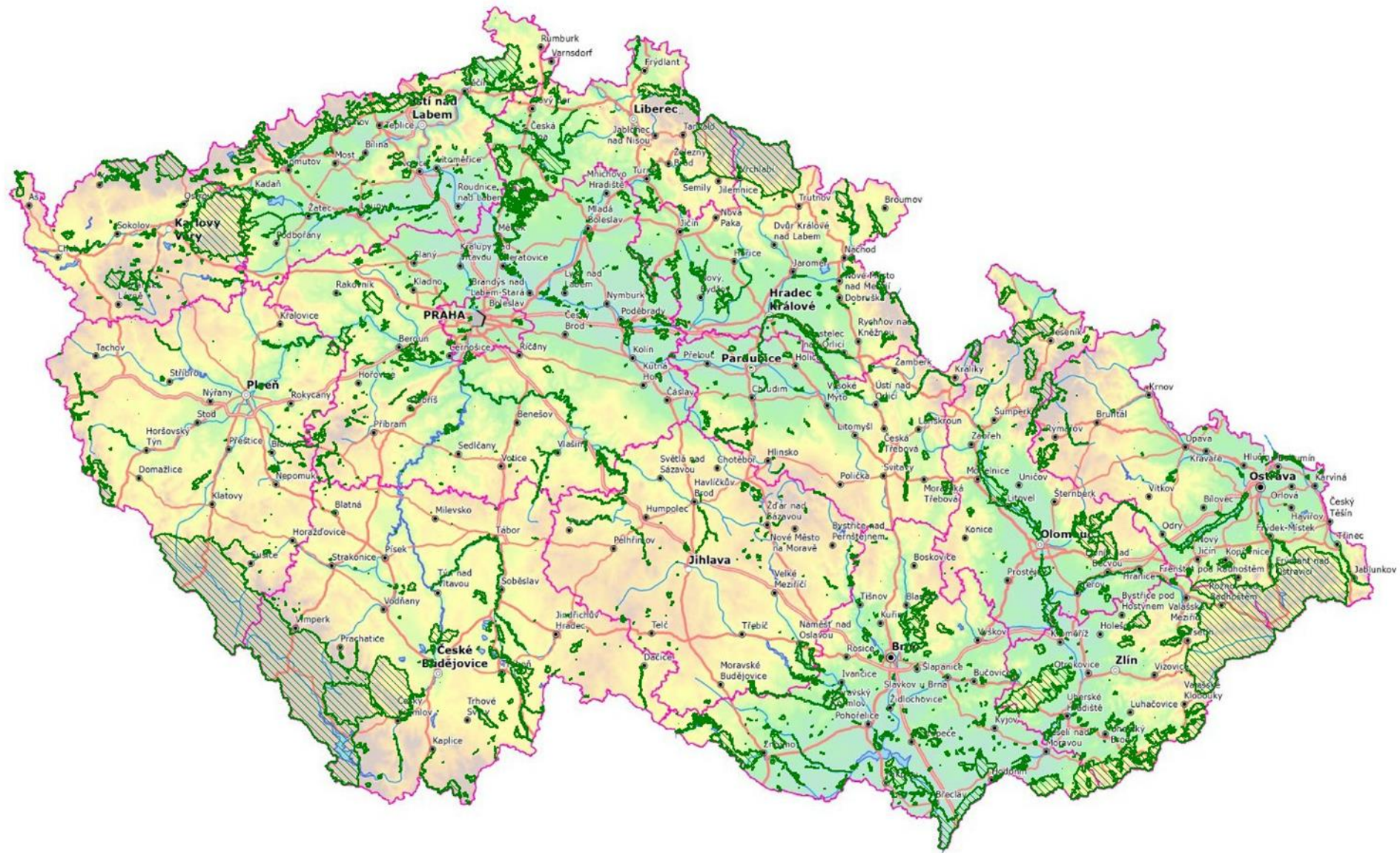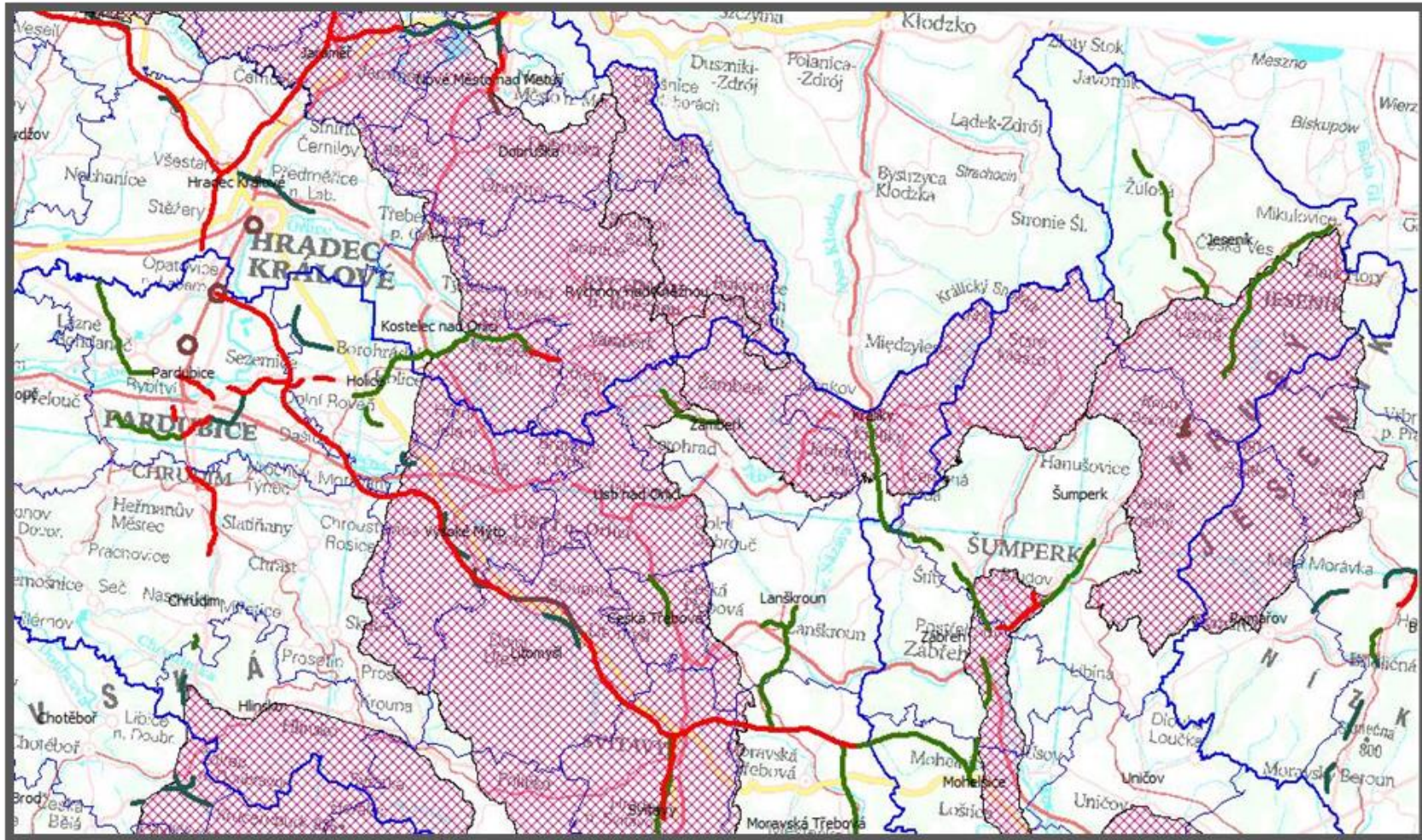
SEA evaluation indicators (con'd)

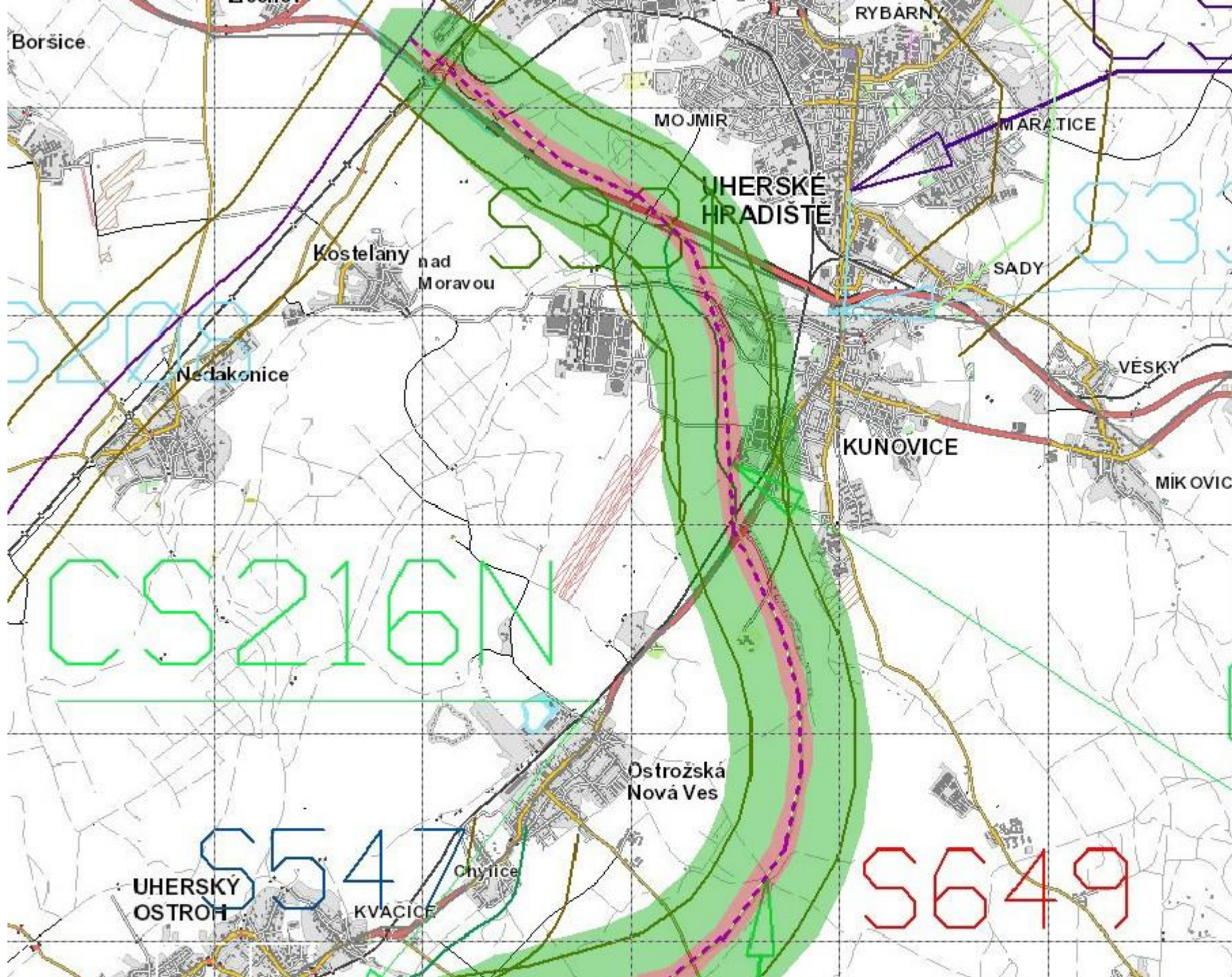Nature, Landscape, Biodiversity

- Natura 2000 site

- Protected area; habitats of protected species;

- Potential loss of natural biotepes

- Important landscape feature, part of the „ecological stability network"

- Landscape fragmentation (new projects in non-fragmented area, areas important for wildlife migration)

- Water regime (wetlands, protected areas for water accummulation, large forest areas)

SEA TSS Assessment

- Evaluated individual clusters (logically interlinked groups of investment projects) on the basis of
  - GIS data (identification of risks of spatial conflicts)
  - Results of existing studies (e.g. EIAs for individual construction projects)
  - Knowledge of situation and conditions of protected areas (Natura 2000 sites)

- For each cluster was determined
  - Intensity of impact/risk (on a defined scale)
  - Description of likely impacts
  - Possible mitigation or prevention measures

Boršice

RYBÁRNY

MOJMÍR

MARATICE

UHERSKÉ
HRADIŠTĚ

Kostelany nad
Moravou

SADY

Nedakonice

VÉSKY

KUNOVICE

MÍKOVIC

CS216N

Ostrožská
Nová Ves

S547

S649

UHERSKÝ
OSTROH

Chylice

KVAČICE

SEA TSS2 Assessment (cont'd)

- Identification of potentially problematic clusters

- SEA evaluation matrix

č. clusteru	popis	ovzduší											popis	celkové hodnocení zdraví	hluk
		dotčení citlivých oblastí					dotčení citlivých oblastí - souhrn		kumulativ ní vliv	odvedení dopravy	celkové hodnocení	komentář ovzduší			
		les	>800 m.n.m.	VCHÚ	OZKO	zastav. území	vliv na zdraví lidí	vliv na ekosystémy							
002P	D1 Mirošovice - Kývalka opravy	0,12458	0	0	0	0,03462	-0,22	-0,41	-0,82	0,00	-0,79	minimální dotčení citlivých oblastí, nedochází k nárůstu emisí, zachovává intenzitu >15000 voz/den v zástavbě (zejména Velké Meziříčí a obce v blízkosti Prahy)	D1 Mirošovice - Kývalka opravy	-2	stavby přinesou vyšší dopravní zátěž.Mapy nejsou. -1
003P	D1 Kývalka - Holubice rozšíření	0,00104	0	0	0,60061	0,11402	-0,74	0,00	-1,74	0,00	-1,35	minimální dotčení ekosystémů, zvyšuje znečištění v oblasti s překročenými limity, zachovává intenzitu >15000 voz/den v zástavbě, významný negativní kumulativní vliv	D1 Kývalka - Holubice rozšíření	-3	konfliktní stavba, šestiproud přinese nový hluk, není k dispozici mapa -2
004P	D1 Říkovice - Přerov	0	0	0	1	0,04259	-0,28	0,00	-1,73	1,21	-0,43	minimální dotčení ekosystémů, zvyšuje znečištění v oblasti s překročenými limity, významný negativní kumulativní vliv	D1 Říkovice - Přerov	-1,5	překročení hlukového limitu v Předmostí a Přerově, u dalších obcí hluk na úrovni obtěžován í - 2
005P	D3 STC	0,13442	0	0	0	0,0181	-0,12	-0,44	-0,52	1,59	0,28	málo významné dotčení citlivých oblastí, zachovává intenzitu >15000 voz/den v zástavbě	D3 STC	-4	Nová hluková zátěž do rekreačního území, 43 obcí bude v hluku 50 - 60 dB a tedy obtěžováno, v Rakousích a Libeři přiekročení limitu hluku -2

SEA TSS2 Conclusions

- If implemented in the proposed scope (by year 2050) and with modelled intensities – significant risk of increase of total emission from the road transport (even if emission factors are reduced)

- The Strategy will facilitate change in spatial distribution of emissions – improvement in urban areas located in current network is anticipated.

- For the future update of the Strategy – preparation of more detailed studies for regional context is recommended (to address compliance with the regional emission targets)

- For selected projects specific mitigation measures and alternative routing was proposed

- Proposed conditions for project-level environmental assessment related to the selected water transport project

SEA TSS2 Results

- Partial modifications of TSS2 in the proces of preparation
    - Introduction certain SEA proposed adjustment of Multicriteral analysis
    - Changes in texting of the draft TSS

- Recommendations for update of TSS2
    - Data and maps specifications
    - Level od detail of the transport model
    - Specifications for accompanying analyses

- Recommendations adopted in the final SEA statement of the MoE

SEA TSS2 Experience

- Fully-integrated SEA proces (representative of SEA team participating on regular monthly TSS2 meetings within 1,5 year)

- Extensive public participation

- Limited expert- and methodology- support from the environmental and health authorities

SEA Quality control

Who?

- Developer/Planning agency
- EIA/SEA experts
- Environmental and health authorities
- Special institutions
- Ad-hoc bodies (expert missions, independent experts)
- Public

What?

- Reports
- Procedural aspects (e.g. public participation)

When?

- Scoping
- Draft EA report
- + throughout EA process (internal quality control)

How?

- Quality criteria
- Forms
- Licensing systems

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What makes good SEA?

- Proper participatory process
- A good reliable report with
  - Identifies environmental risks and opportunities
  - Scientifically sound estimation of likely effects
  - Mitigation measures proposed

- Improvement of the plan under assessment
  - Ensured compliance with environmental goals
  - Put in place safeguards and monitoring for unforeseen effects

- Final decision (permit/approval) considering SEA conclusions

- Something else?
  - Seeking windows of opportunity to influence planning and decision making
  - Quality of planning and decision making are critical limits
    - Commitment to SEA results

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Thank you for your attention!

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