

# SEA and economic considerations in the planning processes: Lessons from Czech Republic

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# Basic system: 1992 – 2001



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- EIA Act (244/1992 Coll.): Art 14 simple provisions on SEA
- National 'Concepts' for energy, transport, agriculture, waste management, extraction and processing of minerals, tourism, water management + regional and national land-use plans
- Proponents must undertake assessment which covers appropriate EIA topics
- Proponents make the SEA and the proposed concept available for 60 days – details determine in agreement with MoE
- Final draft of the concept shall take comments from commenting into account –
- Final draft is sent to MoE for opinion. This opinion is not binding but the concept cannot be adopted without it.

# Lessons from 1992-2001

- Applied only since 1997
- 1998-2000 growing systematic application on national level – but not on regional level
- Flexible requirements allow experimentation
- Detailed impact assessments (Energy, Transport, Mining Policy)
- Delays (usually 10-18 months) and unclear relations specific projects – e.g. transport
- Growing use of objective led appraisals (National Development Plan, pilot SEAs Regional Development Strategies)

# Example 1: SEA of 1997 Czech Energy Policy



# Context

Initiated at the MoE request once the draft Energy Policy proposed

Need to consider 3 alternatives for possible future energy mixes based on: nuclear, coal-based and massive energy savings and renewables

Scoping consultations defined key issues:

- Environmental issues: air emissions, impacts on land take and soils (including mining), water pollution, biodiversity
- Soc: job creation/changes and people to be reallocated
- Economic: CAPEX and OPEX, Costs of measures to offset and mitigate adverse environmental impacts

# Example 1:

## SEA of Czech Energy Policy (2)

Modeling: energy demand/supply, specific investments needed, emissions and demand for land

Option assessment:

- Simple comparison: Alternative A was used as a baseline - alternatives B and C compared against it.
- MCA – prolonged the assessment
- 6 regional public hearings and review in Czech Senate
- 12 months, over 600 person days (EUR 100.000 – less than 0.001% of the total investments), most budget spent on modelling

# Example 2:

## SEA of 2001 National Development Plan





# SEA process

- Part of the planning process
- Relevant objectives for all major env. + SD issues (air, water, noise, biodiversity, landscape ... env. education, energy savings, sustainable production and consumption)
- Objective-led appraisal: do the proposed measures promote their achievements or contradict them – how should they be amended Outcomes of the assessment provided to the proponent and consulted on working meetings with the proponent and the MoE

# SEA process

- Modifications, reformulations and supplements incorporated in the draft text in the form of revision
- Development of SEA documentation
- 2 public hearings (during SEA and after it)
  
- Interactive, flexible, common-sense
- Unplanned changes in time schedule of the planning process
- 200 working days (EUR 30.000 – less that 0.001% of the investment costs)

# SEA process after 2001



# SEA process after 2001

- EIA Act (100/2001 Coll.) – Complex SEA procedure for full transposition of the SEA Directive and SEA Protocol
- All concepts on national/regional/local levels that set framework for EIAs, may have impacts on Natura 2000, may have important cumulative impacts
- Systematic application: 150-300 concepts per year
- Detailed procedure with 5-7 steps
- Average duration also 10-18 months but most time spent on procedure (not on assessment)
- Rigid SEA requirements and outdated SEA guidance

# Present procedure (1)

- Notification – when the proponent intends to develop the concept
- Screening/Scoping – notification made available for 20 days of commenting by authorities and to public through online information system – conclusions normally based on formalistic analysis without consultations with the proponent or SEA experts

# Present procedure (2)

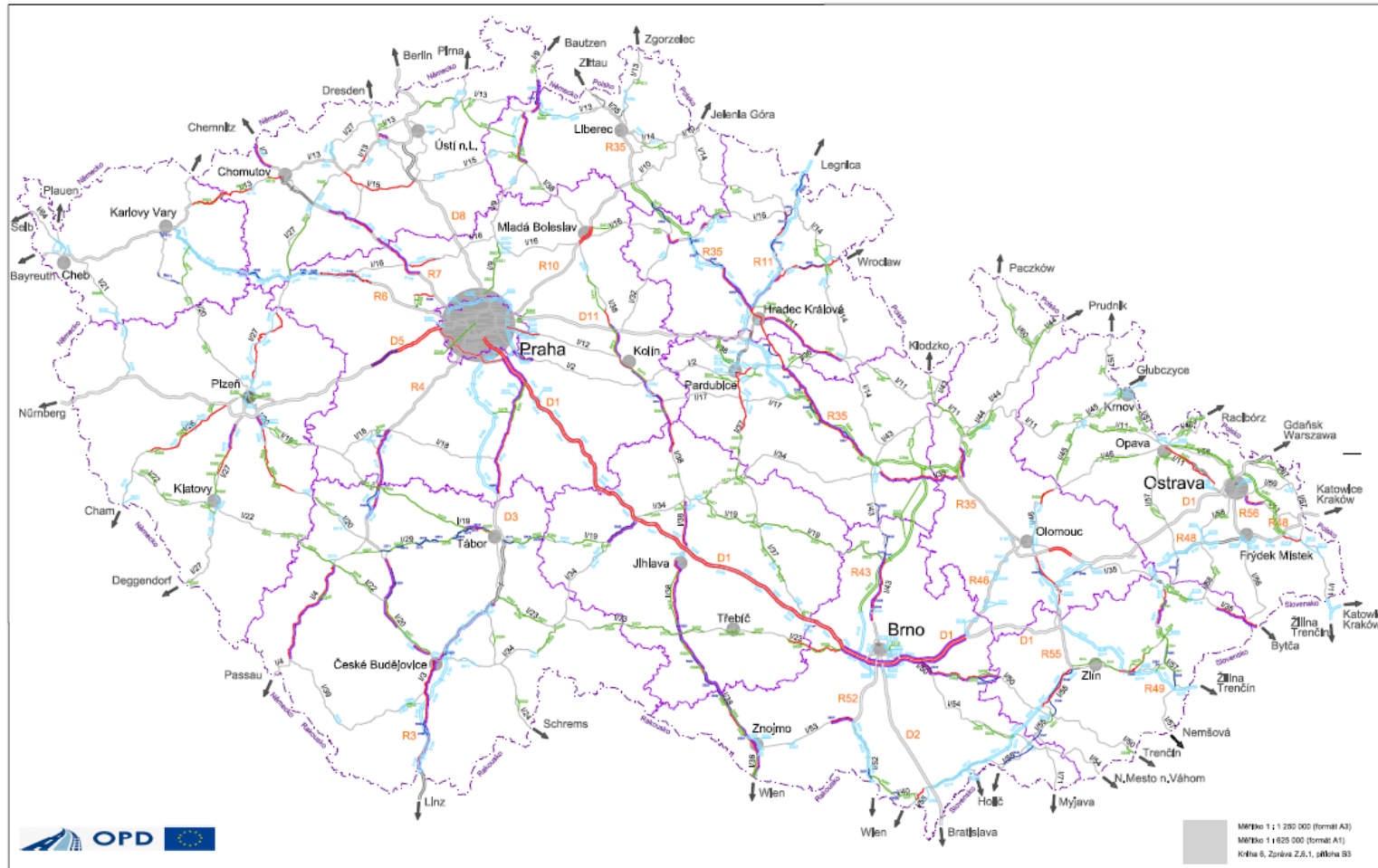
- Detailed requirements for the SEA Report + accompanying (separate) assessments of impacts on public health and Natura 2000 network: **needs to be prepared by certified practitioners** - unrestricted access to information held by the proponent and relevant authorities – **rigid format for SEA Report without opportunity to amend it- outdated guidance for SEA preparation and price diving**
- 30 days for commenting on proposed concept and accompanied SEA report by authorities and the public + public hearing

# Present procedure (3)

- Transboundary consultations – became a standard practice
- Opinion by the MoE/Regional authority – works with the findings and formulates recommendations that are normally fully incorporated into SEA
- Adoption and monitoring - guidance for subsequent SEAs and project EIAs

# Example 3: SEA of National Transport Sector Strategy

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



- Stavěná silnice / rychlostní silnice
- Vyhledávaná silnice / rychlostní silnice
- Dálnice / rychlostní silnice ve výstavbě
- Stavěná dálnice / rychlostní silnice
- Silnice I, ve výstavbě
- Silnice I, vyhledávaná
- Silnice II, vyhledávaná
- D3, R3 Omezená silnice / rychlostní silnice
- Potenciální kapacitní nedostatky na síti silnic
- Kapacitní nedostatky (složka) na síti silnic

- Profekty
- Náměty
- Náměty - Alternativy
- mezinárodní hranice států
- Hranice krajů

Měřítko 1 : 1 200 000 (formát A3)  
Měřítko 1 : 625 000 (formát A1)  
Kofra 6, Zpráva Z.6.1, příloha B3

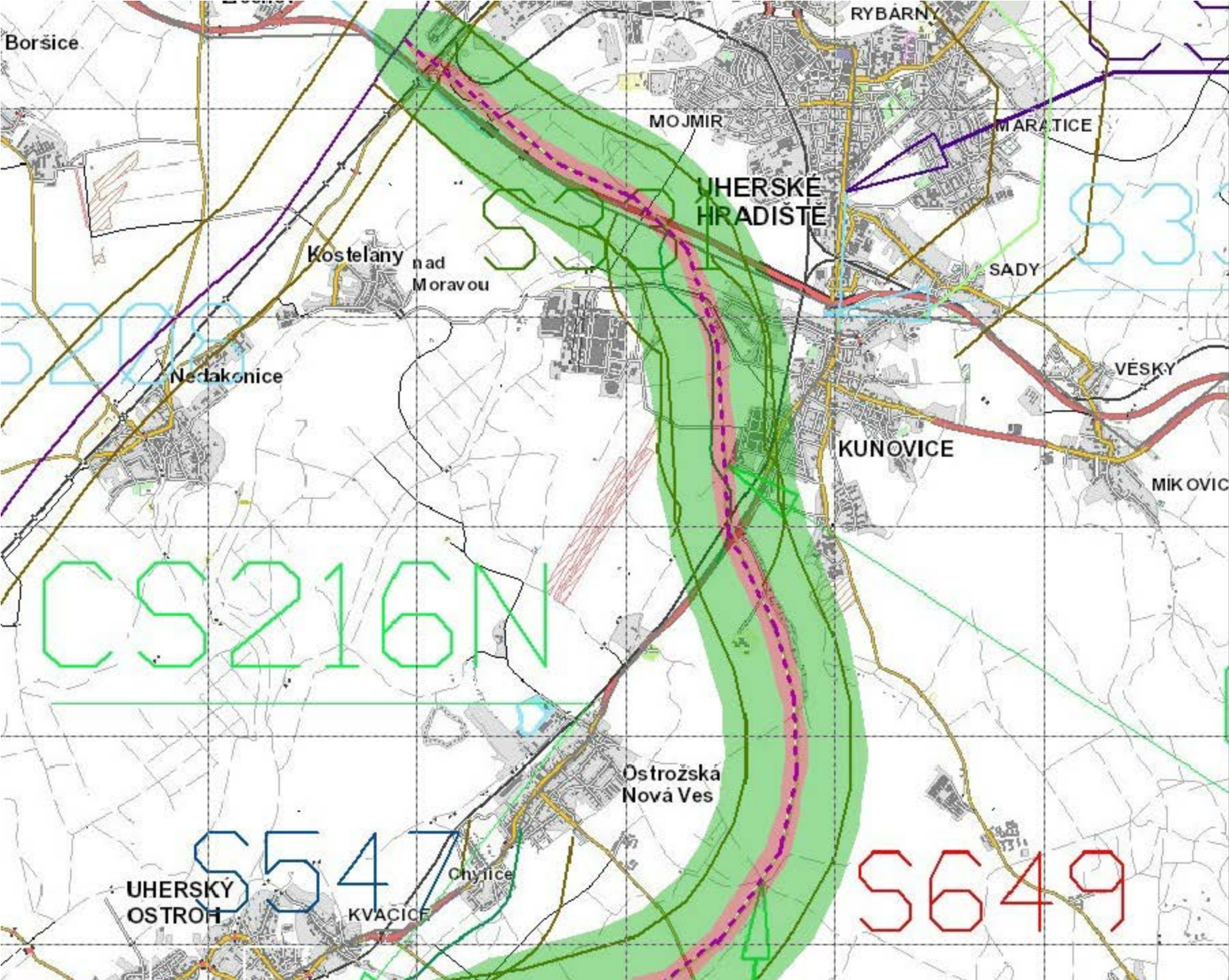




# Example 3:

## SEA of National Transport Sector Strategy

- Policy and investment measures
- Includes with 1270 road projects in 260 clusters, 360 railway in 90 clusters, and 20 water transport projects in 3 clusters
- Multi-criteria analysis (MCA) for selection of priority investments was applied
  - Need of a project (transport, regional development)
  - Obstacles (land-use planning, environmental)
  - preliminary Cost-benefit analysis
- GIS data only for corridors (digital map with +/- 1 km accuracy)



# SEA

- Key issues: Air quality, Landscape and Biodiversity, Public Health
- Secondary issues: Soil, water, cultural heritage, climate change
  
- planning team did their own MCA with environmental criteria –
- Both teams came to different conclusions
- Eventual painful agreement on priority projects – but many projects left with diverting opinions
- Requirements for revision of the strategy in the next 2-3 years + calls for more detailed studies in most problematic regions + more coordinated economic/env. assessment

# Example 4: Waste Management Plan of Plzen Region, 2005



# Example 4: Waste Management Plan of Plzen Region, Czech Republic

- organisational and investment measures for integrated waste management for 450 000 inhabitants
- **Alternative 1** – waste separation and its further re-use combined with deposition of unusable materials to landfills
- **Alternative 2** - strategy based on incinerator for communal waste with capacity 100.000 tons/year. Optional energy use of communal waste from the entire region
- **Alternatives 3+4** – strategy based on separation of communal waste at its source, low-capacity pyrolysis line with capacity of 60.000 tons of communal waste per year

# SEA: example of the summary assessment

Alternative 3	Clim ate	Air quali ty	Geo- logy and hydro- geol ogy	Hydr olog y	Soil	Eco- syste ms	Land scap e	Arch eolo gy	Occu pation al heat h	Pub- lic hea- lth	Env. liabili ty	Total
	1	2	3	4	5	6	7	8	9	10	11	
Collection, sorting and transport	-1	-1	0	0	0	0	-1	0	0	0	0	-3
Theomocial reduction of volume (autokláv)	-2	-2	-1	-2	-2	-2	-2	0	-2	-2	-1	-18
Pyrolysis	-1	+2	+1	0	+1	0	0	0	0	0	0	+3
Landfills S-NO	-1	-2	-2	-3	-3	-2	-2	0	-3	-3	-3	-24
Composting	-1	-1	-1	-1	-1	0	0	0	-2	-2	-1	-9
Landfill S-OO	-1	-1	-2	-2	-2	-2	-1	-1	0	-2	-2	-16

# SEA Outcome

- 2 public hearings
- NGOs upset

Alternative 1a	-45
Alternative 2	-75
Alternative 3	-64
Alternative 4	-67

- Future problems in EIA process – incinerator worth EUR 110 million built but EU withdrew funding - the court orders re-examination of the EIA procedure (not SEA)
- SEA total costs: 30.000 EUR (0,3%)

# Overall Conclusions

- SEA pays off
- More transparency and debates not necessarily welcome by lobbies
- Scoping is critical to determine what matters - Dialogue between planners and environmental authorities needed
- Sensible assessment approach without rigid reporting templates
- Effectiveness depends on qualifications of the SEA team  
Ideally, basic economic analyses (CAPEX and OPEX) should be done concurrently with SEA



# Reflections on SEA system development in Turkey

- Coverage of national-regional-district plans and programmes
- SEA Decree lays a solid framework – screening, scoping, SEA report, review
- Will need a lot of capacity development and rational approach (to avoid formalistic approaches)
- It would be good to have economic analyses along with SEA
- Precedents in first 3 years extremely important - get good quality of consultants

Thank you for your attention!

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