

CROATIAN EXPERIENCE WITH SEA/EIA IN HYDROPOWER SECTOR

Workshop and site visit on SEA and EIA in hydropower development

11 - 12 May 2016, Ljubljana

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SEA/EIA LEGAL BASIS

Environmental Protection Act

SEA Regulation

EIA Regulation

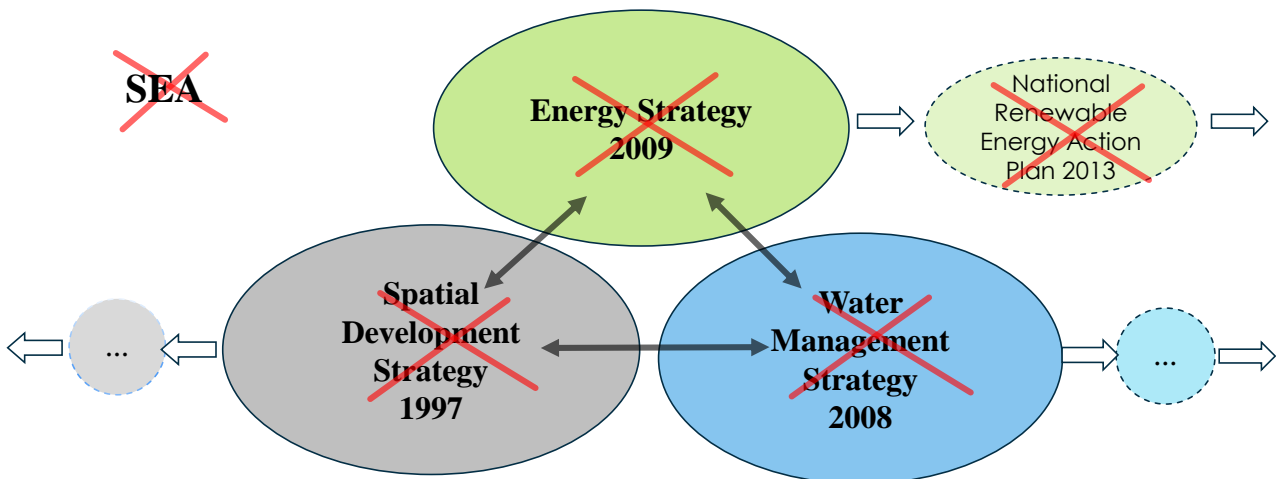


SEA REGULATION

SEA is mandatory for strategies, plans or programmes in the following sectors:

agriculture, forestry, fishery, **energy**, industry, mining, transport,
electronic communications, tourism, **spatial planning**,
regional development, waste management and **water management**

KEY DOCUMENTS



ONGOING SEA PROCEDURE

SPATIAL DEVELOPMENT STRATEGY

Final draft of the Strategy

- ! Increase and improvement security of energy supply (hydropower plants, small hydropower plants...) → sustainable development of the ecological network areas

Activities/Projects:

- Development of guidelines for selection of potential sites of small hydropower plants
- Development of Programme for protection, management and use of the Sava River from Slovenian border to Sisak (HR)

ONGOING SEA PROCEDURE

SPATIAL DEVELOPMENT STRATEGY

Environmental Report

Hydromorphological pressures; Changes in the water regime; Migration of fishes; Cumulative impacts during construction of a chain of small HPP; Impacts on landscape...

ER Recommendations/Measures:

- Ensure continuity of watercourses in a case of planning HPP
- Define real needs and priorities for construction/reconstruction of small HPP
- Use locations of the existing water stairs in a case of planning a small HPP
- Give preference to reconstruction and redevelopment of the water mills in a case of planning a small HPP
- Take into account the constraints related to the ecological network



ONGOING SEA PROCEDURE

RIVER BASIN MANAGEMENT PLAN 2016-2021

Final draft of the Plan/Environmental Report

- ! Increase and improvement security of energy

ER Recommendations/Measures:

- Ensure continuous cross sectoral data exchange
- Consult experts in the early stages of planning
- Develop a guide for construction of fish lines and for determining functionality of fish lines



ONGOING SEA PROCEDURE

RIVER BASIN MANAGEMENT PLAN 2016-2021

Opinions/comments received during public consultation:

- ! Authorities responsible for energy should be involved in the SEA and the Plan preparation
- ! Implementation will increase cost of construction of HPP (fish lines!)

Transboundary consultations

ONGOING SEA PROCEDURE

KARLOVAC COUNTY SPATIAL PLAN



Plan objectives:

- ! Construction of HPPs and small HPPs

Key problems:

- Disruption of water regime
- Impact on coastal habitats and species
- Impact on rare habitats
- Fragmentation of fish migratory routes
- Loss of forests and forest land
- Construction of a chain of HPPs → cumulative effects assessment on Natura 2000 (ecological network), increase risk of flooding and erosion of the riverbed and banks, reduce sediment transport...

ONGOING SEA PROCEDURE

KARLOVAC COUNTY SPATIAL PLAN

Conclusion:

- ! Construction of new HPP will have significant negative impact on the environment

Recommendations/Measures:

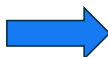
- Exclusion of planned HPPs from the Plan
- Construction of small HPPs on the sites of existing water mills

EIA REGULATION

2008 - Industrial installations for the production of electricity, steam and hot water with power exceeding 1 MW with the use of:

- Renewable energy sources (**water**, ...)
- ...

✓ Annex II - Subject to screening procedure



2009 – HPP with capacity over 5 MW


✓ Under the competence of the Ministry of ENV

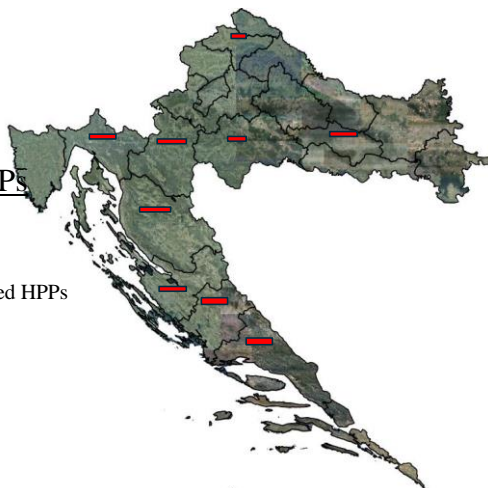
2014 – HPPs

EIA PROCEDURES *after 2013*

! 2 scoping procedures for HPPs

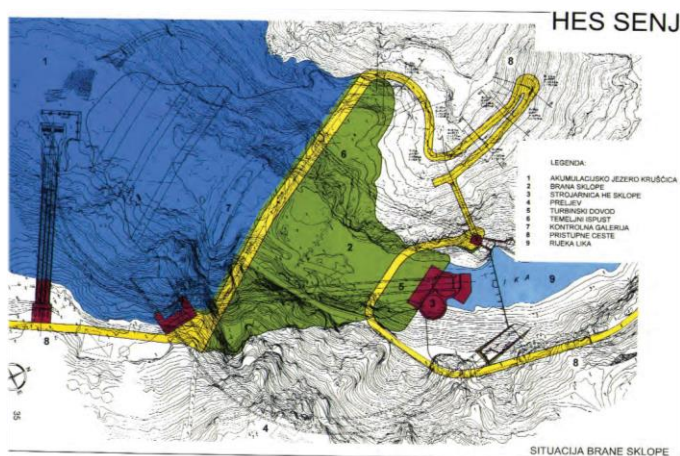
! > 20 screening procedures for HPPs and small HPPs

 general areas for planned HPPs and small HPPs



EIA SCOPING FOR HYDROPOWER PLANT KOSINJ

- Scoping (Jan-May 2013)
- Karts area, Natura 2000
- Capacity over 5 MW
- Construction of artificial lake
300.000.000,00 m³, 3 dams, tunnel,
channel, engine room
- Flood protection, irrigation



EIA SCOPING FOR HYDROPOWER PLANT KOSINJ

- **Identified areas of particular importance:**
 - Main Assessment
 - The impact on the population, infrastructure, cultural heritage, landscape, forest and important habitat types
 - The combined approach (Water Framework Directive), the condition and dynamics of surface and groundwater
 - Alternatives and multipurpose of the project
- **Opinions/comments received during public consultation:** ...to amend hydrological data, to assess the impact on quality of life, biodiversity and cultural heritage, to prepare safety risk assessment...
- **Instructions on the content** → is not administrative act

MAIN PROBLEMS

SEA

- Still not conducted for 'main' national documents for hydropower sector
- Postponing consideration of the key issues → 'will be determined on project level'
- Lack of cooperation and communication between document prepares (e.g. different data) → harmonization of national interests
- Assessment without alternatives and cumulative effects
- Insufficiently participation of authorities

EIA

- Natura 2000 (ecological network)
- Cumulative effects and alternatives of the proposed project
- NGO's appeals
- Investors give up projects

THANK YOU FOR YOUR ATTENTION