



The European Union's Instrument for Pre-Accession Assistance (IPA)

# Regional Environmental Network for Accession (RENA)

*SEA/EIA – MAIN DIFFERENCES AND  
COMMONS FEATURES*

*WG Activity 3.3 – Environmental Impact  
Assessment (EIA) / Strategic  
Environmental Assessment (SEA)*

*Mostar, Bosnia and Herzegovina  
(24 – 25 April 2012)*



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Consortium led by Hulla & Co.  
Human Dynamics KG



## **DAY 1**

### **THIRD TRAINING OF THE EIA/SEA SUB-GROUP SEA/EIA – main differences and common features**

**Regional Environmental Network for Accession  
Regional Training under Working Group 3 – Activity 3.3 Environmental Impact  
Assessment (EIA) / Strategic Environmental Assessment (SEA)**

## RENA EIA/SEA sub-group

# SEA/EIA – MAIN DIFFERENCES AND COMMON FEATURES

Mostar, 24-25 April 2012



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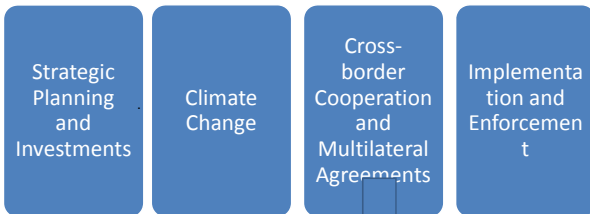
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## Four RENA Working Groups:



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## WG 3 - Cross-border Cooperation and Multilateral Environmental Agreements:

1. Nature Protection
2. Water Management
3. Environmental Impact Assessment / Strategic Environmental Assessment (EIA/SEA)
4. Multilateral Environmental Agreements – gap assessment



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### Selected pilot cases

1. Case study on SEA on the Operational Programmes for 2012-2013 (IPA III);
2. Neretva/Trebišnjica river basin management with focus on upper horizon (cross-border countries – Croatia and BiH);
3. Four HPPs on Moraca river (cross border countries – Montenegro and Albania);
4. Motorway Morinë – Merdar (cross border countries – Albania and Kosovo);



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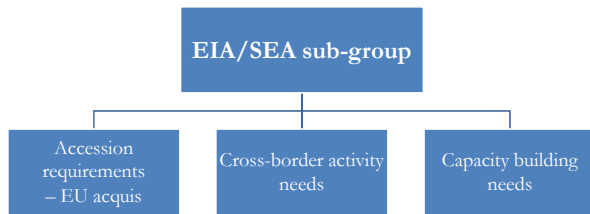
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### Capacity building programme is based on



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### Trainings and pilot cases

1. Approaches to transposition of EIA/SEA directives.	No pilot case needed	6-8 June 2011, Istanbul
2. SEA for IPA programmes, combined with annual meeting of the sub-group	Operational Programmes	8-10 November 2011, Dubrovnik
3. EIA/SEA differences and common features	Neretva/Trebišnjica river basin management with focus on upper horizon	24-26 April 2012, Mostar
4. SEA cross-border procedures,	Four HPPs on Moraca river	25-27 September

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### Training materials

- Power-point presentations from training workshops and three annual meetings ([www.renainetwork.org](http://www.renainetwork.org)).
- Training workshop reports including description of examples, used during the training.
- As per request by BiH, CD or memory stick with all relevant documents on EIA/SEA, produced so far – better on the RENA website
- Quality review of prepared EIA/SEA documents, to be submitted by BiH representatives.
- Guide to transboundary consultations process: steps, activities to be carried out and responsibilities.
- + ToR for SEA



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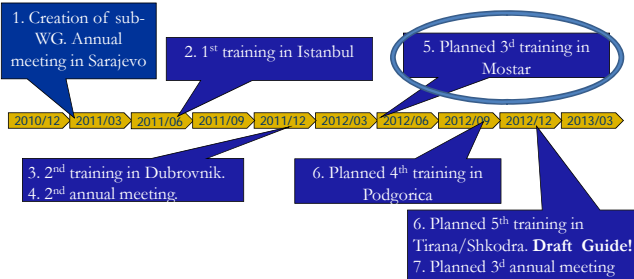
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### WG 3.3 / Sub-group on EIA/SEA. Meetings/trainings



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### Objectives and results of today's workshop:

- Familiarise with pros and cons of applying SEA or EIA for various types of plans, programmes and projects.
- Better understand the role of EIA and SEA in preparation and implementation of plans, programmes and projects enabling determination of the proper design and approach to the assessment.
- Increase ability (i) to decide if SEA or EIA should be applied, (ii) to coordinate transboundary consultations within the SEA and EIA process
- Exchange experience on EIA and SEA in EU MSs, Western Balkan countries and Turkey.



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## AGENDA for today

09:30 – 10:00	Welcome, introduction, objectives of the workshop
10:00 – 10:30	Brief introduction to main differences and similarities of SEA and EIA
10:30 – 11:00	Round table on application of EIA and SEA in the candidate and pre-candidate countries
11:00 – 11:30	Coffee
11:30 – 12:30	Transboundary SEA and EIA. <i>Presentation and discussions</i>
12:30 – 13:30	Lunch
13:30 – 14:30	Introduction to the pilot case study
14:30 – 15:00	Exercise: Determination on application of EIA or SEA – introduction

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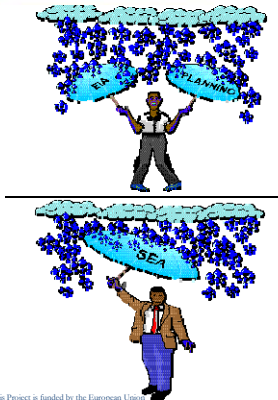
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Thank you!  
And good luck!



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## Differences and similarities between SEA and EIA

by Martin Smutny, Senior expert of RENA

Mostar, April 24 – 25, 2012



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## Evolution of EIA and SEA

- US National Environmental Policy Act (1969) reflects
  - Public concerns on the quality of environment
  - Increasing effects of new technologies and ever-larger development schemes
  - Fact that existing economic appraisal techniques (e.g. CBA) didn't consider environmental and social effects of major projects

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## US National Environmental Policy Act

The Congress authorizes and directs that... all agencies of the Federal Government shall...

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the **human environment**, a detailed statement by the responsible official on:

- (i) the **environmental impact** of the proposed action,
- (ii) any adverse environmental effects **which cannot be avoided** should the proposal be implemented,
- (iii) **alternatives** to the proposed action,
- (iv) the relationship between local **short-term uses** of man's environment and the maintenance and enhancement of **long-term productivity**, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

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## US National Environmental Policy Act

✓ **Prior to making any detailed statement**, the responsible Federal official **shall consult with and obtain the comments** of any Federal agency which has jurisdiction by law or special expertise **with respect to any environmental impact involved**. Copies of such statement and the comments and views of the appropriate Federal, State, and local **agencies, which are authorized to develop and enforce environmental standards**, shall be made **available to the President, the Council on Environmental Quality and to the public** as provided by section 552 of title 5, United States Code, and **shall accompany the proposal through the existing agency review processes**.

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## Evolution of EIA and SEA

1. **Introduction and early development of EIA (1970 – 1975)**
  - NEPA + Australia, Canada, New Zealand
  - CEE Europe: environmental considerations in land-use planning
2. **Increasing scope and sophistication (mid-70' - early 80')**
  - First guidance and advanced methods (e.g. risk assessment), consideration of social impacts
  - Growing public interest – driver of development
  - Introducing EIA in developing countries (Thailand, China)



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## Evolution of EIA and SEA

3. **Process strengthening and integration (early 80' - early 90')**
  - Wide application of EIA in many countries
  - International treaties and frameworks (EU EIA Directive, World Bank policies)
  - Review of practice
  - Recognizing importance of assessment of policies and strategies (SEA)
    - Netherland (E-test), Canada, New Zealand
    - Convention on Biological Diversity (1992): *impacts of policies and programmes on biodiversity*
  - CEE Europe: 1<sup>st</sup> generation of EIA/SEA acts



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## Evolution of EIA and SEA

4. **Strategic and sustainability orientation (early 90' - new millennium)**
  - Development of SEA (EU + developing countries)
  - Integration of sustainability concept in EIA/SEA (e.g. UK – sustainability appraisal)
5. **Latest development (since 2002 – 2004)**
  - Development in former Soviet Union countries + new EU MSs and candidate countries
  - Green economy and eco-innovations, climate change and adaptations
  - *Does EIA/SEA fulfil its role? Is it efficient? What added value it brings?*



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## EIA/SEA – similarities

- Both EIA and SEA are **systematic processes** to identify, predict and evaluate the **environmental effects** of proposed development and to **integrate findings into decision-making**.
- Same aims and purposes
  - To contribute to environmental and health protection
  - To mitigate adverse impacts and enhance positive ones
  - Should be applied **prior to major decisions** and commitments being made
  - Provide information to planners / project developers, envi / health authorities, decision-makers



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## EIA/SEA – similarities

- Must be ensured by planning agency (SEA) and project developers (EIA)
- Environmental and health authorities as well as public have to participate and be consulted i.e. both EIA/SEA have to provide appropriate opportunities for **involvement of key stakeholders & the public**
- **Should be applied as early** as possible in planning process / project development
- Focused on **key issues**
- Both EIA/SEA have to evaluate **alternatives**
- Carried out with **appropriate**, cost-effective methods & techniques of analysis



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## EIA/SEA – differences

1. Subject of assessment
2. Position in planning / decision-making
3. Level of detail
4. Addressing alternatives
5. Key recipients



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### Subject of assessment

- SEA: wide range of plans, programmes, policies and other strategic / planning documents (+ legislation)
- EIA: specific project and development proposals

**But only those having likely significant environmental effects!**

The selection should be driven by

- Formal development process (planning or project preparation?)
- Decision-making procedure (what nature the approval has?)




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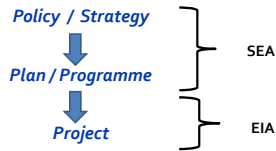
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### Position in planning / decision-making cycle

SEA (earlier) → EIA (later)



**Above illustrated is optimal case (both in terms of planning and assessment)!**




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### Position in planning / decision-making cycle

**Possible overlap: local land-use plans and their amendments**

- SEA Directive (Art. 4): Where plans and programmes form part of a hierarchy, Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy. For the purpose of, inter alia, avoiding duplication of assessment, Member States shall apply Article 5(2) and (3)




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## Level of detail

- EIA
  - Specific impacts to a specific area
  - Quantification is necessary (and possible)
  - Includes specific studies (biological survey, noise analysis, health risk assessment, traffic intensity)
- SEA
  - Often only qualitative assessment (but if data and information allow, quantification should be done)
  - More focused on integration of environmental and health concerns directly in the plan or programme
  - SEA has better chance to address cumulative impacts



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## Addressing alternatives

- EIA
- Usually only limited number of feasible alternatives
  - Rather reactive approach
- SEA
- Broader range of alternatives at various levels of planning
  - Can be more pro-active



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## Key recipients

- SEA
- Decision-makers = Political representation (government, municipal council etc.)
- EIA
- Project are formally approved by relevant agency (mining authority, construction department etc.)

***But, decision on large projects has also a political nature!***



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## Local land-use plans and their amendments

- Meeting point for EIA and SEA
- Local land-use plans define specific sites and their development – e.g. industrial sites, housing, green areas, agriculture land etc.
- Often information available on projects to be implemented on sites defined by the land-use plan (e.g. type of industry, technology etc.) – **proposals from project developers often initiate amendment process!**

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## Local land-use plans and their amendments

- Closer to SEA because they ....
  - are prepared through formalized planning procedure
  - prepared/approved by authority
  - assessing cumulative impacts is important
- Closer to EIA because ....
  - **planning is driven by specific projects**
  - information and data allow detailed analyses

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Thank you for your attention!

[martin.smutny@integranet.cz](mailto:martin.smutny@integranet.cz)

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# Transboundary SEA and EIA

by Martin Smutny, Senior expert of RENA

Mostar, April 24 – 25, 2012



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## Transboundary effects

- **Effects to the air, water, biodiversity, landscape, human health etc. don't always respect national borders!**
- Likely transboundary effects should be identified within scoping (usually required by relevant legislation)
- Based on scoping further analyses and consultations have to be conducted



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## EU SEA Dir – Transboundary consultations

1. In case of likely **significant effects on the environment in another MS than preparing the PP** (if it is considered by a MS preparing the PP or if potentially or if likely affected MS request so)
2. MS preparing project PP shall – before its adoption or submission to the legislative procedure – **forward draft PP and environmental report to the other MS** (potentially affected)
3. Potentially affected MS shall indicate whether it wishes to enter into consultations
4. MS preparing PP shall agree on detailed arrangements to ensure that **environmental authorities the public are informed and given an opportunity to forward their opinion**



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### EU EIA Dir – Transboundary consultations i.

1. In case of likely **significant effects on the environment in another MS** (if it is considered by a MS where the project is to be prepared or if potentially or if likely affected MS request so)
2. MS in whose territory the project is intended to be carried out shall send to the affected MS **as soon as possible and no later than when informing its own public**:
  - a description of the project, together with any available information on its possible transboundary impact;
  - information on the nature of the decision which may be taken, and shall give the other Member State a reasonable time in which to indicate whether it wishes to participate in the environmental decision-making procedures



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### EU EIA Dir – Transboundary consultations ii.

4. If potentially affected **MS intends to participate** the MS in whose territory the project is intended to be carried out shall **send to the affected MS the information on the project** (submitted by developer)
5. Public (concerned) and relevant authorities in potentially affected MS have to be **informed and given an opportunity to forward their opinion** on the information supplied.



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### EU EIA Dir – Transboundary consultations iii.

- The MSs concerned shall enter into consultations regarding the **transboundary effects** and the **measures** envisaged to reduce or eliminate such effects and shall agree on a reasonable time frame for the duration of the consultation period.
- The detailed arrangements for transboundary consultations may be determined by the MSs concerned and shall be such as **to enable the public concerned in the territory of the affected MS to participate effectively** in the environmental decision-making procedures.



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## Main challenges and problems

- Different legal procedures
- Transboundary consultations involve "unusual" (for EIA/SEA) governmental agencies (e.g. Ministry of Foreign Affairs)
- In some cases it can be difficult to find relevant formal partner (national ministry or regional authority?)
- Transboundary consultations prolong EIA/SEA process and mean higher costs (translations, travel arrangements, organizing public hearing)

***First transboundary consultation process is usually the most demanding!***

***Bilateral agreement can clarify majority of issues!***

***Early informal consultations are very important!***



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## Case examples

- SEA for Cross-border Cooperation Operational Programme Bulgaria – Serbia 2007 – 2013
- SEA for Cross-border Cooperation Operational Programme Czech Republic – Austria 2007 – 2013
- EIAs for nuclear power plant Temelin (Czech Republic, 2002 – 2012)
- EIA for wind power farm Jasna Gora (Poland, 2011)



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## Thank you for your attention!

[martin.smutny@integranet.cz](mailto:martin.smutny@integranet.cz)



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# REGIONAL PROJECT NERETVA - TREBIŠNJICA

BOSNIA AND HERZEGOVINA  
FEDERATION OF BOSNIA AND HERZEGOVINA

Mostar, 24.-25. April 2012.

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## GEOGRAPHICAL LOCATION OF NERETVA- TREBIŠNJICA RIVER BASIN IN B&H



Transboundary river basins of Neretva and Trebišnjica rivers are spreading in the area of B&H and Republic of Croatia, covering the territory of ca **11,800 km<sup>2</sup>**. These two rivers are the most of the Adriatic catchment area of B&H, and only the part of Adriatic catchment area of Republic of Croatia. These two rivers are rich in water, because they drain Dinaride Mountains, with the maximum amount of precipitation in South Europe (annually over **1,200 mm** in average within Neretva river basin and over **1,700 mm** within Trebišnjica river

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## GEOGRAPHICAL LOCATION OF NERETVA-TREBIŠNJICA RIVER BASIN IN B&H



Water resources of Neretva and Trebišnjica river basins have the significant role for the economies of both countries. More than **430,000 inhabitants** live within the area of Neretva and Trebišnjica (about 40,000 inhabitants in Croatia, 87,000 in Republic of Srpska and 303,000 in Federation of B&H primarily at the bottom of Neretva river, with land resources of high quality, where City of Mostar (100,000 inhabitants), is situated. Waters are used for energy production, irrigation, water supply, fishing, tourism and navigation. Regional developmental plans for South-Eastern Europe include the increasing role of water resources in hydroenergy, irrigation, and transport.

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## CHARACTERISTICS OF NERETVA – TREBIŠNJICA RIVER BASIN

Basins of the rivers are interstate river basins in southeastern Europe, linking the two countries (Croatia and Bosnia and Herzegovina).

Both rivers are used for transportation, recreation, for supply for drinking water, irrigation and energy production.

The project is planned processing of whole catchment area of the Neretva and Trebišnjica, which includes a RAMSAR site in Croatia - Neretva Delta, who is the project planned to create a management plan.

The Neretva river basin is valley which has a great diversity of habitats, especially wetlands and water.

The upper reaches of the river Neretva is considered the largest reservoir of surface drinking water in the region.

Lower Neretva river contains the largest and most valuable remains of Mediterranean wetlands on the east coast of the Adriatic Sea, which is one of the few remaining areas of its kind in Europe.

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## CHARACTERISTICS OF NERETVA – TREBIŠNJICA RIVER BASIN




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## CHARACTERISTICS OF NERETVA – TREBIŠNJICA RIVER BASIN




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	<b>PROJECT GOALS</b>
	<ul style="list-style-type: none"> <li>▪ To improve quantitative and qualitative status of Neretva and Trebisnjica rivers in achieving a good ecological status of surface waters and good chemical status of ground waters.</li> <li>▪ To protect the biological diversity of water ecosystems.</li> <li>▪ To construct wastewater treatment plants for municipal and industrial wastewaters.</li> <li>▪ To improve public participation in planning and decision-making processes at the local levels</li> </ul>

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	<b>PROJECT GENERAL INFORMATION</b>
	<p>Project referring Neretva and Trebisnjica river basins management is the common one between Republic of Croatia and Bosnia and Herzegovina, which is going to regulate the transboundary water resources managing.</p> <p>World Bank, as an executive agency of GEF is financing this Project in amount of 8 mill. US\$, of which 2 mill. US\$ belong to Republic of Croatia, and 6 mill. US\$ to Bosnia and Herzegovina.</p> <p>Each country co-finances the Project by its own financial resources.</p> <p>Duration of the Project realisation is 5 years, i.e. until 2013.</p> <p>Memorandum of Understanding on carrying out the activities in the frame the Project referring Neretva and Trebisnjica river basins between Bosnia and Herzegovina and Republic of Croatia was assigned on 09. September 2008.</p>

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	<b>PROJECT COMPONENTS</b>
	<ol style="list-style-type: none"> <li>1. IMPROVED TRANSBOUNDARY WATER RESOURCE MANAGEMENT</li> <li>2. IMPROVED MANAGEMENT AND USE OF ECOSYSTEMS AND BIODIVERSITY</li> <li>3. HIGH-PRIORITY INVESTMENTS FOR WATER POLLUTION CONTROL</li> <li>4. PUBLIC PARTICIPATION AND MANAGEMENT OF PROJECT IMPLEMENTATION</li> </ol>

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### PROJECT COMPONENT 1: ACTIVITIES

- Strengthening of the existing institutional capacity for comprehensive management of transboundary water resources and of water dependent ecosystems in the karst river basins of the Neretva and Trebisnjica
- Establishment of an integrated water information and monitoring system
- Development of the Framework Neretva and Trebisnjica river basin management plan

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### PROJECT COMPONENT 2 - activities

- sensitive ecosystem management improvements.
- Water infrastructure investments.
- Improvements in reservoir management and determination of environmental flows.

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### PROJECT COMPONENT 3 - activities

- Improvement of municipal waste water treatment system.
- Improvement of industrial waste water treatment system.
- Strengthening of water quality monitoring laboratories.

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**PROJECT COMPONENT 4 - activities**

This component covers activities related to increase civil society participation in the decision-making process for water resource management and to establish an incentive mechanism for responsible, local level resource management.

The component also covers activities related to project implementation itself.

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**PROJECT EXPECTED OUTCOMES**

- Developed and approved water basin management plan as well as Framework (harmonized) plan
- Developed and approved wetland management plan.
- Water pollution reduction.
- Collaborative, harmonized information and monitoring system.

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**WATER USE PROJECT**

There are ten hydroelectric power plants (six on the Neretva and two on the Trebisnjica) with accompanying reservoirs due to high water capacity, adequate morphological and geotechnical conditions.

The existing hydroelectric power plants represent multi-purpose systems for use, management and protection of the Neretva and Trebisnjica river basin.

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**WATER USE PROJECT**

In addition to the existing hydroelectric power plants, potentially negative effects may occur:

- Short-term, large water waves occur during the period of heavy precipitations, causing the flooding.
- The water levels in the lower parts of the rivers drop significantly during the summer, despite the compensatory volumes supplied by the discharge at dams.

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**WATER USE PROJECT**

Based on the previous slide, it is necessary to **coordinate infrastructure available on the Neretva and Trebisnjica Rivers in order to:**

- prevent potential negative effects on waters both from large to small types,
- enable a joint coordination with other beneficiaries to provide sufficient quantities of high-quality water for water supply, irrigation, and other needs such as recreation, tourism etc.

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**PROJECT OVERVIEW OF POTENTIAL CONSEQUENCES WHEN USING HYDROELECTRIC POWER CAPACITIES**

The use of hydroelectric capacities shall be considered a process promoting the coordinated development and management of water, land and related resources in order to meet both its goals and interstate obligations.

Diverting waters of the Neretva river into Trebisnjica for the purpose of:

- Operation of the planned hydroelectric power plants covered by "Upper horizons"/ the Neretva-Trebisnjica regional project ,
- Operation of the hydroelectric power plants in the Republic of Croatia

is considered a significant (adverse) consequence.

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**PROJECT  
OVERVIEW OF POTENTIAL CONSEQUENCES WHEN  
USING HYDROELECTRIC POWER CAPACITIES**

Water would be diverted from the karst fields, easterly of the Neretva river leading to significant changes, as follows:

- change in water balance of all types of waters (small, medium and large) of certain karst springs, (**the Buna, Bregava and Bunica springs** would be the most endangered, springs and water sources located along the northeastern margin of the **Deransko lake**),
- disturbances in native (endemic) fish species and downstream ecosystems, such as **Hutovo blato**, (an internationally recognized wetland under the Ramsar convention), that is highly threatened due to lack of water,
- Diverting water would cause its deficiency in fertile valley of the Neretva river eventually turning the respective area into salt desert.

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**PROJECT  
OVERVIEW OF POTENTIAL CONSEQUENCES WHEN  
USING HYDROELECTRIC POWER CAPACITIES**

Multi-purpose hydropower facilities in the Neretva and Trebisnjica river basins represent developing systems- their establishment has not been completed entirely. In that regard, hydropower facility expansion and upgrading are envisaged in line with relevant design documentation and basin development plans. Some planned hydroelectric power facilities are subject to an optimization review of key balance analysis parameters as well as eventual amendments to conceptual solutions.

One example of such an approach is HPP Dabar - Environmental impact study for the respective facility is currently undergoing preparation phase ( first step in defining both environmental and social impacts of the planned HPP).

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**A RECOMMENDATION**

*"An integrated water resource management is considered a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems."*

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**THE NERETVA –TREBISNJICA RIVERS-  
REGIONAL PROJECT**

**THANK YOU FOR YOUR ATTENTION**

BOSNIA AND HERZEGOVINA  
FEDERATION OF BOSNIA AND HERZEGOVINA  
Mostar, 24-25 April 2012

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Regional Environmental Network for Accession

**Group work: SEA or EIA?**

**Case Study: Amendment of the  
Spatial Plan of Krasna Hora  
municipality**

Mostar, April 24 – 25, 2012



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Regional Environmental Network for Accession

Based on the information provided, please answer following questions and provide your argumentation:

1. Considering the information and data provided, should EIA or SEA be applied? Why?
2. What pros and cons could you list for both EIA and SEA application in this case?
3. What (EIA, SEA or other type of environmental assessment) would be applied in accordance with your country legislation?
4. What should be the approach to the assessment in terms of analyses to be conducted, detail of impacts evaluation, mitigation measures, public consultations?
5. What can be provided by the SEA (if applied in this case) towards the EIAs for specific projects to be implemented within the spatial plan?



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## **DAY 2**

### **THIRD TRAINING OF THE EIA/SEA SUB-GROUP SEA/EIA – main differences and commons features**

**Regional Environmental Network for Accession  
Regional Training under Working Group 3 – Activity 3.3 Environmental Impact  
Assessment (EIA) / Strategic Environmental Assessment (SEA)**



## SEA for local spatial plans

### Case example: Amendment of the Spatial Plan of Krasna Hora municipality

Mostar, April 24 – 25, 2012



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## Background info

- ✓ Main actors:
  - Proponent: Municipal authority
  - Planner: freelance architect
  - SEA team: consultancy company
  - SEA competent authority : Regional municipality
- ✓ SEA
  - July / August 2007
  - Altogether 14 man-days budgeted
- ✓ SEA team: 3 experts, focus on (i) wastes, (ii) biodiversity, (iii) public health + team leader



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## Amendments of spatial plan

- ✓ Aim is to “examine and modify current functions of certain localities and to identify new areas for urbanization”
- ✓ Purpose is to “define new localities for building, for additional service functions in municipality, and other areas for small businesses and manufactures, which will provide new working places in the area. Important is also recreational function”.
- ✓ Altogether 11 localities proposed to be modified (i.e. to change their function)
- ✓ Description of the territory and infrastructure was taken from the original plan



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## Types of modifications

- ✓ Agriculture land → small manufactures and services
- ✓ Permanent grass → recreation, green areas
- ✓ Agriculture land → sport facilities, recreation
- ✓ Agriculture land → buildings, small services
- ✓ Other areas → family houses



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## Approach to SEA

- ✓ „Ex-post“ assessment
- ✓ Focus on
  - evaluation of environmental impact of proposed changes and
  - proposal for the plan modification
- ✓ Public participation ensured within land-use plan preparation



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## SEA steps

- ✓ Identification of key issues / impacts
  - Agriculture land
  - Landscape character
  - Biodiversity
- ✓ Status of environment
  - Objectives from national / regional strategic documents
  - Current status – on localities proposed to be changed
  - Short description of “zero” alternative (without implementing proposed changes)



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## Evaluation of proposed changes

- ✓ Likely impacts regarding
  - Environmental components
  - Public health
  - Cultural heritage
- ✓ Evaluation is based on the description of the environmental status i.e. status of localities to be changed (done through field survey)



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## Evaluation of proposed changes

- ✓ Verbal evaluation
  - **Likely very adverse impact** (very significant, irreversible, direct),
  - **Likely adverse impact** (less significant, direct or significant, secondary, temporary),
  - **Without impact,**
  - **Likely positive impact** (less significant, direct or significant, secondary, temporary),
  - **Likely very positive impact** (very significant, irreversible, direct),
  - **Impact cant be evaluated** (uncertainty, lack of data and information)

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Landscape	<b>Likely adverse impact (less significant, direct, permanent);</b> location close to inhabited area can cause local change of the landscape character, area use shall not include large buildings.
Soil	<b>Likely adverse impact (less significant, direct, permanent);</b> change will cause degradation of agriculture land (total area 2,11 ha), it can also cause soil pollution.
Public health	<b>Likely adverse impact (secondary, short-term, temporary);</b> change can cause higher emissions to the air and noise from manufacture and traffic. Since location neighbours with houses, its necessary to minimize these impacts (to move facility further from houses, find better transport connection, to implement "green belt"). Specific impact to the public health depend on the specific type of manufacture, and have to be addressed in detail within further procedures (building permits and EIA).

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## Conditions for implementation

- ✓ Due to close location to inhabited area, its necessary to conduct detail noise and emission study before the project implementation. Study has to include also assessment of potential cumulative impacts with already existing agriculture production.
- ✓ The most noisy parts of the manufacture place as far from the inhabited area as possible
- ✓ The separate family houses from the manufacture by "green belt"
- ✓ To save trees along the road
- ✓ To solve waste water and rain water management

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## Summary of evaluation

- ✓ Suggestions for
  - Exclusion of 1 location from the plan
  - Modification (area reduction, different land-use) for 3 locations
  - Modification of some project proposed for implementation on selected locations
- ✓ Environmental indicators
  - The plan proponent (municipal authority) has to prepare report on the land-use plan implementation every 4 years. Relevant environmental indicators have to be included in this report in order to monitor environmental impacts of the plan implementation.



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## Main benefits of SEA

- ⊕ SEA affected the final version of the plan – proposed modification have been included in the plan



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## Main problems

- ⊖ Lack of data
- ⊖ Plan has not strategic character (only list of projects)
- ⊖ Problematic acceptance of SEA proposals by plan proponent (municipal authority)



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Thank you for your attention!

[martin.smutny@integranet.cz](mailto:martin.smutny@integranet.cz)



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## Group work: Quality control

### Case Study: Environmental Assessment for Neretva and Trebišnjica River Basin

Mostar, April 24 – 25, 2012



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## Quality of SEA and EIA

- **Quality of SEA/EIA system**
  - Legal framework, guidance, scope of SEA/EIA application, personal / expert capacities (authorities, experts)
- **Quality of specific SEA/EIA process**
  - Links to the planning / project preparation process, public involvement, consultations with relevant authorities, integration of the assessment results in the decision-making
- **Quality of SEA/EIA report**
  - All key issues covered, alternatives evaluated, findings clearly defined etc.



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## Approaches to quality control

- Often formalized step in EIA process – after the EIA report is drafted
- Both EIA report and the quality review report can be a subject of the public consultations
- SEA usually doesn't recognize specific QC stage
- Responsibility for QC
  - Environmental authorities
  - Planning agencies (SEA) and project developers (EIA)
  - SEA/EIA experts
  - Special institutions



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## Quality criteria

- Often defined by the legislation
- Can be derived from good international practice
- Specific criteria for a particular SEA/EIA process can be developed
- **SEA/EIA quality review is qualitative!**
- **Verbal description of evaluation is always needed!**



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## Aspects of quality

1. Arrangement and management of the process
2. Scope of assessment
3. Baseline analysis
4. Impact evaluation
5. Mitigation measures
6. EIA report
7. Decision-making
8. Monitoring
9. Consultations and stakeholders' participation



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## Assignment

- Based on the EIA Report as well as all information you have been provided with during the workshop, please
  1. Evaluate quality of the assessment in nine quality aspects (previous slide).
  2. Suggest what issues / problems for each quality aspect should be addressed if there is assessment (SEA?) for Neretva and Trebišnjica River Basin (spatial) plan



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## Assignment

- Scoring:
  - Completely covered
  - Partially covered
  - Completely missing
  - Cannot be evaluated due to lack of information
  - Not relevant (a quality aspect is not relevant for the case)
- Use detailed quality criteria for each quality aspect!



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Quality aspect	Overall scoring	Comments (suggestions for future SEA)
• Arrangement and management of the process		
• Scope of assessment		
• Baseline analysis		
• Impact evaluation		
• Mitigation measures		
• EIA report		
• Decision-making		
• Monitoring		
• Consultations and stakeholders' participation		



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