
Environment and Climate Regional Accession Network (ECRAN)

**Workshop Report
on the regional
'Workshop and study
tour on SEA/EIA in
hydropower sector'**

11 – 12 May, 2016, Ljubljana, Slovenia

ENVIRONMENT AND CLIMATE REGIONAL NETWORK FOR ACCESSION - ECRAN

TRAINING REPORT

Activity No. 2.4 Environmental Assessments

Task 2.4.3. Other assessments

Regional workshop and study tour on SEA/EIA in hydropower sector

11 – 12 May 2016, Ljubljana, Slovenia

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LIST OF ABBREVIATIONS	
EA	Environmental Assessments
EC	European Commission
ECRAN	Environment and Climate Regional Accession Network
EIA	Environmental Impact Assessment
EU	European Union
HPP	Hydropower plant
MENP	Ministry of Environmental and Nature Protection
MNE	Montenegro
MS	Member State
NGO	Non-governmental Organisation
NGO	Non-Governmental Organisation
RENA	Regional Environmental Network for Accession
SEA	Strategic Environmental Assessment
SPP	Strategies, Plans, Programmes
ToT	Training of Trainers
UNECE	United Nation Economic Commission for Europe
WG	Working Group
WS	Workshop



I. Background/Rationale

General information about the event

Hydropower development represents an important sector in almost all ECRAN beneficiary countries, which can contribute to the change of the energy mix and GHG emission decrease, on the other hand may lead to significant negative impacts on the environment (especially biodiversity and sensitive ecosystems). Therefore, efficient application of SEA and EIA in this field is an important way to avoid or minimize likely adverse impacts related to the hydropower development.

Following the discussions at the 3rd Annual Meeting of the ECRAN Environmental Assessment Working Group (Vienna, November 2015) the hydropower development was selected as one of the areas to be addressed at the regional workshops on 'SEA/EIA for specific economic sectors / policy areas' (under the Task 2.4.3. Other assessments).

Since both Croatia and Slovenia have an extensive experience with hydropower development, including also transboundary consultations within environmental assessment processes, the location of the workshop (i.e. Slovenia with visits organized to the sites close to Croatian borders) provided an opportunity to discuss the key issues related to efficient application of SEA and EIA in the hydropower sector with the representatives of the SEA/EIA Competent Authorities of both countries, as well as with the project developers.

Current state of the affairs in the beneficiary countries in the specific sector

The event relates to two EU Directives stipulating provisions for SEA and EIA, i.e., the Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive), the Directive 2014/52/EU, which has recently amended the Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (EIA Directive).

Although the process of harmonizing the national legislation with the requirements of the EIA and SEA Directives has been initiated in all ECRAN countries, and some of the countries have already achieved full compliance with both Directives (Croatia, Montenegro, Kosovo*, Serbia, the FYR of Macedonia), the implementation of these two directives is still in many countries in its early stage. Almost all ECRAN countries are facing a lack of capacity for appropriate implementation both at the national and sub-national levels. The situation is more advanced in case of EIA, which has in all ECRAN countries longer history compared to SEA.

The hydropower development as a long history almost in all ECRAN beneficiary countries, and both SEA and EIA have been applied in last 10 years to the documents related to hydropower development as well as to the specific projects in the region. However, several challenges regarding quality of SEA/EIA can be formulated, among others including:

- Insufficient consideration of the likely cumulative effects
- Relatively weak link between SEA and follow up EIA
- Lack of data (especially regarding biodiversity)

Summary of the main topics covered



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As already mentioned above, the main focus of the workshop was to address the efficient application of SEA and EIA in hydropower sector including transboundary consultations. In order to cover the topic above, following sessions were included in the agenda:

- ***Slovenian experience with SEA/EIA in hydropower sector***
 - Major developments
 - Existing challenges
- ***WB6 hydropower masterplan development process and the intended outputs***
 - Introduction to the project by the representatives of the Infrastructure Project Facilities (IPF)
- ***Introduction to the case examples***
 - Brief overview of the history and actual status of the projects to be visited
 - Environmental characteristics of the areas
- ***Croatian experience with SEA/EIA in hydropower sector***
 - Major developments
 - Existing challenges
- ***Introduction to Sava River Programme***
 - Linkages to the WB6 hydropower masterplan
 - Croatian view
- ***Transboundary environmental assessments in hydropower sector and water management: Overview of lessons from outside Europe***
 - Experience from operation of the Mekong River Commission
 - Challenges in transboundary assessment and consultations
- ***Transboundary consultations – group work***
 - Design of the procedure for transboundary consultations
 - Determining the scope of transboundary consultations i.e. what issues to be addressed in EIA and SEA



II. Objectives of the training

General Objective

To present Croatian and Slovenian practice regarding the application of SEA and EIA in the hydropower development sector and provide hands-on experience for the study visit participants.

Specific Objective

- To highlight main issues regarding efficient SEA/EIA application in hydropower sector.
- To share experience of Croatian and Slovenian key actors involved in SEA/EIA application.
- Based on Croatian and Slovenian experience as well as considering case examples from the other EU countries to formulate recommendations to enhance SEA/EIA practice in hydropower sector in ECRAN beneficiary countries.

Results/outputs

The expected results are:

- Increased understanding of the efficient application of SEA/EIA in hydropower sector.
- Contacts established between the study visit participants and the relevant governmental institutions to be further utilized



III. EU policy and legislation covered by the training

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment

The SEA Directive has been in force since 2001 and it should have been transposed by July 2004 by all EU member states. Its requirements have had to be integrated in the national legal frameworks. More information can be found at <http://ec.europa.eu/environment/eia/home.htm>

The SEA Directive stipulates the framework for SEA application in EU Member States. It defines main responsibilities of the MSs to be ensured.

The SEA Directive defines a group of plans and programmes, which shall be subject of SEA (or screening). Plans and programmes in the sense of the SEA Directive are those, which are prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions. However, the SEA Directive does not include a list of plans and programmes (as the EIA Directive does for types of projects), it rather defines criteria to be considered when deciding if SEA should / should not be applied for a certain planning document.

In principle, SEA shall be applied mandatory for plans/programmes which:

- Are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste/ water management, telecommunications, tourism, town & country planning or land use, and
- Set the framework for future development consent of projects listed in the EIA Directive, or
- Have been determined to require an assessment under the Habitats Directive.

The SEA procedure as designed by the SEA Directive includes for major steps:

- Preparation of environmental report, in which the likely significant effects on the environment and the reasonable alternatives of the proposed plan or program are identified
- Consultations with public and the environmental authorities on the draft plan or program and the environmental report prepared (including transboundary consultations if relevant)
- Taking into account the environmental report and the results of the consultations when adopting the plan or program
- Providing information to the environmental authorities and the public on how the SEA has been taken into account in the adopted plan or program and/or relevant decision.

The MSs are also obliged to monitor significant environmental effects of the plan or program during its implementation.

Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU

The newly amended EIA Directive (2014/52/EU) entered into force on 15 May 2014 to simplify the rules for assessing the potential effects of projects on the environment. The main amendments are as follows:

- Member States now have a mandate to simplify their different environmental assessment procedures.



- Timeframes are introduced for the different stages of environmental assessments: screening decisions should be taken within 90 days (although extensions are possible) and public consultations should last at least 30 days. Member States also need to ensure that final decisions are taken within a "reasonable period of time".
- The screening procedure, determining whether an EIA is required, is simplified. Decisions must be duly motivated in the light of the updated screening criteria.
- EIA reports are to be made more understandable for the public, especially as regards assessments of the current state of the environment and alternatives to the proposal in question.
- The quality and the content of the reports will be improved. Competent authorities will also need to prove their objectivity to avoid conflicts of interest.
- The grounds for development consent decisions must be clear and more transparent for the public. Member States may also set timeframes for the validity of any reasoned conclusions or opinions issued as part of the EIA procedure.
- If projects do entail significant adverse effects on the environment, developers will be obliged to do the necessary to avoid, prevent or reduce such effects. These projects will need to be monitored using procedures determined by the Member States. Existing monitoring arrangements may be used to avoid duplication of monitoring and unnecessary costs.

More information about new EIA Directive can be found at <http://ec.europa.eu/environment/eia/review.htm>

Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)

The United Nations Economic Commission for Europe (UNECE) Espoo Convention sets out the obligations of its Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

Useful references on practical guides or links to various web sites

- SEA and EIA
 - A Practical Guide to the Strategic Environmental Assessment Directive. Office of the Deputy Prime Minister, UK, 2005
 - Handbook on SEA for EU Cohesion Policy 2007-2013. GRDP, 2006
 - Sadler, B., McCabe, M.: Environmental Impact Assessment Training Resource Manual. UNEP, 2002
 - United Nations' EIA Course Module (eia.unu.edu)
 - Environmental Impact Assessment: A guide to good practice and procedures. Department for Communities and Local Government, 2006
 - Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment. European Union, 2013 (<http://ec.europa.eu/environment/eia/pdf/EIA%20Guidance.pdf>)
 - EIA/SEA of hydropower Projects in South East Europe: Meeting an EU Standards. Planning Green Futures for WWF Adria and South East Europe Sustainable Energy Policy (SEE SEP). Edited by Peter J. Nelson. 2015



Case studies/examples to illustrate practical situations or best practices that have been covered during the training

Several case examples were presented in order to illustrate practice in the EU as well as in non-EU countries. These included:

- EIA of hydropower plans Brežice, Krško, and Arto-Blanc on Sava River
- SEA of the National River Basin Management Plan of Croatia 2016 – 2021
- SEA of Spatial Plan of Karlovac County (Croatia)
- SEA of Sava River Programme (Croatia)
- SEA of hydropower planning on Mekong mainstream



IV. Highlights from the training workshop

IV. Highlights from the training

Summary of each training session and description of the training activities (delivered presentations, small group work, plenary discussions, etc.) done during each training session

Following sessions were carried out during the workshop:

- **Slovenian experience with SEA/EIA in hydropower sector:** The presentation, which was delivered by Ms. Vesna Kolar-Planinsic, ECRAN expert, addressed following topics:
 - Strategies
 - Programmes and plans
 - Location alternatives
 - Transboundary effects
 - Cumulative effect
 - Good water status
 - Natura 2000 species habitats

She explained the SEA process for the National Energy Strategy and its linkages to the hydropower development emphasizing the importance of SEA application at the strategic level to provide 'guidelines' for further assessments. Next case presented was SEA of the Renewable Energy Action Plan, where SEA focused mainly on the share of energy production from various sources and recommended to stipulate less ambitious goal for overall energy production from renewable resources due to likely significant effects on the environment. Also, SEA suggested to reduce hydropower development on Middle Sava and Mura Rivers, as well as to cancel hydropower station Učja. Ms. Kolar-Planinsic also introduced in detail following alternatives developed on Mura River and its assessment regarding Natura 2000 sites:

- Chain of 9 hydropower 600 MW: not acceptable, reaching renewable energy aim, but not reaching Natura 2000 and cultural heritage aims
- Chain of 4 hydropower 400 MW: not acceptable, reaching renewable energy aim, but not reaching Natura 2000 aim
- Two small from 0/55 MW: acceptable, reaching both aims, but renewable aim not adequate, it must be achieved in solar or wind option

At the last part of her presentation, she explained approach to SEA transboundary procedures regarding hydropower development for

- the national plan for Brežice
- the national plan for Mokrice

and its linkages to EIA procedures for the specific HPPs. She concluded that these cases can be considered as examples of a good practice for transboundary consultations. Following aspects were important for efficient process:

- Transboundary SEAs were under the dispute on the International Court of Justice
- There was a good cooperation between focal points




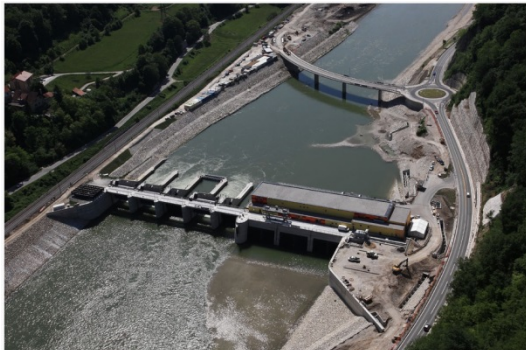

- Transparency of all steps was ensured
 - Agreement was made between two countries on each step as well as there was a clear conclusion of each step
 - Consultations focused on all environmental aims with an emphasis on the state of the water bodies, including underground water and water supply, nature conservation and flood protection
 - There was an agreement on how to deal with new facts and information
- **WB6 hydropower masterplan development process and the intended outputs:** The presentation was delivered by Mr. Arthur Schankler, Deputy Team Leader, and Mr. Martyn Osborn, Key Expert on Energy, Infrastructure Projects Facility in the Western Balkans, IPF Consortium. They explained background as well as intended outputs from hydropower development study for Western Balkans, providing that the overall objective of this project is *'to foster harnessing of environmentally and climate change sustainable hydropower generation in the Western Balkans (WB) region in line with strategic objectives of the European Union and Energy Community Treaty obligations'*. The purpose of the intervention is the development of a Hydropower Master Plan for the Western Balkans (now referred to as "Hydropower Development Study"), including a list of HPP development priorities by (i) individual WB6-country as well as the WB-region as a whole and (ii) type of planned HPP facilities (storage, run-of-river, reversible), by which the remaining hydropower potential in the region will be evaluated.
 - **Site visit:** The site visit was organized with emphasis on SEA/EIA processes and environmental issues that investors encountered in planning, building and operational phases. This was why the first site-visit location was to the HPP Brežice, which is currently under construction. The second site was the HPP Krško which was recently put into the operation, thus re-cultivation works were the main topic, while the third site was the HPP Arto-Blanca which is in operation since 2011. Special attention was put into designing and building a fish-path that recently became a good-practice example, which is why it was chosen as the last site-visit location, where some real effects of SEA/EIA mitigation measures can be seen.

Before leaving to the site visit, Ms. Kolar-Planinsic explained the key features of EIAs conducted for the HPPs with the emphasis on alternative options and mitigation measures.

Site-visit started with a visit of main offices of the HESS d.o.o. company – they are state-owned company that was established with a specific task of planning, construction and management of hydro-power plants on Lower Sava River. After initial greetings a general presentation of the company, as well as the overall project of hydro-power exploitation on Lower Sava River was presented by their representatives. After this general introduction a field visit of 3 out of 4 existing hydro-power plants was briefly presented.

Below you can find a general description of all tri site-visit locations provided from HESS d.o.o. from their official web-site (URL: <http://www.he-ss.si/>).






HPP	HPP Brežice	HPP Krško	HPP Arto-Blanca
Description	<p>The 45 MW HPP Brežice is the fifth in the chain of six hydroelectric power plants on the lower Sava River. It is a hydroelectric power plant of the run-of-the-river and reservoir type, with three vertical generating units with a combined rated discharge of 500 m³/s, five spillways and an average annual production output of 161 GWh.</p> <p>HPP Brežice will make up roughly one percent of Slovenia's present annual electricity production and will also provide peak-load power and open up possibilities for selling ancillary services. This power plant is going to be fully automated, unmanned and remotely operated from the control centre.</p>	<p>The 39 MW HPP Krško is the fourth in the chain of six hydroelectric power plants on the lower Sava River. It is a hydroelectric power plant of the run-of-the-river and reservoir type, with three vertical generating units with a combined rated discharge of 500 m³/s, five spillways and an average annual production output of 140 GWh.</p> <p>HPP Krško accounts for roughly one percent of the present annual electricity production in Slovenia, but will also provide peak-load power and open up possibilities for selling ancillary services. This power plant is going to be fully automated, unmanned and remotely operated from the control centre.</p>	<p>The 39 MW HPP Arto-Blanca is the third in the chain of six hydroelectric power plants on the lower Sava River. It is a hydroelectric power plant of the run-of-the-river and reservoir type, with three vertical generating units with a combined rated discharge of 500 m³/s, five spillways and an average annual production output of 140 GWh.</p> <p>HPP Arto-Blanca accounts for roughly one percent of the present annual electricity production in Slovenia, but will also provide peakload power and open up possibilities for selling ancillary services. This power plant is going to be fully automated, unmanned and remotely operated from the control centre.</p>
Picture or sketch:			



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Specifications			
• Number of generating units	3	3	3
• Turbine type	Double-regulated vertical Kaplan turbine	Double-regulated vertical Kaplan turbine	Double-regulated vertical Kaplan turbine
• Installed plant capacity	45.3 MW (3 x 15.1 MW)	39.12 MW (3 x 13.04 MW)	39.12 MW (3 x 13.04 MW)
• Rated plant discharge	500 m ³ /s	500 m ³ /s	500 m ³ /s
• Rated head	11 m	9,14 m	9.29 m
• Average annual output	161 GWh	154 GWh	140 GWh
• Headwater elevation	153 m a.s.l.	164 m	174.20 m



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• <i>Maximum operating variation of water level</i>	1.1 m	1 m	1 m
• <i>Mean annual discharge</i>	207 m ³ /s	205 m ³ /s	201 m ³ /s
• <i>Reservoir capacity</i>	19,300,000 m ³	6,310,000 m ³	9,950,000 m ³
• <i>Reservoir live storage</i>	3,400,000 m ³	1,180,000 m ³	1,300,000 m ³
• <i>Number of spillways</i>	5	5	5
Important milestones	<ul style="list-style-type: none"> • 5 June 2006 The initiative to start the procedure for the preparation of the National Spatial Plan for HPP Brežice is launched • 15 July 2008 A proposal of the National Spatial Plan for HPP Brežice is prepared • 20 December 2010 The Comprehensive Environmental Impact Assessment Division issues a positive opinion with regard to the draft National Spatial Plan and the Environmental Report • 2 February to 7 March 2011 Public unveiling of the draft National Spatial Plan and the Environmental Report for HPP Brežice takes place in the Republic of Slovenia • March, April 2011 Public unveiling of the draft National Spatial 	<ul style="list-style-type: none"> • 6 October 2006 National detailed site plan is approved for HPP Krško • 14 June 2007 Environmental approval is granted • 21 November 2007 Start of construction • 12 June 2012 Generating unit initial run with running water at HPP Krško • 3 July 2012 Synchronisation of HPP Krško's first generating unit • 7 March 2013 Technical inspection of the dam structure • 1 April 2013 Start of trial operation of the dam structure • 23 May 2013 Technical inspection of the reservoir 	<ul style="list-style-type: none"> • 28 October 2005 Start of construction • 17 August 2007 Environmental approval is granted • 6 November 2008 Generating unit initial run with running water at HPP Arto-Blanca • 24 November 2008 Synchronisation of HPP Arto-Blanca's first generating unit • 23 October 2009 Technical inspection of the dam structure • 29 October 2009 Technical inspection of the reservoir • 3 December 2009 Start of trial operation of the dam structure • 15 January 2010 Start of trial operation of the reservoir



	<p>Plan and the Environmental Report for HPP Brežice takes place in the Republic of Croatia</p> <ul style="list-style-type: none"> • 29 June 2012 National Spatial Plan is approved for HPP Brežice • 7 February 2014 Environmental approval is granted • 17 February 2014 A request for a building permit is submitted to the Ministry of Infrastructure and Spatial Planning • 13 March 2014 A partial building permit is obtained • 25 March 2014 Opening ceremony to mark the beginning of construction • 2 April 2014 Start of construction of HPP Brežice • 18 December 2014 A supplementary building permit is obtained 	<ul style="list-style-type: none"> • 7 June 2013 Start of trial operation of the reservoir • 7 June 2013 Official opening of HPP Krško and the bypass road • 24 March 2014 Operating licence obtained for the dam structure • 1 April 2014 HPP Krško starts regular operation • 23 May 2014 Operating licence is obtained for the reservoir 	<ul style="list-style-type: none"> • 12 November 2010 Operating licence obtained for the dam structure • 21 December 2011 Operating licence obtained for the reservoir
Source of information:	Official HESS d.o.o. web-site (URL: http://www.he-ss.si/).		



- **Croatian experience with SEA/EIA in hydropower sector:** The presentation delivered by Ms. Ana Kovačević (TAIEX expert, Ministry of the Environment and Nature Protection, Croatia) outlined the scope of SEA application for plans and programmes addressing in a certain way hydropower development – the National Spatial Development Strategy, the National River Basin Management Plan 2016 – 2021, and county spatial plans. The case example of SEA of the Karlovac County Spatial Plan, where the Plan stipulated objectives regarding construction of HPPs and small HPPs, illustrated following key issues addressed in SEA:

- 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...

Based on the analyses of the likely impacts, SEA concluded that construction of new HPP will have significant negative impact on the environment, and recommended to exclude planned HPPs from the Plan and to use the sites of existing water mills for construction of small HPPs.

Ms. Kovacevic continued with EIA, providing that since 2013 only two scoping procedures for HPPs, and more than twenty screening procedures for HPPs and small HPP were conducted. She introduced details regarding the EIA scoping for hydropower plant Kosinj.

She concluded her presentation by describing existing problems regarding SEA/EIA application in hydropower sector in Croatia:

- SEA
 - Still not conducted for 'main' national documents for hydropower sector
 - Postponing consideration of the key issues to be determined on project level
 - Lack of cooperation and communication between document preparers (e.g. different data) ☐ harmonization of national interests
 - Assessment without alternatives and cumulative effects
 - Insufficient participation of authorities
- EIA
 - Impacts to Natura 2000 (ecological network)
 - Cumulative effects and alternatives of the proposed project
 - NGO's appeals
 - Investors giving up projects

- **Sava Programme and SEA procedure in Croatia:** The presentation was delivered by Ms. Anamarija Matak (TAIEX expert, Ministry of the Environment and Nature Protection, Croatia). At the beginning she briefly introduced main features of Sava River in Croatia and history of its development. It was further explained that Sava River Programme is supposed to be a multi-purpose programme providing a complete solution for protection and development of Sava River from Slovenian border to Sisak. The programme includes also up to seven hydropower plants (151 – 156 MW) – 4 small HPPs (Jarun, Šanci, Petruševac, Ivanja Reka), and

3 HPP (Podsused, Prečko, Sisak). SEA was initiated in February 2014 – after scoping stage being carried out in 2014, the SEA report is currently under preparation.

- **Sava The Sava River Multi-Purpose Development Project (“Program Sava”) – SEA: The WBIF-IPF perspective:** Ms. Maja Kerovec, SEA/EIA Expert, Infrastructure Projects Facility in the Western Balkans, IPF Consortium, introduced the Programme’s objectives i.e.:
 - flood protection and control;
 - replenishment of groundwater aquifers;
 - stabilization of the riverbed and riverbanks;
 - power generation;
 - urban regeneration;
 - transport;
 - and irrigation and drainage.

She explained that altogether three options were developed during the conceptual solution development phase – one option without Hydropower Plants, and two options with Hydropower Plants. She provided further details on the Strategic Themes under the options with Hydropower Plants:

- Water and Sediments
 - Ecosystems
 - Local Communities
 - Landscape
 - Energy
- **Transboundary environmental assessments in hydropower sector: Overview of lessons from outside Europe:** In his presentation, Mr. Jiri Dusik, ECRAN expert, explained the role of the Mekong River Commission, and ongoing development of Transboundary EIA system in the river basin. He introduced case example of SEA of hydropower planning on Mekong mainstream (2010), which focused mainly on:
 - Economic development and poverty alleviation
 - Ecosystems integrity and diversity – aquatic, terrestrial, hydrological dynamics and sediment/nutrient transport.
 - Fisheries and food security (including agriculture)
 - Social systems - livelihoods and the living cultures of affected communities

SEA concluded mainstream hydropower cascade is not critical to ensure healthy economic growth in the Lower Mekong Basin region, while the alternatives to completely blocking the mainstream to produce electricity have not been adequately explored. SEA recommended that partial damming of channel branches, in-stream turbines and diversions should be considered in further planning.

Mr. Dusik described the main issues addressed in ‘Preliminary Design Guidance for Proposed Mainstream Dams in the Lower Mekong Basin’ (2009) i.e.:

- Navigation
- Fish Passage on Mainstream Dams



- Sediment Transport and River Morphology
- Water Quality and Aquatic Ecology
- Safety of Dams

Outputs during group work.

Altogether two group work sessions were organized.

Group work no. 1 was focused on the transboundary consultations procedure. The participants were asked to outline the procedure for transboundary consultations for SEA and EIA i.e. to suggest:

- At which stage of SEA/EIA to decide if transboundary consultations are needed?
- At which stage of SEA/EIA the transboundary consultations should be initiated?
- What type of information should be available when launching transboundary consultations in SEA/EIA?

In group work no. 2, focusing on the scope of transboundary consultations, the participants were asked – based on the information on the pilot site and proposed projects – to determine the key environmental and health issues related to proposed hydropower development, and:

- Identify issues to be discussed through transboundary consultation in SEA
- Identify issues to be discussed through transboundary consultation in EIA the participants were asked to

It can be concluded that the most of the participants indicated the scoping stage, when the decision regarding transboundary consultation should be made as well as the consultations should be initiated. For EIA, the information about location of the project, area to be likely affected, and the key environmental issues likely to be affected should be available to launch transboundary consultations. Location alternatives should be addressed both in SEA and EIA together with likely impacts on water regime, Natura 2000, sediment transport, and flood protection. It was also emphasized that cumulative transboundary effects have to be properly considered both in SEA and EIA.

Panel discussion on key issues of efficient SEA/EIA practice in hydropower development sector including transboundary consultations

A panel discussion was used to give concluding word to main guest speakers and to answer last questions from the audience. The questions were collected throughout the second day of the workshop, sorted out and presented to main speakers. Most of the questions from the audience were still under the influence of the site-visit and were thus focused on resolving some misunderstandings/misinterpretations regarding the pilot cases on Sava River. Also group work results were commented by guest speakers, which had an opportunity to present their own views on opened issues. Panel discussion was closed with a final question – ‘Do you prefer transboundary consultations to be a 1-step event or rather an on-going process?’ General conclusion was to opt for transboundary consultations conducted in several stages of SEA/EIA process – i.e. to be initiated in the scoping stage (informal consultations) followed by consultations regarding the likely impacts (i.e. when the draft SEA/EIA report is available).

Conclusions

Based on the discussions following the presentations it can be concluded that the experience from Slovenia and Croatia, as well as the case examples, were found relevant to ECRAN countries. It has been confirmed that hydropower development belongs to the key sectors and requires high attention regarding proper application of SEA and EIA considering also the fact the often it may lead to transboundary impacts.

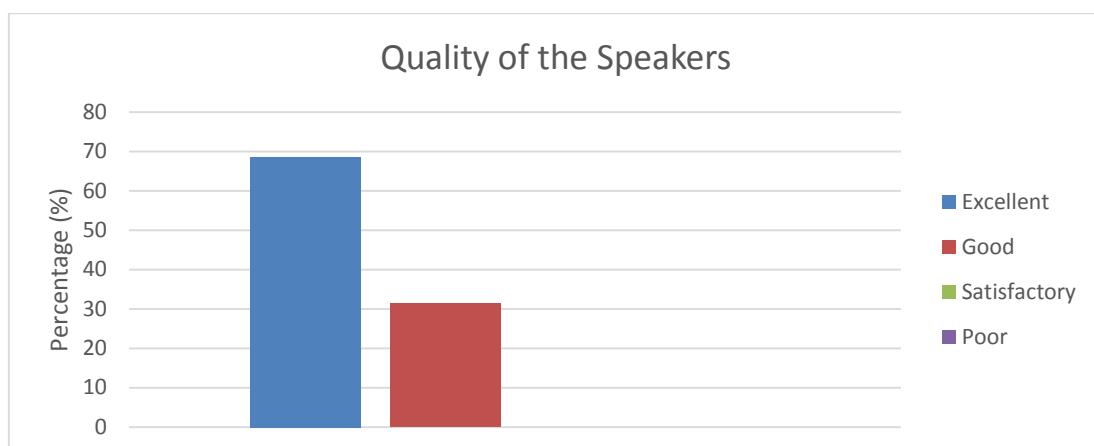
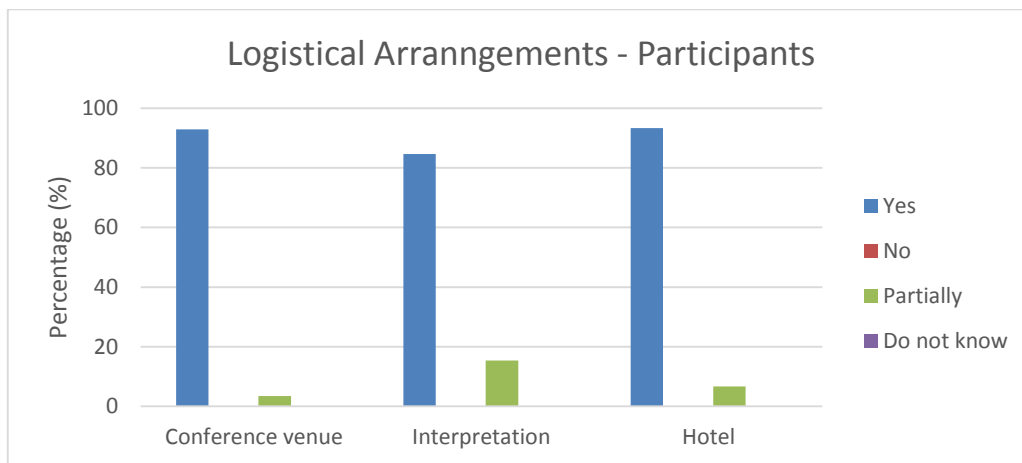
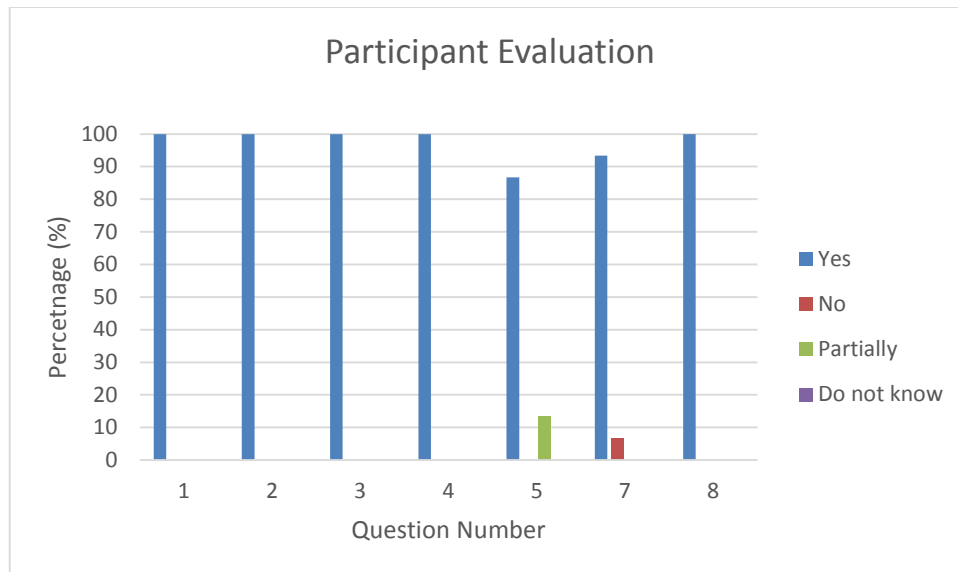
It was indicated that further hydropower development can be expected (e.g. in Albania), therefore the countries may need further technical support to apply SEA and EIA in the most efficient way and following integrational good practice.



V. Evaluation

Workshop – Participants' Evaluation

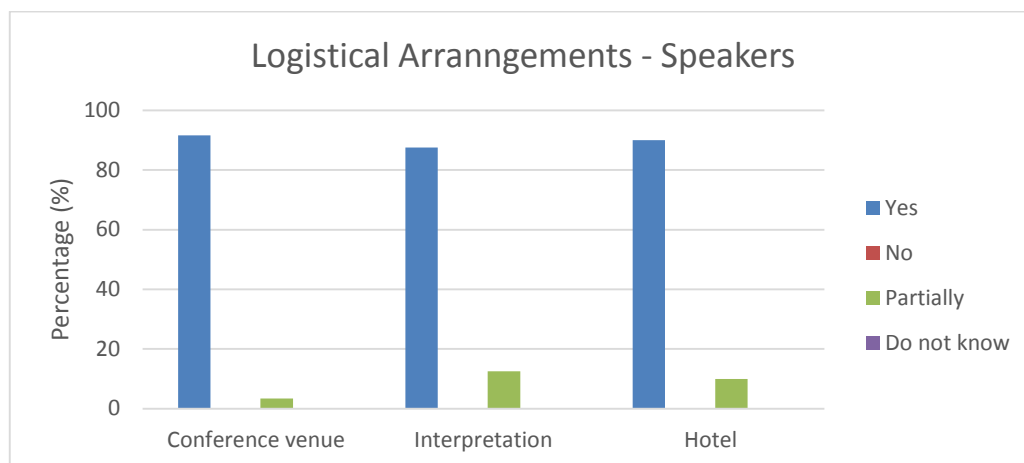
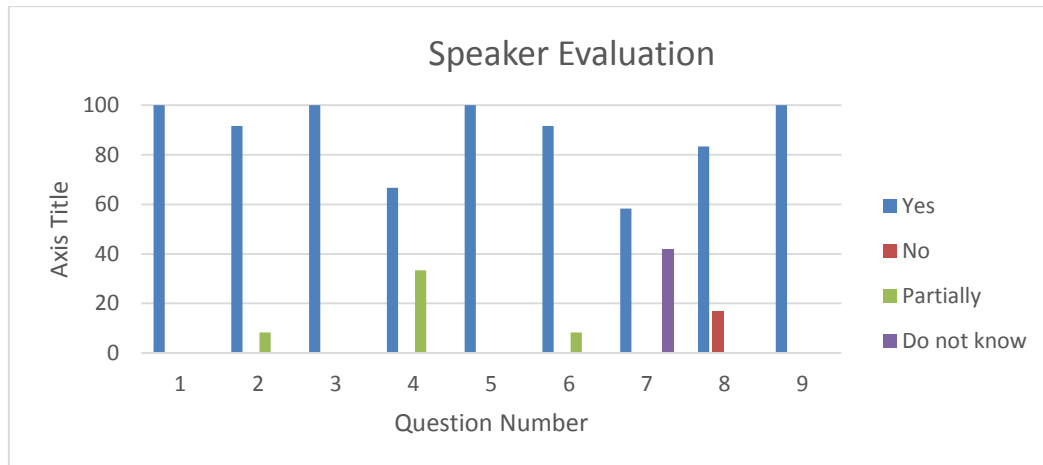
Question		N°. Responses	Yes	No	Partially	Do not know
1. Was the workshop carried out according to the agenda		15	15 (100)%	0 (0)%	0 (0)%	N/A
2. Was the programme well structured?		15	15 (100)%	0 (0)%	0 (0)%	N/A
3. Were the key issues related to the topics addressed?		15	15 (100)%	0 (0)%	0 (0)%	N/A
4. Did the workshop enable you to improve your knowledge?		15	15 (100)%	0 (0)%	0 (0)%	N/A
5. Was enough time allowed for questions and discussions?		15	13 (86)%	0 (0)%	2 (13)%	N/A
6.How do you assess the quality of the speakers?	Speaker/Expert	N°. Responses	Excellent	Good	Satisfactory	Poor
	12	172	18 (68)%	54 (31)%	0 (0)%	0 (0)%
Question		N°. Responses	Yes	No	Partially	Do not know
7. Do you expect any follow-up based on the results of the workshop (new legislation, new administrative approach, etc.)?		15	14 (93)%	1 (6)%	N/A	N/A
8. Do you think that further TAIEX assistance is needed (workshop, expert mission, study visit, assessment mission) on the topic of this workshop?		14	14 (100)%	0 (0)%	N/A	N/A
9.Were you satisfied with the logistical arrangements, if applicable?	Conference venue	14	13 (92)%	0 (0)%	1 (7)%	0 (0)%
	Interpretation	13	11 (84)%	0 (0)%	2 (15)%	0 (0)%
	Hotel	15	14 (93)%	0 (0)%	1 (6)%	0 (0)%
Comments:						
<ul style="list-style-type: none">No comments;NO COMMENT!Only one suggestion in terms of public participation into SEA or EIA procedure. I would note that the next time could add any case study for elaboration by the participants where is strong reaction by NGO and others relating any project realization.						



Workshop – Speakers’ Evaluation

Question		N°. Responses	Yes	No	Partially	Do not know
1. Did you receive all the information necessary for the preparation of your contribution?		12	12 (100)%	0 (0)%	0 (0)%	N/A
2. Has the overall aim of the workshop been achieved?		12	11 (91)%	0 (0)%	1 (8)%	N/A
3. Was the agenda well structured?		12	12 (100)%	0 (0)%	0 (0)%	N/A
4. Were the participants present throughout the scheduled workshop?		12	8 (66)%	0 (0)%	4 (33)%	N/A
5. Was the beneficiary represented by the appropriate participants?		12	12 (100)%	0 (0)%	0 (0)%	N/A
6. Did the participants actively take part in the discussions?		12	11 (91)%	0 (0)%	1 (8)%	N/A
7. Do you expect that the beneficiary will undertake follow-up based on the results of the workshop (new legislation, new administrative approach etc.)		12	7 (58)%	0 (0)%	N/A	5 (41)%
8. Do you think that the beneficiary needs further TAIEX assistance (workshop, expert mission, study visit, assessment mission) on the topic of this workshop?		12	10 (83)%	2 (16)%	N/A	N/A
9. Would you be ready to participate in future TAIEX workshops?		10	10 (100)%	0 (0)%	N/A	N/A
10.If applicable, were you satisfied with the logistical arrangements?	Conference venue	12	11 (91)%	0 (0)%	1 (8)%	0 (0)%
	Interpretation	8	7 (87)%	0 (0)%	1 (12)%	0 (0)%
	Hotel	10	9 (9)%	0 (0)%	1 (10)%	0 (0)%
Comments: <ul style="list-style-type: none"> Note, i participated only at the morning of 11.5.2016 session as part of WBIF-IPF. Project expert team which had a presentation on the Hydropower Development Study for the Western balkans (presenter: Mr. Marty Osborn). Therefore, I cannot comment the whole 2-day workshop; The workshops shows that there are many gaps in the countries transposition and implementation of transboundary SEA/EIA. It seems that the process management is one of them. The follow up is needed on transposition and effective implementation, in specific to achive better process management in transboundary SEA/EIA; 						

- I would say ito ran very smoothly overall, and hit the objective. I particularly liked the external perspective on the meking river which i thought was a nice supplement to teh balkan perspectives;
- I was onl there for the morning session on 11 May, so cannot really comment fully on the workshop.



ANNEX I – Agenda

Wednesday 11 May 2016

Topic: Introduction to Slovenian and Croatian SEA/EIA experience in hydropower sector with site visit

Chair and Co-Chairs: Mr. Martin Smutny (ECRAN KE3, Coordinator of Environmental Assessment EG), Mr. Klemen Strmšnik (ECRAN NKE), Ms. Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial Planning, Slovenia), Ms. Anamarija Matak (Ministry of the Environment and Nature Protection, Croatia)

Start	Finish	Topic	Speaker	Sub topic/Content
08:00	08:30	Registration		
08:30	08:50	Welcome and introduction	Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial Planning, Slovenia) and Martin Smutny (ECRAN KE3)	Welcome on behalf of the host country Introduction to the agenda of the study visit
8:50	9:30	Slovenian experience with SEA/EIA in hydropower sector	Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial Planning, Slovenia)	- General experiences and procedures – main topics and problems
9:30	10:00	WB6 hydropower masterplan development process and the intended outputs	Arthur Schankler, Deputy Team Leader, Infrastructure Projects Facility in the Western Balkans , IPF Consortium	
10:00	10:20	Coffee Break		
10:20	11:15	Introductions to case examples	Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial	Introduction to the site visit



			Planning, Slovenia) and Klemen Strmšnik (ECRAN NKE)	
11:15	12:30	<p>SITE VISIT:</p> <p>Traveling from Ljubljana to the location of the site visit</p> <p>On the bus we will discuss - Experience of ECRAN beneficiary countries with SEA/EIA in hydropower sector</p>	<p>Klemen Strmšnik (ECRAN NKE)</p> <p>Discussion facilitated by Martin Smutny (ECRAN KE3) and Klemen Strmšnik (ECRAN NKE)</p>	<p>Site visit will be organized by bus from Ljubljana to Brežice and back, including transfer between 3 Hydro power Plant (HPP) locations.</p> <p>Short presentations by trainees from ECRAN countries on the topic of:</p> <p>Expectations, main problems and issues to be addressed (maximum 5 min each country).</p>
12:30	13:30	Lunch Break with coffee (in Brežice)		
13:30	17:30	<p>SITE VISIT:</p> <p>Site visits to 3 Hydropower plant locations – 1 in building phase and 2 already finished</p>	<p>Representative of Holding Slovenske Elektrarne (HSE)</p> <p>Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial Planning, Slovenia) and Klemen Strmšnik (ECRAN NKE)</p>	<p>Filed trip will include:</p> <ul style="list-style-type: none"> - Introductory presentation of the Hydropower project on Lower Sava River (4 Hydropower plants – including integration of mitigation measures for environment and nature protection) – 45 min presentation by HSE representative - Site visit to Brežice HPP with emphasis on the building phase (HPP under construction) – cca. 1 h site visit lead by HSE representative; discussion led by ECRAN and TAIEX expert. - Site visit to Krško HPP with emphasis on sanitation works after completion of building phase (already built) – cca. 0,5 h site visit lead by HSE representative; discussion led by ECRAN and TAIEX expert.

				<ul style="list-style-type: none"> - Site visit to Blanca HPP with emphasis on fish lane (already built) – cca. 1 h site visit lead by HSE representative; discussion led by ECRAN and TAIEX expert.
17:30	18:30	SITE VISIT: Return trip to Ljubljana and site-visit evaluation	Klemen Strmšnik (ECRAN NKE)	Site visit will be organized by bus from Ljubljana to Brežice and back, including transfer between 3 Hydro power Plant (HPP) locations.



Thursday 12 May 2016

Topic: Introduction to Slovenian and Croatian SEA/EIA experience in hydropower sector and transboundary consultations

Chair and Co-Chairs: Mr. Martin Smutny (ECRAN KE3, Coordinator of Environmental Assessment EG), Mr. Klemen Strmšnik (ECRAN NKE), Ms. Vesna Kolar-Planinšič (Representative of the Ministry of the Environment and Spatial Planning, Slovenia), Ms. Anamarija Matak (Ministry of the Environment and Nature Protection, Croatia)

Start	Finish	Topic	Speaker	Sub topic/Content
08:30	08:45	Registration		
8:45	9:15	Croatian experience with SEA/EIA in hydropower sector	Ms. Anamarija Matak (Ministry of the Environment and Nature Protection, Croatia)	General experiences and procedures – main topics and problems
9:15	10:00	Presentation of “Sava Programme” and SEA procedure	Ms. Anamarija Matak (Ministry of the Environment and Nature Protection, Croatia)	Presentation
10:00	10:20	The Sava River Project	IPF Consortium	Presentation
10:20	11:00	Facilitated discussion on vital environmental issues and linkages between Slovenian and Croatian Hydropower programmes on Sava river	Discussion facilitated by Martin Smutny (ECRAN KE3) and Klemen Strmšnik (ECRAN NKE)	Discussion
11:00	11:30	Coffee Break		
11:30	12:15	Transboundary environmental assessments in hydropower sector and water	Jiri Dusik (ECRAN NKE)	Presentation and discussion



		management: Overview of lessons from outside Europe		
12:15	13:00	Group work exercise: “How to reach a decision weather transboundary consultation is needed and how to start the procedure”	Facilitated by Martin Smutny (ECRAN KE3) and Klemen Strmšnik (ECRAN NKE)	Introduction to group-work Group-work
13:00	14:00	Lunch Break		
14:00	14:30	Group work exercise: “How to reach a decision weather transboundary consultation is needed and how to start the procedure”	Facilitated by Martin Smutny (ECRAN KE3) and Klemen Strmšnik (ECRAN NKE)	Group-work Reporting
14:30	15:30	Panel discussion on key issues of efficient SEA/EIA practice in hydropower development sector including transboundary consultations	Martin Smutny (ECRAN KE3) and Klemen Strmšnik (ECRAN NKE) with guest speakers (SLO, CRO)	Presentation and discussion
15:30	16:00	Coffee Break		
16:00	17:00	Group discussion: Summarizing main points and lessons learned with recommendations for ECFRAN countries		Discussion



ANNEX II – Participants

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ANNEX III – Presentations (under separate cover)

Presentations can be downloaded from:

http://www.ecranetwork.org/Files/Workshop_Presentations_EIA-SEA_in_HP_April_2016_Ljubljana.zip



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