

REPORT ON PUBLIC DEBATE ON STRATEGIC ENVIRONMENTAL ASSESSMENT

*** DSP FOR THE AREA OF MULTI-PURPOSE ACCUMULATIONS ON THE MORAČA RIVER ***

I INTRODUCTION

The Law on Strategic Environmental Assessment (Official Gazette of the Republic of Montenegro 80/05) stipulates conditions, methods and procedure for undertaking environmental impact assessment of certain plan or programmes through the integration of environmental protection principle into the procedure of preparation, adoption and implementation of plans or programmes that have significant impact on the environment (Article 1).

Strategic assessment is carried out for those plans or programmes for which there exists possibility that their implementation might cause significant impacts on the environment.

The strategic assessment elaboration is mandatory for plans and programmes in the area of agriculture, forestry, fishery, hunting, energy, industry, including mining, transport, tourism, regional development, telecommunications, waste management, water management, coastal zone management, urban and spatial planning or land use planning, laying down the framework for future development of projects that are subject to Environmental Impact Assessment elaboration in accordance with the special act, as well as for plans and programmes which, considering the area within which they are carried out, could affect the protected areas, natural habitats and preservation of wild flora and fauna (Article 5).

Article 2 of the Law lays down objectives of elaboration of the Strategic Environmental Assessment:

- ensure that environmental and public health issues are fully taken into consideration in the development of plans and programmes;
- set clear, transparent and efficient procedures for strategic assessment, provide for public participation;
- provide for sustainable development;
- enhance the level of protection of human health and environment.

Under Article 6 of the Law, the Report on Strategic Environmental Assessment is mandatory for plans and programmes that are subject to Strategic Impact Assessment. The Report on Strategic Environmental Assessment is a part of documentation that is attached to the plan or programme and includes identification, description and assessment of potential significant impacts on the environment, including the transboundary impacts

caused by implementation of the plan or programme, as well as alternatives that have been considered or adopted, taking care of objectives and geographic scope of the plan or programme and measures for mitigating negative impacts on the environment (Article 7, paragraph 3).

Contents of the Report on Strategic Environmental Assessment are defined in Article 15 of the Law. The Report on Strategic Environmental Assessment contains data describing and assessing potential significant impacts on the environment that might be caused by implementation of the plan or programme, as well as considered alternatives, taking into account the objectives and geographic scope of the plan or programme.

Developer of the Report on Strategic Environmental Assessment is defined in Article 16 of the Law on Strategic Environmental Assessment. Accordingly, the consortium COWI, a renowned global company, was hired to prepare the Report on Strategic Environmental Assessment for the detailed Spatial Plan for four multi-purpose accumulations on the Morača river which means that different authors were hired for DSP and SEA for DSP respectively.

The COWI consortium, one of the leading consulting firms in Europe, is a leader in providing services in the field of environmental protection. Since its founding in 1930 the COWI has participated in more than 50,000 projects in 175 countries, with 6,000 employees including environmentalists, biologists, engineers, geologists, economists, researchers, anthropologists, sociologists and architects. Montenegrin Academy of Sciences and Arts (CANU) was hired by the Ministry as a supervisor of the Report on Strategic Environmental Assessment.

On 18 February 2010 the Government of Montenegro adopted a draft Detailed Spatial Plan and the draft Report on Strategic Environmental Assessment of multi-purpose accumulations on the Morača river. Previously, on 16 February 2010 the Council for the construction of hydro-power plants on the Morača river unanimously adopted final draft of the document. Thus, the conditions were in place for the plan to be forwarded to public debate and further legal procedure.

At the seventeenth session of the National Council for Sustainable Development that was held on 19 April this year, the Council members were introduced with the draft DSP for the area of multi-purpose accumulations on the Morača river and SEA Report. In accordance with the discussion on presented documents, a File was prepared on opinions and suggestions submitted to the MSPE and authors of DSP. In addition, the Office for Sustainable Development prepared and submitted to the Government for insight the Information on the course and findings of the seventeenth session of the NCSD.

II PUBLIC DEBATE

Participation of the public, public concerned and public debate is defined in Article 19 of this Law. The competent authority responsible for preparation of the plan or programme shall as a rule inform the public concerned about the manner and deadlines for public inspection into the contents of the SEA Report and delivery of opinions, as well as the time and venue of the public debate.

The boundaries of the subject DSP include basin area of the Morača river, in which the construction of hydro-power plants is planned and it is located at 16 ° 45' and 17 ° 15' geographic longitude (E) and 42 ° 30' and 43 ° 00' geographical latitude (N). The area of DSP includes central part of the flow of the Morača river, upstream of Podgorica. This area has been expanded in the framework of the design for the plan development so as to include all areas in the upper part of the basin of the Morača river. Therefore, DSP belongs to municipalities of Podgorica and Kolašin and regions that are listed.

Goal of the DSP is to create an integrated approach to the construction of accumulations by preparation of relevant studies, analytical and planning documents that will be very important for the analysis of all elements that reflect the purpose and organisation of the space use. This would protect and encourage further development of the included area. In addition, DSP should be used to determine the optimal distribution of population in the area affected by future accumulations, by application of economic, technical and technological and functional spatial criteria and principles of sustainable development. DSP identifies two groups of goals that are divided into long-term ones and short-term ones.

In addition to a number of positive effects of implementation of the plan for the whole of Montenegro through the provision of hydro power, reduced dependence on imports and stimulation of development at the local level, negative impacts on biodiversity, hydrology, water quality, cultural heritage, geological and hydrological issues and the landscape are also expected.

Implementation of the DSP for the area of multi-purpose accumulations may lead to direct impacts of the construction in the DSP zone, while indirect impacts are expected in the valley of the Morača river downstream of Skadar Lake.

Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river contains basis for complex socio-economic growth and protection of the area of entire basin of the Morača river. The development basis, in addition to the production of substantial quantities of energy from renewable sources and formation of water stocks, water management, tourist and leisure activities, development of the fishery and engagement of other local capacities, also features full integral revitalisation of that area which has been recently marked by migrations of population.

Draft DSP provided overview of the various alternatives from the existing documentary base (Water Management Master Plan of Montenegro, design and study documentation of EPCG and other alternatives to the current plan), while in the SEA Report contains analyses of “Do Nothing” option.

Under the Law on Strategic Environmental Assessment (Article 23), the exchange of information on transboundary impact of the plan and programme on the environment is responsibility of the competent state environmental protection authority.

If the implementation of the plan or programme may have a significant negative impact on the environment of another state or if the state whose environment may be significantly affected so requests, the authority of state administration in charge of environmental protection, in the process of participation of interested authorities and organisations and the public, shall submit the relevant information to another country within the shortest time possible and at the latest when informing its own public.

The state administration authority in charge of environmental protection informs authorities concerned and organisations and the public on information received from another state about transboundary impacts of the proposed plan or programme as provided for in Article 19 paragraph 1 of this Law.

Accordingly, the Ministry for Spatial Planning and Environment sent a request to the Albanian side to make a declaration on the Strategic Environmental Assessment for the DSP for the area of multi-purpose accumulations on the Morača river. The request was addressed in parallel with the start of debate for the public and public concerned in Montenegro according to the Law on Strategic Environmental Assessment and ESPOO Convention. As the Albanian side did not make its declaration in specified period of time, the Montenegrin side decided to hold consultation at the level of the Working Group which comprised representatives of relevant departments from Montenegro, author of the DSP and the Ministry of Environment, Forestry and Water Administration of Albania. The meeting was held on 19 June 2010. After a consultative meeting, representatives of the Albanian side provided their written comments and questions related to the DSP and SEA in transboundary context to the competent Ministry for Spatial Planning and Environment.

When giving opinion to the competent authority of another state, the state authority in charge of environmental protection takes into account results of the consultation and the opinion obtained from authorities and organisations and the public concerned.

Under the Law on Strategic Environmental Assessment, the competent authority responsible for preparation of the plan and programme is under an obligation to prepare Report on participation of authorities and organisations concerned in the public debate not later than 30 days from the day of completion of the public debate (Article 20).

Public debate on DSP for the construction of multi-purpose accumulations on the Morača river was conducted by the authority competent for preparation of the plan or programme, namely the Ministry for Spatial Planning and Environment in the period from 15 March until 13 April.

During the informal public debate the Ministry for Spatial Planning and Environment organised two workshops with residents of Morača and Rovci region - in places Monastery Morača and Međurječje, in cooperation with representatives of the municipality of Kolašin in order to inform the local public. Workshops were attended by both, representatives of the Ministry of Economy who presented a general picture of the project structure and representatives of the Ministry for Spatial Planning and Environment, as well as the authors of DSP who presented objectives of the plan, with special emphasis on infrastructure and accompanying facilities of HPPs. Workshops were organised with the aim of introducing population with the DSP and SEA Report in order to hear all opinions that would be incorporated into the plan in further procedure. Workshops have caused great interest with the presence of over a hundred residents, while at the same time they represented an adequate introduction to the main public debates.

On 22 March 2010 the Ministry for Spatial Planning and Environment organised workshop together with NGOs dealing with the environment protection with which the Ministry has signed a Memorandum of Understanding in order to present DSP, SEA and Climate Model for the Morača basin. Due to great interest, the presentation was also attended by NGOs that are not party to the Memorandum of Understanding. The aim of the presentation was to give all the necessary information about the said documents before the round tables in order to include the NGO sector and have its contribution to the overall process.

Draft DSP for the Morača river basin and Climate Model of the Hydro-Meteorological Service of Montenegro were presented at the press conference held on 19 March, while round tables as part of public debates were also announced. Public debates were organised:

- at the University of Montenegro (23 March 2010),
- in the municipality of Podgorica (24 March),
- in the municipality of Kolašin (26 March) and
- at the Montenegrin Academy of Sciences and Arts – CANU (29 March).

During the public debate, the *Diocese of Montenegro and the Littoral* (25 March), association *NGO FORUM 2010* (31 March) and *Scientific Council of the Public Enterprise National Parks* (30 March) organised round tables aimed towards more complete consideration of the subject documentation.

In addition to the aforementioned round tables, the Minister Branimir Gvozdenović had a meeting with representatives of the diplomatic corps in Montenegro as he deemed it quite useful in initial stage to directly inform representatives the

diplomatic corps on completed and planned activities in implementation of the project and legal procedure.

As already mentioned, at the seventeenth session held on 09 April this year the National Council for Sustainable Development considered SEA Report on DSP for the area of multi-purpose accumulations on the Morača river.

In addition, several meetings were organised on 24, 25 and 29 March with representatives of WWF and NGO Green Home with the aim of better considering the potential disputable issues in documents offered in public debate which were raised by representatives of these organisations.

Upon completion of the public debate and on the basis of the Law on SEA, the authority competent to prepare the plan or programme, namely the Ministry for Spatial Planning and Environment is also responsible for drafting the Report on the participation of authorities and organisations concerned in the public debate which is to include the opinions of authorities and organisations concerned and opinions submitted during the public inspection and public debate on the Report on Strategic Environmental Assessment (Article 20). The report is prepared within 30 days from the date of completion of public debate and includes an explanation of all accepted or rejected opinions.

The report on public debates and opinions gathered from the public and public concerned regarding SEA for DSP for the construction of hydro-power plants on the Morača river is submitted to the author of the Report on Strategic Environmental Assessment – the COWI Consortium.

The competent authority responsible for the preparation of the plan or programme submits for approval the Report on Strategic Environmental Assessment and report on participation of authorities and organisations concerned in public debate to the Environmental Protection Agency in accordance with Article 21 of the Law on Strategic Environmental Assessment. After receiving the report, the Environmental Protection Agency may obtain opinion from other authorised organisations or experts in certain fields or it may establish the Committee for evaluation of the Report on Strategic Environmental Assessment.

Accordingly, the Agency shall establish the Committee to provide expert evaluation of the Report on the basis of the following criteria (Article 21):

1) Plan and programme:

- objectives and contents of the plan and programme are presented, as well as the area for which the plan or programme, the spatial coverage and time frame are prepared;
- environmental protection issues that have been included in the preparation of objectives of plans and programmes;
- connections with other relevant plans and programmes have been presented.

2) Environmental status:

- the existing and future environmental status have been presented;
- environmental status description is harmonised with objectives and indicators of the strategic assessment;
- sources of data on the environmental status have been presented and the methodology which is harmonised with the degree of strategic assessment complexity;

3) Alternative solutions:

- method of preparation and consideration of alternative solutions for issues and problems related to the environment is presented;
- alternative solution in the event of non-implementation of the plan and programme is prepared, as well as the alternative solution which is the most favourable one from the perspective of environmental protection;
- impacts of alternative solutions on the environment have been assessed and comparisons have been made;
- reasons for the selection of the most favourable alternative solution from the perspective of environmental protection have been explained;

4) Environmental impact assessment:

- method of identification and evaluation of significant impacts of plans and programmes on the environment have been presented;
- the following elements have been included in the environmental impact assessment: air, water, soil, climate, flora and fauna, habitats, biodiversity, landscape (natural beauty), natural resources, population and health, cities and other settlements, cultural and historic heritage, infrastructure, industrial and other structures, other created values;
- the following impact characteristics have been taken into consideration in impact assessment: probability, intensity, complexity/reversibility, time dimensions (duration, frequency, repetition), spatial dimension (location, geographical areas, size of the affected population, transboundary nature of impact), cumulative and synergistic nature of impact, other impact characteristics;
- identification and evaluation of significant impacts have been harmonised with the valid standards, regulations and threshold values;
- the applied methodology has been described;

5) Measures and programme for monitoring environment condition:

- measures for the prevention and mitigation of adverse impacts have been envisaged, that is increase in positive impacts on environment for each assessed impact;
- method of developing the guidelines for elaboration of the assessment of impact of projects on the environment and other strategic assessments are prepared;

- environmental status monitoring programme has been prepared during implementation of the plan and programme,

6) Report on Strategic Environmental Assessment:

- the role of competent authorities in elaboration of strategic assessment is clearly defined;
- the Report on Strategic Environmental Assessment is prepared in a clear and precise way;
- all the elements of the Report on Strategic Environmental Assessment set forth in Article 15 of this Law are elaborated and sources of information given, including expert opinions;
- the way in which environmental issues have been included in the plan or programme is presented as well as the way in which the decision making process has been carried out and reasons that have been decisive for the selection of a given plan or programme from the perspective of alternative solutions that were subject of consideration are also described;
- conclusions on the elaborated Report on Strategic Environmental Assessment are presented in a way which is understandable for the public;

7) Participation of authorities and organisations and the public concerned:

- participation of authorities and organisations and the public concerned in the procedure of strategic assessment elaboration is ensured;
- opinions of relevant authorities, organisations and public regarding the Report on Strategic Environmental Assessment are submitted and the way in which decisions were made on opinions is presented.

On the basis of evaluation referred to in Article 21 of this Law on Strategic Environmental Assessment, the Environmental Protection Agency either grants or refuses request for approval of the Report on Strategic Environmental Assessment. Deadline for deciding on approval is 30 days from the day of receipt of the request from the competent authority for the preparation of the plan or programme (Article 22), that is the day of receipt of the report from public debate with attachments.

Approval for the Report on Strategic Environmental Assessment is a part of obligatory documentation for implementation of the further procedure of consideration or adoption of the plan. The plan or programme may not be submitted for further adoption procedure without having previously obtained approval for the Report on Strategic Environmental Assessment from the Environmental Protection Agency (Article 6).

III

PUBLIC DEBATES ON DRAFT SPATIAL PLAN FOR THE AREA OF MULTI-PURPOSE ACCUMULATIONS ON THE MORAČA RIVER AND DRAFT REPORT ON STRATEGIC ENVIRONMENTAL ASSESSMENT

Public debates were aimed at providing the necessary information about the detailed Spatial Plan for the Morača area and potential impacts of its implementation to all segments of the environment. Participants in public debates expressed their great interest in the HPPs on Morača project and also presented a number of suggestions, comments and questions. DSP and SEA for multi-purpose accumulations were presented by representatives of the team of authors as follows: Mr. Predrag Bulajić – DSP team leader for the Morača basin, Ms. Budislava Kuč – representative of the Ministry for Spatial Planning and Environment, Mr. David Heywood – COWI Representative – Norwegian consortium which prepared the SEA, Mr. Dušan Pavićević, representative of the Hydro-Meteorological Service of Montenegro and Mr. Mihailo Burić - Coordinator of the Expert Group for the database for the Strategic Environmental Assessment.

1. Public Debate »University of Montenegro«

The first public debate regarding the draft Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river and Strategic Environmental Assessment was held on 23 March 2010 at the University of Montenegro in Podgorica.

Public debate was attended by representatives of the University, NGO sector, professional public and other public concerned, as well as the authors of the Plan and Strategic Impact Assessment. Public debate was chaired by the Minister for Spatial Planning and Environment, Mr. Branimir Gvozdenović.

A large number of suggestions and proposals, both by eminent experts from the University and residents of some Morača villages were voiced during the debate. Key issues and suggestions that were emphasised were related to the reduction of the elevation of Andrijevo dam and the impact on the hydrological regime of the Morača river, necessary amendments to the Report in the part of data related to biodiversity, with special emphasis on species that will be directly endangered or destroyed by implementation of the subject plan, and the lack of consideration of alternatives. In addition, the villagers from the Morača region expressed expectations regarding the implementation of the subject plan in terms of valorisation of their villages and they also supported its implementation.

Detailed outline of questions and suggestions is given in the Attachment to the Report on Public Debate.

It was stated at the University of Montenegro that the draft Detailed Spatial Plan for the area of multi-purpose accumulations on Morača and Strategic Environmental Assessment represent a good starting point for a more comprehensive consideration of positive and negative impacts of planned dams.

Detailed outline of questions and suggestions from the public debate is given in the Attachment to the Report on Public Debates.

2. Public Debate » the Municipality of Podgorica«

The second public debate on the draft Detailed Spatial Plan for the area of multi-purpose accumulations on Morača and Strategic Environmental Assessment was held at **the Cultural Information Centre – KIC and it was organised by the Municipality of Podgorica** on 24 March 2010.

Public debate was attended by Project Coordinator, authors of the Plan and Strategic Environmental Assessment, representatives of Universities, NGO sector, professional public and other public concerned. Public debate was chaired by Dr. Miomir Mugoša, the Mayor of the Capital City of Podgorica.

Suggestions and proposals were voiced during the debate by both, experts in the field of environmental protection and residents concerned of the municipalities of Podgorica and Kolašin.

Most of the questions and suggestions were related to the risk assessment in the event of a potential dam bursting, possible floods, as well as protective measures to be applied in the event of possible accidents with the aim of completing the necessary documentation and successfully implementing the project. It was suggested that there is a need to amend the existing cost-benefit analysis on building accumulations on the Morača river and integrate it into the SEA.

Detailed outline of questions and suggestions from public debate is given in the Attachment to the Report on Public Debates.

3. Round Table »the Diocese of Montenegro and the Littoral «

During the public debate period the Orthodox Diocese of Montenegro and the Littoral organised a multi-disciplinary roundtable on 25 March 2010 in order to more comprehensively consider the proposed solutions and their impact on cultural heritage, with special emphasis on the Morača Monastery.

In addition to the Project Coordinator the public debate was also attended by the Minister of Economy Mr. Branko Vujović, His Eminence Metropolitan of Montenegro

and the Littoral Mr. Amfilohije, monks and priests, representatives of NGO sector, expert public and other public concerned.

The issue of potential threat to and protection of the Morača Monastery and other cultural and historic sites that are included in the mentioned plan was highlighted at the round table.

The main suggestions set out by the Diocese referred to the following: the problem of non-compliance of planning documents with the ratified international conventions and applicable Law on the Protection of Cultural Monuments and the lack of adequate conservation measures. In this regard, there emerged an initiative to prepare the Study on the Protection of Cultural Heritage in the basin area which will result in the definition of adequate protection measures for Morača Monastery.

Detailed outline of questions and suggestions given by the Diocese is given in the Attachment to the Report on Public Debates.

4. Public Debate »The Municipal Assembly of Kolašin«

The third public debate on the draft Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river and Strategic Environmental Assessment was held on 26 March 2010 in the **assembly room of the Cultural Centre and it was organised by Municipal Assembly of Kolašin.**

Residents of the municipality of Kolašin and Morača villages mostly asked questions about certain segments of DSP such as local roads, transportation links, cultural and historical heritage.

Comments and suggestions that were voiced during the public debate mainly referred to potential vulnerability of the area of the municipality of Kolašin in the course of implementation of the subject plan.

Citizens and representatives of the municipality of Kolašin supported construction of hydro-power facilities and the use of water resources, bearing in mind the importance of energy for all development plans. On that occasion, interest was expressed in establishing partnership in the context of construction of the planned hydro-power plants, and the request was put forward for restoration of the landslide Đuđevina, protection of the Morača Monastery and construction of necessary infrastructure.

Detailed outline of questions and suggestions from public debate is given in the Attachment to the Report on Public Debates.

5. Public Debate »Montenegrin Academy of Sciences and Arts - CANU«

Final public debate on the draft Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river and Strategic Environmental Assessment was held on 29 March 2010 at the **Montenegrin Academy of Sciences and Arts – CANU**, in Podgorica.

Participants were introduced with the draft Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river and draft final Report on Strategic Environmental Assessment for DSP for HPPs on the Morača river.

Public debate was attended by Project Coordinator for SEA elaboration, authors of the Plan and Strategic Impact Assessment, His Eminence Metropolitan of Montenegro and the Littoral Mr. Amfilohije, representatives of NGO sector, expert public and other public concerned. Public debate was chaired by academician Professor Momir Đurović, PhD, President of the Montenegrin Academy of Sciences and Arts.

During the expert and scientifically based debate suggestions and proposals were presented by Dr. Zlatko Bulić, Mr. Darko Pajović, Executive Director of NGO Green Home, Professor Slobodana Radonjić, PhD, as well as the public concerned from the municipalities of Podgorica and Kolašin.

General recommendations given in CANU referred to the reduction in dam elevation of hydro-power plant Andrijevo, the need for implementation of monitoring programmes at all stages of the execution of the plan, testing the risk of possible dams bursting, the threat posed by Đuđevina landslide and the need for amendments to the SEA by addition of the cost-benefit analysis of building four HPPs on the Morača river which was highlighted during all public debates.

Detailed outline of questions and suggestions from public debate is given in the Attachment to the Report on Public Debates.

6. Round Table »NGO Association – Forum 2010«

In the course of public debate the NGO Association – Forum 2010 organised the round table on 31 March 2010 in order to consider proposed solutions in a more comprehensive manner.

During the debate, the NGO Forum it was indicated that under the Law on Spatial Planning and Construction of Structures, DSP and SEA Report must contain economic and demographic analysis and market projection, as well as the protection measures in the event of natural and technical and technological disasters.

Main suggestions voiced at the round table referred to the cost-benefit analysis of the project, obligations of the state and concessionaires, protection measures and

description of the state of play, as well as the critical segments that need to be elaborated more thoroughly.

7. Scientific Council »Public Enterprise National Parks - JPNP«

Public Enterprise “National Parks of Montenegro” engaged in public debate on the draft Detailed Spatial Plan for the area of multi-purpose accumulations on the Morača river through the Scientific Council as an advisory body of the Governing Board of the enterprise. In this regard, a joint session of the Scientific Council and the Council for Waters of the Government of Montenegro was organised on 30 March 2010 in which draft SEA Report was thoroughly considered with the primary emphasis on the impact of the project of building multi-purpose accumulations in the area of the National Park Skadar Lake. Special emphasis was placed on the expected impact of the water level change in the lake, the total water balance and its impact on ecosystem, and especially on ornithofauna and ichthyofauna as the most characteristic representatives of the fauna of Skadar Lake. A comprehensive and professional debate, as well as opinions of ornithologists and ichthyologists of the Public Enterprise “National Parks of Montenegro” indicate that ornithofauna as a very significant population in the lake and fish stock, as one of the significant economic potentials of Skadar Lake, **will not be threatened** by the construction of hydro-power plants on the Morača river. It was also stated that construction of hydro-power plants will not have considerable impact on the balance and oscillation of waters in Skadar Lake.

On the basis of presented opinions, it was concluded that the planned multi-purpose accumulations will not have considerable impact on natural balance of the ecosystem of the National Park Skadar Lake.

Detailed remarks, comments and suggestions given during public debates are contained in Attachment to the Report on Public Debates.

The Ministry for Spatial Planning and Environment, being the organiser of public debate on DSP for the multi-purpose accumulations and SEA Report for the DSP, received clear inputs, suggestions and proposals which enable reaching higher quality of subject documents. That contributes to the achievement of the fundamental mission of the Ministry in terms of optimum spatial management within the limits of conservation and improvement of the living environment. Namely, in the context of development needs and plans of Montenegro the Ministry is committed to the implementation of environmental protection measures and principles of sustainable development.

IV

REPORT ON PUBLIC DEBATE ON ACCEPTED AND REJECTED SUGGESTIONS

Public participation with regard to DSP and SEA for DSP in the course of public debates was arranged on the basis of good European and global practice. At the same time, engagement of the Norwegian consulting firm COWI, a renowned global company, was evaluated as positive since together with the Slovene and national experts it ensured achievement of satisfactory results.

Public debate demonstrated a high level of interest of expert public and public concerned as well as extremely quality organisation. Openness and readiness for communication aimed towards finding the best solution was evident.

After having considered all the evaluations, comments and proposals it can be concluded that the public attitude towards valorisation of hydro potential of the Morača river is positive, with the need for consistent application of sustainability principles. Therefore, it was insisted on the need to preserve special values of biodiversity which will be either directly or indirectly affected. In this regard, it is also evident that the view of the public requires additional research and consideration of possible alternatives at the level of strategic planning and the level of implementation of project activities.

After gaining insight with the set of questions and comments that have been received, the author concluded that most of the comments refer to the document DSP for the area of multi-purpose accumulations on the Morača river, with partial emphasis on SEA Report. Responses to specific questions regarding the Report on Strategic Environmental Assessment are given in the following part of the Report on Public Debate.

Under the Law on Strategic Environmental Assessment, remarks concerning the Report on Strategic Environmental Assessment are evaluated from the perspective of their acceptability or unacceptability in the framework of consideration of justifiability to implement the plan and effects that may be achieved with it.

IV 1. RELATION WITH RELEVANT PLANS AND PROGRAMMES

Questions and comments concerning the contents and main objectives of the plan or programme and their relation to other plans and programmes were given by: NGO OZON (page 62), Integra Consulting Services (page 9, pages 16-18, 21, 27), NGO Green Home (page 2).

Question and suggestion 1 - analyse the need of additional harmonization of the subject Report on Strategic Environmental Assessment in relation to provisions of Article 15 of the Law on Strategic Environmental Assessment (NGO Green Home page 2.)

Relevance assessment: Article 15 of the Law on Strategic Environmental Assessment clearly defines the contents of the Report. Therefore, the author should make correction in accordance with the Law.

Question and suggestion 2 - Lack of a clear relation between the DSP and other plans and programmes which are implemented at the national and local levels (Integra p. 16).

Relevance assessment: The SEA Report states that the planning documents which the Report author took into account refer to the relevant plans or programmes at the national and municipal level.

The SEA Report needs to give a clearer and more comprehensive link between the DSP and other planning and programming documents at the national and local level, which relate to the area covered by the DSP (Article 15, sub-paragraph 1 of the Law on SEA).

Question and suggestion 3 - SEA Report analyses the effects of construction of four multi-purpose accumulations as described in the DSP, without reference to the cumulative effect of the potential construction of 11 small accumulations, which are mentioned in the SEA Report and the DSP (Integra, page 5, NGO Ozon, page 12., NGO Green Home page 1).

Relevance assessment: The DSP is designed at two levels, a narrower one that includes 4 hydro accumulations (Andrijevo, Milunovići, Raslovići, Zlatica), which are the subject of the SEA Report and a broader one, which covers the entire Morača river basin, and which also reserves (in the spatial sense) 11 possible hydro accumulations in the upper basin of the Morača river.

In this regard, it was agreed that the SEA Report is to include only 4 hydro-power plants (i.e. Andrijevo, Milunovići, Raslovići, Zlatica) and that the potential 11 hydro accumulations in the upper basin be mentioned only for the purpose of introducing the idea and facilitating a cross-link with the DSP. Any further planning process of 11 additional hydro accumulations should include implementation of all procedures provided for by law which also implies new researches and new documentation including a new SEA Report, while special attention should be paid to Article 4.7 of the Water Framework Directive.

IV 2. GENERAL AND SPECIFIC OBJECTIVES OF ENVIRONMENTAL PROTECTION

IV 2a. Questions and comments related to the specific objectives of the Strategic Environmental Assessment are given in the comments of Ms. Marina Marković, an independent consultant in the context of the impact on waters and SEA objective (pages 76, 77 and 85) and Integra (pages 15, 17, 21, 25, 26, 27, 28, 39).

Questions and suggestion 1 - general and specific objectives of environmental protection are not fully differentiated and covered in the SEA Report accordingly.

Relevance assessment: Based on the aforementioned, it is necessary to give an overview of general and specific environmental objectives established at the national or international level which are important for the plan or programme and the way in which these objectives, as well as all other aspects of importance for the environment, were taken into consideration in the preparation process.

Regarding the issue of comments relating to the *general and specific objectives*, the Report needs to be upgraded in that part in accordance with sub-paragraph 5 of Article 15 of the Law on SEA.

IV 2b. During the public debate, questions and comments were expressed related to:

- the description of the current environmental status and its potential development if the plan or programme are not implemented;
- the existing environmental problems in connection with the plan or programme, particularly including those relating to the areas that are especially important for the environment, such as the preservation of wildlife flora and fauna, specially protected areas, national parks or coastal area;
- identification of areas which might be exposed to significant risks and characteristics of the environment in these areas.

Biodiversity

Questions and suggestions 1 - Insufficient use of the existing data on biodiversity of the area covered by the plan and adequate measures of protection, conservation and resettlement of populations of endemic and protected species of flora and fauna which will be directly threatened by building hydro-power plants on the Morača river. The following observations and comments are particularly relevant in the context of biodiversity: NGO OZON (page 64), Integra Consulting Services (pages 11, 12, 15, 17, 28, 39, 22-28), NGO EXPEDITIO (pages 52, 57), NGO Green Home (p.4), NGO MANS (pages 62, 63) Civil Engineering Faculty from Podgorica (pages 67-69), Marina Markovic - independent consultant (pp.78, 79).

Based on presented opinions, the following questions and opinions may be recorded as critical for the biodiversity area:

I Lack of comprehensive analyses concerning the area of possible direct impact.

Thus, the SEA Report does not list endemic species of most taxons located in the area that will suffer a direct impact, and that belong to groups of invertebrates which account for about 70-80% of total biodiversity in the given area (and even more in the direct impact zone). Shortcoming of SEA relates to the context of analyses of size and distribution of the population of species and estimate of the population dynamics. One should especially analyse the impact on the populations of those species which are (in the direct impact zone) dominant (in terms of their role in ecosystem functioning) and those that are rare and which will be affected by a significant reduction in the number of populations.

II A special overview is given in regard to the EU Habitats Directive which states that conversion and compensation for damage caused to priority habitats and species (which are listed in the Annexes to the Directive) is possible only if there is public interest in doing so (based on very restrictive criteria), including compensatory measures, preservation of the overall integrity of the Natura 2000 ecological network and EC approval. All interventions that may affect the special protection sites (sites with priority species and habitats) require “appropriate assessment“ and projects are rejected if the assessment shows adverse impacts.

III It was pointed out that the indirect impact of dams construction will affect the waterlevel fluctuations in Skadar Lake and the lake biodiversity and it was suggested that the SEA should provide expert analysis of the impact on Skadar Lake biodiversity. The possibility was highlighted in terms of applying standard methodologies used in ecology to determine biodiversity loss caused by changes in water level, thus causing the loss of habitat.

With reference to that, questions raised by the Republic of Albania transboundary context are also relevant:

- What are the impacts on the water regime of Skadar Lake?
- What will these impacts on the volume of water, the water level, etc. throughout the seasons?
- Based on that, how will it affect the surface of water?
- What impacts on biodiversity are caused by implementation of this project in comparison to impacts caused by nature and climate conditions?
- What are the possible impacts on birds, fish and endemic species?

IV General comments and suggestions presented in terms of biodiversity indicate the necessity of gathering and assessing the missing data. Before giving approval for the SEA and the DSP it must be absolutely clear which priority habitats and species will suffer direct and/or indirect negative impacts and what will happen in that case. Based on analyses thus conducted and according to the Law on Nature Protection, compensatory conditions and measures are determined by assessing the acceptability of intervention at the level of environmental impact assessment. The investor is responsible for implementation of these measures. The SEA should highlight this possibility and indicate potential compensatory measures (i.e. take into account their impact on cost-benefit analysis of DSP implementation).

Relevance assessment: In connection with the opinions presented during the public debate it can be concluded that the recommendations for biodiversity are not sufficiently precisely defined in the SEA, in particular in relation to species that are protected in Montenegro at the national level and whose protection is laid down by legislation and whose endangerment or permanent destruction implies criminal liability.

Assessment of impact on biodiversity, which is given in the SEA contains incomplete data on biodiversity that would be lost (direct impacts) or that would suffer significant impacts (indirect) due to the DSP implementation. It is also underlined that the landscapes that would suffer direct and/or indirect impacts by the DSP implementation are very important due to the diversity of habitats and species and that some of them have already been identified as important areas for conservation based on various international and national agreements and regulations (for example, recognised as Emerald sites, areas important for birds etc.).

In connection with these remarks and suggestions which were expressed during the public debate, there emerged an initiative to implement activities aimed towards undertaking additional researches that will be used for the implementation of the Environmental Impact Assessment. Starting from the precautionary principle as one of the fundamental principles enshrined in the Law on the Environment and the Law on Strategic Environmental Assessment, the Ministry for Spatial Planning and Environment will initiate development of additional studies on biodiversity, including conservation plans for individual species which is of particular importance for the aforementioned Environmental Impact Assessment procedure. In fact, implementation of the project was launched with general objectives are to: (i) **supplement the existing data stock on biodiversity** for the zone covered by the DSP for multi-purpose accumulations on the Morača river by September this year, (ii) prepare a **Study of biodiversity protection in the zone covered by the Detailed Spatial Plan for multi-purpose accumulations on the Morača river by mid 2011**, by means of which the necessary biological researches would be undertaken and data obtained will be used for the preparation of the Study on Environmental Impact Assessment of Interventions for each hydro-power plant - accumulation, other infrastructural (roads, etc.) and construction interventions. Update of the existing data stock on biodiversity should be embedded in the SEA.

This is especially important in terms of measures of protection, conservation and resettlement of flora and fauna populations that will be endangered by constructing hydro-power plants on the Morača river. Therefore, the need to implement these measures will be defined in the SEA Report and they will be defined at the level of Environmental Impact Assessment.

In addition to biological research, specific objectives of this project will ensure for the analytical part of the Study *to identify the key species of biodiversity, subject them to critical analysis and environmental evaluation*. Distribution of these species should be spatially analysed (*spatial analysis*) and *represented graphically* in suitable GIS-compatible software. In fact, the project aims at representing the assessment/evaluation results of biodiversity (text and graphics) through **biologically representative zones**.

Report on amendment of the existing data stock on biodiversity in the area of the DSP for multi-purpose accumulations on the Morača river will be implemented within 40 days from the date of defining the Terms of Reference to enable its results to be integrated into the Strategic Environmental Assessment of interventions under DSP for multi-purpose accumulations on the Morača river, while the Study of Biodiversity Conservation in the zone covered by the Detailed Spatial Plan for multi-purpose accumulations on the Morača river will be prepared within one year period. The document will be the basis for the implementation of impact assessment procedure.

In addition to that, impact analysis of the effects of hydro-power plants construction in the area covered by the DSP and downstream, especially in the context of transboundary aspects indicated by the Albanian side, will be subject of regular monitoring of biodiversity condition on an annual basis under a programme which will be defined by the Environmental Protection Agency. At the same time, implementation of projects that will give answers about the impact on biodiversity and water regime of Skadar Lake was started or is planned to be started, including primarily the development of the hydrologic model under the project “Skadar Lake - Integrated Ecosystem Management“ and the planned continuation of activities on elimination of hydrological risks initiated under the ADRICOSM STAR project.

Questions and suggestion 2 - The following comments are important in terms of questions and suggestions that are related to the lack of good quality available data on the hydrology of the total water system, **integrated water management and maintenance of good environmental status of the Morača river basin**: Marina Markovic, independent consultant (pages 81, 83-85 WWF and Green Home (pages 3-6), Civil Engineering Faculty (pages 68, 78), NGO Exeditio (pages 55, 56), NGO Ozon (page 64).

In order to provide for integrated management of the Morača river basin waters, there is a specific need to:

- make the Water Framework Directive (WFD) a part of the SEA analysis in its entirety, especially its parts which have been transposed into the Montenegrin legislation,

- the SEA explicitly identifies adverse impacts of the construction of 4 hydro-power plants as provided by the DSP on the existing status of the middle course of the river under the WFD provisions (impacts on the hydrological, hydro-morphological, physical, chemical and environmental characteristics of the Morača),
- emphasize and recommend the necessity for an integrated approach in planning interventions in the entire basin,
- the SEA seeks for the DSP planers to demonstrate underlying reasons for this solution, bearing in mind the restrictions provided by Article 4.7 of the WFD.

Importance of the following aspects of integrated water management was highlighted:

1. for new hydro-morphological pressures, such as pressures that will arise by constructing hydro-power plants on the Morača river, preventive measures to avoid deterioration of the status of the water body need to be applied first. When it is not possible, mitigation measures must be implemented;
2. for the existing hydro-morphological pressures, when physical modifications have already occurred, activities should primarily include measures of restoration in order to achieve good environmental status;
3. for the existing hydro-morphological pressures, when restoration is not possible, mitigation measures have to be applied for purposes of good environmental status.

Questions of the Albanian side expressed in the transboundary consultation process are of relevance on this basis as well:

- What are the impacts on the water regime of Skadar Lake?
- What will these impacts be like on the volume of water, the water level, etc. throughout seasons?
- Based on that, how will it affect the water surface?

Relevance assessment:

In the context of remarks and comments presented in terms of hydrology and integrated water management, especially in terms of good environmental status of the Morača river, which will be subject of monitoring following the execution of the planned intervention as well, water management conditions will be laid down at the level of implementation of Environmental Impact Assessment in accordance with the Water Management Master Plan and the Spatial Plan of Montenegro. Conditions defined in that manner are the basis for the issuance of approvals in the field of water management.

Risk identification

From the aspect of comments and suggestions referring to the risk assessment and identification of areas that may be exposed to significant risk, the predominantly relevant issues are those of developing scenarios and risk assessment in terms of achieving environmental goals. It is also important to take into account the aforementioned issues when defining water management conditions and approvals at the implementation level of Environmental Impact Assessment, in accordance with the Water Management Master Plan and the Spatial Plan of Montenegro.

Risks relevant in the context of threats to biodiversity

Starting from the initial results which were reached under IFC project (define the obligation of the concessionaire or the Government) with a view to a comprehensive analysis of the impact of the construction of HPPs on Skadar Lake biodiversity, it is necessary for the author to take over the outline of dams operation included in the Study of Technical and Economic Analysis of HPPs on the Morača. This is especially important from the aspect of the study conclusions: **“In accordance with IFC assessment, areas of potential risk were identified, more specifically in Đuđevina landslide area in relation to seismic impact and risk as well as in the area of the Morača Monastery and Andrijevo high dam. It is necessary to further investigate impermeabilities of accumulations Raslovići, Milunovići and Zlatica in the next phase of the project“.**

The aforementioned approach is relevant in the context of providing data which were assessed as missing in the SEA Report and which are related to the impact of the water regime of the Morača river basin after the construction of HPPs to the water level and ecosystems of Skadar Lake, the Bojana river and coastal area. At the same time this also concerns issues significant in the context of transboundary consultation which were put forward by the Albanian side. Missing data will be available in the next phase of project implementation.

Initial results reached under the ADRICOSM STAR project are important in this regard, especially in terms of impact analysis of effects of the construction of hydro-power plants on Skadar Lake biodiversity (see part of the Report on the analysis of transboundary impacts and the opinion of the Scientific Council of the Public Enterprise National Parks).

Scientific team of ADRICOSM project applied hydrological prognostic model (HYPROM) reaching conclusion that construction of dams on the Morača river leads to an increase in inflow of waters through the Morača river in the summer period and reduction of inflow in winter period. This hydrological regime influences the reduction of currently existing seasonal differences of the Morača river water regime and causal amelioration of the water quality of this river watercourse in the summer period.

On the basis of currently available data, scientific team of ADRICOSM STAR project foresees the possibility of changes in lake surface and depth in terms of changes in lake waters volume, i.e. increase in summer period and decrease in winter period. The

aforementioned phenomenon, including its impact on biodiversity should be further investigated which will, amongst other things, to a certain extent be the task of a project activity related to the development of the hydrological model under the project "Skadar Lake – Integrated Ecosystem Management“.

Finally, the project ADRICOSM STAR has completed the hydrological model of the Bojana river as the only lake distributary. Taking into account the above-mentioned facts - that there will be an increase in the lake waters inflow in summer period and decrease in winter period simulations demonstrate that there will be no significant changes in the Bojana river water regime (water inflow from the Drim river from the Albanian side is included here).

Bearing in mind the research results of ADRICOSM STAR project, the construction of planned hydro-power plants will have a positive impact on the Morača river water regime concerning the reduction of the currently present seasonal differences.

Climate change

In the context of possible climate change in the area covered by the DSP caused by planned interventions, the SEA Report needs to integrate the climate model that was presented during the public debate. The aforementioned is also relevant concerning the analysis of impacts on the Morača Monastery, Ski Center Bjelasica and Biogradska gora.

In addition to that, in terms of suggestions and comments referring to the necessity of taking into account the projections of climate change impacts under the IPCC (Intergovernmental Panel on Climate Change) model, the SEA Report author needs to integrate in the Report climate change mitigation and adaptation measures contained in the First National Report on Climate Change that is delivered in the Appendix.

The aforementioned is also relevant in terms of issues put forward by the Republic of Albania within the transboundary consultations: "What are the impacts on biodiversity caused by the implementation of this project in comparison to the impacts caused by nature and climatic factors?" Based on the analyses contained in the First National Report on Climate Change and climate model developed by Hydro-Meteorological Service, it would be necessary to evaluate the level of the anthropogenic factor' s influence in the course of construction of hydro-power plants on the Morača river in comparison to the situation when there is no construction and to take into account the impact of climate change in accordance with the IPCC methodology.

Questions and suggestions 1 - shortcoming of the Report was pointed out during the public debate regarding definition of adequate protection measures for the direct impact area and the need to supplement them, with special emphasis on protection measures of the Morača Monastery, Đuđevina land slide and the risk of dams bursting.

Relevance assessment: In addition to supplementing the SEA Report in terms of biodiversity, hydrology, climate and risks, as previously stated, it is important to point out that according to the statements from the SEA Report, ten DEZs (Direct Elaboration Zones) represent major risk areas and they are the most problematic ones in terms of potential DSP impact. It is also stated that people who live in the DEZs within the DSP border will probably feel the most significant risks related to the Project.

In this regard, the Report should give a clear presentation of all ten Detailed Elaboration Zones - DEZs, which will be directly affected by the plan implementation, as well as risk factors which they will be exposed to, and define adequate measures for protecting these areas. Particular attention should be paid to the potential endangerment of the Morača Monastery, Đudevina land slide and the city of Podgorica.

In connection with the above-mentioned and bearing in mind that the threat to the Monastery was recognised irrespective of the construction of HPPs on the Morača river, the Government launched the development of a Study of the Protection of Cultural Heritage, including the Morača Monastery. **The basic guidelines for action that will be initiated on this basis and which are known at this initial stage of the Study's development should be incorporated in the Report on Strategic Environmental Assessment.**

IV. 3 ALTERNATIVE OPTIONS

Questions and suggestion 1 - Opinions and suggestions from public debates related to the development of alternative options for constructing 4 HPPs were put forward by a number of participants during the public debate, among them the following: INTEGRA (Chapter IV Alternatives), NGO Expeditio (page 55), NGO MANS Podgorica (page 56), NGO OZON (page 63), Italian company A2A, (pages 67, 68), independent consultant Ms. Marina Marković (pages 72, 73, 75, 78, 79) civil engineer Mr. Radovan M. Radović (page 88), municipality of Kolasin (page 89).

Many comments and suggestions from the public debate indicated that the “Do Nothing“option is not an adequate alternative option given in the subject plan. In addition to that, a series of proposals relating to the various alternative options were set forth: low Andrijevo, which means that Andrijevo elevation does not exceed 240m or 250m, replacement of multi-purpose accumulations on the Morača river with multi-purpose accumulations on other localities, improving efficiency and capacities for energy production from thermal power plants etc.

Different individual views were presented on possibilities for the concessionaire to offer those options contained in the DSP, which are not elaborated, as alternatives in the context of its acceptability in terms of general social and public interest of the state of Montenegro.

Relevance assessment: The Law on SEA (Article 15) defines that the SEA Report is to contain data that describe and evaluate possible significant environmental impacts that may be caused by the plan or programme's implementation, as well as the considered alternative options, taking into account the objectives and geographical scope of the plan or programme. In addition to these data, the Strategic Environmental Assessment Report includes a *overview of the reasons that have served as the basis for the selection of alternative options, as well as a description of the assessment method including possible difficulties in formulating the requested data.*

In addition to the elaborated solution that implies construction of four multi-purpose accumulations, the DSP for multi-purpose accumulations on the Morača river also proposed alternative options that have not been elaborated yet (page 65 of the Main Planning Document).

The SEA Report considered the option to construct four multi-purpose accumulations and an alternative "Do Nothing" option.

In this regard and in accordance with the suggestions presented during the public debate, it is suggested that alternative options proposed in the DSP be elaborated. After the revision of the existing draft DSP, the next stage of the SEA Report should analyse those alternative options as well.

IV.4 TRANSBOUNDARY IMPACTS ON THE ENVIRONMENT

Questions and suggestions 1 - suggestions and comments relevant to transboundary impacts on the environment (WWF page 6) were set out during the public debate.

Relevance assessment: In accordance with the Montenegrin Law on SEA, Article 15, sub-paragraph 9, it is necessary to describe the potential significant transboundary environmental impacts caused by the construction of multi-purpose HPP reservoirs on the Morača. ESPOO Convention and Article 23 of the Law on SEA lay down the obligation of transboundary exchange of information.

As the Albanian side has not stated its opinion within the envisaged period, the Montenegrin side decided to hold consultation at the level of the Working Group comprising representatives of relevant departments from Montenegro, DSP authors and the Ministry of Environment, Forest and Water Administration of the Republic of Albania. The meeting was held on 19 June 2010.

On that occasion, the Albanian side put forward comments and suggestions concerning amendments to the SEA Report in terms of treating two groups of potential impacts on the Skadar Lake ecosystem:

1. BIODIVERSITY:

- lake biodiversity and the general biodiversity;
- impact on flora and fauna of the lake, especially on the ichthyofauna (aspects of reproduction and quantity of certain populations) and ornithofauna, especially in terms of migratory species;

2. WATER REGIME

- impact of building multi-purpose accumulations on the water regime of the lake, especially in terms of possible seasonal lack of water in the lake basin and the associated impact on the national interests of the Republic of Albania;
- water quality periodically observed per seasons (the river Morača water quality and impact on the lake);
- impact of the HPPs construction on the occurrence of natural hazards.

The position presented by the Albanian side is that based on the amendments to the SEA Report in accordance with the aforementioned, it is necessary to give precise assessments of positive and negative impacts of the construction of HPPs on Skadar Lake, on the river and in coastal area.

Relevance Assessment: As a party to the Espoo Convention and the accompanying Kiev Protocol, Montenegro has the duty of informing the other countries on projects that may have transboundary impacts. Furthermore, as a party to the Ramsar Convention (Skadar Lake), Montenegro has the duty to actively work on implementation of the “three pillars” of the Convention which includes consultation with other parties, particularly with regard to transboundary wetlands, shared water systems and common species (mentioned obligations are recognized in the SEA Report on page 145).

The Report on Strategic Environmental Assessment provides for **dialogue with Albania in a transboundary context** (Page 145 of the SEA Report): “Montenegro has a good relationship with Albania and over the years it has been in active discussions concerning the issues of Skadar Lake”. In this regard, it is important to note that the dialogue between the two governments on issues related to the environment of Skadar Lake began back in 1994.

The first Memorandum of Understanding (MoU) on the protection and sustainable development of Skadar Lake was formally signed in 2003, whereas a new Memorandum was signed on 19 June 2010. Under provisions of the Memorandum, obligations have been assumed to:

- preserve natural resources of Skadar Lake in a coordinated and integrated manner,
- set up bilateral Commission for lake management and
- enhance relevant regulatory and institutional capacity at the national level.

In this regard, over the past few years governments of the two states have recognized the possible effects of degradation of natural resources of the lake in their

development goals and prepared plans for the preservation of Skadar Lake and its basin. The project aims to assist in the establishment and strengthening of institutional mechanisms for transboundary cooperation through joint efforts to:

- a) improve understanding of the lake ecosystem and potential impacts of development;
- b) promote sustainable use of lake resources, and
- c) demonstrate pollution reduction.

As for notifying the Albanian side in transboundary context it is necessary to highlight the following:

The Law on Strategic Environmental Assessment (Official Gazette of RM 80/05) is in compliance with the SEA Directive (Directive 2001/42/EC of the European Parliament and the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment). Under Article 23 of the Law on Strategic Environmental Assessment, the competent state environmental protection authority is responsible for the exchange of information on transboundary impact of the plan or programme on the environment.

If implementation of the plan or programme may have a significant negative impact on the environment of another state or if the state whose environment may be significantly threatened requests to, the state authority responsible for environmental protection shall submit to another state, in the procedure of informing the authorities and organisations and public concerned, within the shortest time possible and at the latest when it has informed its own public, the following information requesting its opinion on:

- 1) description of the plan and programme together with all available information about their potential impacts;
- 2) nature of the decision that may be made;
- 3) period of time in which the other state may announce its intention to participate in the decision-making process.

In addition, the competent state environmental protection authority informs another state which was consulted in the decision-making procedure of the decision on granting approval for the Report on Strategic Impact Assessment by submission of the following information:

- 1) contents of the decision which grants approval;
- 2) method of preparation of the Report on Strategic Environmental Assessment and opinions obtained in the preparation procedure;
- 3) results of consultation and reasons on which the decision to grant approval was based;
- 4) measures in the field of monitoring of plans and programmes.

Results of the consultation and opinion obtained from authorities and public concerned are to be taken into consideration by the state authority responsible for environmental protection when giving opinions to the competent authority of another state.

In addition to the Law on Strategic Environmental Assessment, Montenegro as a Party to the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and the UNECE Protocol on Strategic Environmental Assessment in a Transboundary Context (SEA Protocol) believes that compliance with and implementation of requirements and standards from the aforementioned international treaties is important.

In view of mentioned legal provisions, the procedure was initiated to exchange information on transboundary impacts by delivery to Albania of this notice on potential transboundary effects of the construction of hydro-power plants on the Morača river in accordance with the draft Detailed Spatial Plan (DSP) for the area of multi-purpose accumulations on the Morača river.

According to the Instruction for the implementation of the Espoo Convention, the time frame in which another state may announce its intention to participate in the decision-making procedure should not be less than six weeks, while Article 23 of the Law on SEA specifies that informing in a transboundary context is to be completed in the shortest period of time and at the latest after the local public has been informed. In this regard and in accordance with Article 19 of the Law on Strategic Environmental Assessment a period of 30 days is laid down for the participation of authorities and organisations concerned.

It is also important to point out the fact that, in accordance with the provisions and requirements of the Espoo Convention, Environmental Impact Assessment shall, as a minimum requirement, be **undertaken at the project level of the proposed activity**. To the extent appropriate, the parties shall endeavour to apply the principles of Environmental Impact Assessment to policies, plans and programmes (Article 2, paragraph 7). Despite the fact that the Espoo Convention is dominantly applied at the project level, Montenegro decided to conduct transboundary consultation also at the level of the plan, that is at the level of DSP for the area of multi-purpose accumulations on the Morača river.

Pursuant to the aforementioned, all necessary and relevant documentation was sent to the Albanian side and the deadline **from 15 March until 27 April 2010** was set for the submission of comments and opinions relating to the draft Report on Strategic Environmental Assessment. The Albanian side failed to submit an opinion within the envisaged period, but during the subsequent talk a consultation date in transboundary context with the Montenegrin side was agreed, that is 19 June 2010 when parties concerned from the Republic of Albania gave comments and suggestions regarding DSP and SEA Report, as previously stated.

Results achieved under the project ADRICOSM STAR are relevant in view of the comments presented during the public debate which contain remarks of insufficient impact assessment of the effects of the construction on the regime of the river Morača, Bojana, Skadar Lake that may also have transboundary impacts. We suggest that the author of SEA Report consider them in the context of amendments to the SEA Report in accordance with the comments presented during the public debate.

It is important to underline that such level of detailed research is not necessary at the level of implementation of Strategic Environmental Assessment and that results of the project ADRICOSM STAR which are integrated in the form of guidelines into the Report on Strategic Environmental Assessment represent a good basis for more thorough elaboration at the level of environmental impact.

IMPACT ON THE MORAČA RIVER

Scientific team of ADRICOSM project applied hydrological prognostic model (HYPRM) reaching conclusion that construction of dams on the Morača river leads to an increase in water inflow through the Morača river in the summer period and reduction of inflow in winter period. Such hydrological regime has impact on the reduction of the currently existing seasonal differences of water regime of the Morača river and cause-and-effect improvement of water quality of this river flow in summer period.

IMPACT ON SKADAR LAKE

As for precise simulation of the water level of Skadar Lake, modelling of the very lake was not carried out under the ADRICOSM STAR project while it is necessary to be done in the forthcoming phases. However, a hydrology model of Skadar Lake basin will be designed under the World Bank project “Skadar Lake - Integrated Ecosystem Management”. This model is expected to be finished by mid 2011 which will enable real simulations and assessments of changes of the regime of lake waters with a view to the planned infrastructure in the basin area. On the basis of data that are available at the moment, the scientific team of the project ADRICOSM STAR gives an assessment of possibilities for the surface and depth of the lake to be changed in terms of changes in the volume of lake waters, that is increase in summer period and decrease in winter period. Said phenomenon, including its impact on biodiversity, needs to be additionally examined in further research which will, amongst other things, be the task of already mentioned project activity in cooperation with the World Bank so as to meet the needs of Environmental Impact Assessment.

IMPACT ON THE BOJANA RIVER

On the other hand, hydrology model of the Bojana river as the only distributary of the lake is fully completed under the project ADRICOSM STAR. Taking into account the aforementioned facts according to which water inflow will increase in summer period and decrease in winter period, simulations demonstrate that there will be no significant

changes in the Bojana river water regime (this also includes inflow of waters from the river Drim from the Albanian side).

We recommend to the author of SEA Report to incorporate the aforementioned results of the project ADRICOSM STAR into the SEA Report. The Montenegrin side proposed that monitoring of biodiversity in the area downstream of DSP coverage be carried out in the framework of implementation of the National Environmental Monitoring Programme which is undertaken annually by the Environmental Protection Agency.

The aforementioned is also important in terms of questions raised by Albanian side in transboundary context at the consultation held on 19 June, which were also afterwards formally delivered in writing:

- What are the impacts on water regime of Skadar Lake?
- What will these impacts be like on the volume of water, the water level, etc. throughout the seasons?
- How will that have impact on water surface?
- In relation to biodiversity, what are potential impacts on birds, fish and endemic species?
- What impacts on biodiversity are caused by implementation of this project in comparison to impacts caused by nature and climate conditions?
- How much time is needed for the reservoirs to be filled in with water?

In addition to assessments of the relevance of initial findings reached under the project ADRICOSM STAR, certain questions were also addressed in certain sections of this Report in accordance with the contents of the questions.

IV. 5 ENVIRONMENT STATUS MONITORING AND ADDITIONAL RESEARCH NEEDED FOR ASSESSMENT OF THE BASELINE ENVIRONMENTAL STATUS

Question and suggestion 1 – As for opinions voiced during the public debate, the environmental status monitoring programme did not include all the data needed for the assessment of the baseline environmental status, neither did it include the basics for further environmental monitoring during and after implementation of the plan which is why it needs to be supplemented in that part (Integra pages 33,34,40), Civil Engineering Faculty (pages 67, 68). In fact, monitoring in the SEA report failed to include all the data needed for assessment of the baseline environmental status which is a starting point for further environmental status monitoring during and after implementation of the plan.

The monitoring programme and additional research needed for assessment of the baseline environmental status needs to include the following zones:

- directly included zones (dams Andrijevo, Milunovići, Raslovići, Zlatica);
- basin of the Morača river, downstream of dams;
- Skadar Lake zone.

It is necessary to provide overview of all segments of the environment of the subject area (biodiversity, waters, land, air, climate change, noise) through three stages: before, during and after implementation of the subject plan.

Relevance Assessment: Under Article 15 paragraph 1 sub-paragraph 10 of the Law on Strategic Environmental Assessment which lays down contents of the Report on Strategic Environmental Assessment, it is necessary to define environmental status monitoring programme, including human health during implementation of the plan or programme (monitoring).

Author of the Report states that HPPs from DSP will have significant environmental impacts and that **it is important to monitor project implementation before, during the construction and after exploitation** so as to identify potential unforeseen negative impacts and ensure that adequate corrective measures are undertaken. Author of the Report gives tabular overview of monitoring for the three mentioned phases, however according to the suggestions and remarks from public debates it needs to be supplemented.

Monitoring allows for testing significant environmental impacts caused by planned interventions related to the construction of multi-purpose accumulations with a view to those that have been foreseen. Therefore, it helps to identify certain problems which arise during implementation irrespective of whether they were foreseen or not and it also helps to make future forecasts more precise.

Biodiversity

SEA Report, as it is mentioned in Chapter IV. 2 of this Report, fails to describe endemic species, that is taxons which are located in the area of direct impact and which belong to invertebrate groups that account for about 70-80% of total biodiversity in a given area, as well as a large number of birds and fish. Particular shortcoming of SEA relates to the context of analysis of the size and distribution of species population, that is the assessment of populations dynamics which is one of important indicators of environmental changes. Expert analysis of indirect impact on Skadar Lake biodiversity also needs to be provided.

In this regard, biodiversity condition monitoring programme as a segment of environment and additional research to be conducted to meet the needs of assessment of the baseline environmental status will include zones outside the DSP coverage, with special emphasis on biodiversity of the lower basin of the Morača river, Skadar Lake and Bojana river.

In the framework of suggestions that referred to:

Soil – there is a lack of data regarding:

- control of the soil and levelling of accumulations;
- control of the transport of alluvial sediments (gravel and sand);
- proposal and elaboration of alternative profile for Zlatica dam;
- analysis of karst terrains in the areas planned to be flooded by construction of HPPs;
- regular monitoring of the control of soil erosion;
- baseline condition of soil quality;
- stability of the Monastery terrace in natural and altered conditions and of terraces upstream and downstream of the Monastery terrace .

Water quality - there is a lack of data regarding:

- simultaneous measurements of water flow on selected profiles alongside the flow of the Morača river with the aim of identifying sinking zones. It is also necessary to carry out comparative measurements of the water level of Morača (Zlatica and Straganičko oko), as well as comparable measurements of the level of Morača and level of compacted aquifers of Zeta Valley in the current and altered conditions;
- set up the monitoring station which will be tailor made to the location (rivers and streams/springs, underground waters and Skadar Lake);
- identification of water quality on specific locations (full range of parameters, including heavy metals);
- colouring underground waters through the existing precipices in Morača waterbed and in the zone which is affected by accumulations (suggestion given by Professor M.Radulović);
- installation of new piezometers and colouring underground waters with the aim of identifying directions of movement of underground waters (suggestion given by Professor M.Radulović);
- identification of changes of water level in Skadar Lake;
- identification of seasonal change of water flow in the river in the project area;
- identification of seasonal change of underground water levels in the project area;
- collection of data on absorbing water from the river (for irrigation etc.) for the project area.

Air quality/Climate – **Having in mind the fact that construction of multi-purpose accumulations on the Morača river might lead to changes in air quality and climate change**, there is a lack of data regarding:

- identification of the need to install semi-automatic air station in the project area;
- identification of the need to measure all the necessary climate parameters in the framework of National Monitoring Programme:
 - temperatures
 - precipitation
 - snow cover
 - number of precipitation days
 - cloudiness
 - duration of sunshine
 - humidity

Mentioned missing elements for the implementation of environmental status monitoring during interventions related to the planned constructions of multi-purpose accumulations on the Morača river and baseline environmental status assessment are obligation of the future concessionaire at the level of impact assessment of planned interventions on the environment and they will partially be integrated in the National Environmental Condition Monitoring Programme carried out by the Environmental Protection Agency. In this regard it is necessary to determine which of these elements can be integrated into the National Environmental Condition monitoring Programme, including water monitoring particularly during implementation of the project of the construction of hydro-power plants on the Morača river.

IV 6. CONCLUSIONS REACHED DURING THE PUBLIC DEBATE - SUMMARY

Public debate has shown a high level of interest in expert public and public concerned, as well as high quality level of organisation during which authors of SEA Report were open for all types of communication and information exchange.

Both positive and negative comments relating to the contents of the Report on Strategic Environmental Assessment on the environment were given during the debate. Most of the comments received during the public debate were related to the draft DSP for the area of multi-purpose accumulations on the Morača river.

The following conclusions were reached during the public debate:

- **The Morača river basin should be valorised in terms of energy including additional research, particularly into biodiversity conservation and integrated management of the Morača river basin and potential alternatives should be considered at the level of both, strategic planning and implementation of project activities.**

- **Good basis for implementation of the project HPPs on the Morača river is established by making appropriate corrections and amendments to the subject SEA Report in line with suggestions and proposals put forward during the public debate. On such basis and during further stages of plan implementation, Environmental Impact Assessment (EIA) enables concessionaires to select the best alternative solution which will be beneficial in economic and energy terms, the least risky and fit into the environment in the best way.**
- SEA Report is not structured in accordance with Article 15 of the Law on Strategic Impact Assessment which defines the contents of the report. SEA Report failed to fully present negative environmental impacts of the plan implementation due to the lack of all the necessary data and other factors that were indicated in the Report on Public Debate.
- SEA Report provides alternative “Do Nothing“with a view to the solutions from the existing DSP.

In order to improve SEA Report it is necessary for COWI as its author to consider suggestions received during the public debate in terms of supplementation of data that describe and evaluate the possible significant environmental impacts that may occur due to the implementation of the plan or programme, taking into account the objectives and geographical scope of the plan or programme.