

# CONCESSION ACT FOR THE HYDROPOWER PLANTS PROJECT ON THE RIVER MORACA

### Contents

1	and site at which the concession activity shall be performed	
	Description of the Subject of the Concession	5
	Area borders, the territory, the space and site at which the concession activity shal be performed	
2	The main parameters for assessment of economic feasibility of the investment	6
	The economic impact assessment for construction of a hydropower plants system on the river Moraca.	
	Basic Technical Solutions I impact	8
	The Basic Technical Solution II impact	. 10
3	Minimum or maximum duration of the concession	. 12
4	List of the necessary tehnical documents with conditions for preparation, licenses, permits and approvals which should be obtained before commencement with the concession activity	. 12
5	Excerpt from spatial-planning documentation, ownership structure and methods or resolvement of proprietary relations, information on infrastructure and other facilities located in the areas for performance of concession activities;	
	Excerpts from spatial-planning documentation	. 13
	Elements for urban technical conditions (urbanističko – tehnički uslovi) (UTC):	. 15
	1 <sup>st</sup> category of the SPR:	. 15
	2 <sup>nd</sup> category of the UTC:	. 16
	3 <sup>rd</sup> category of the UTC:	. 16
	Ownership structure on the land - subject matter of the concession	. 17
	The way of resolving proprietary issues	. 17
	Data on infrastructural and other objects located in the area for execution of concession activity	. 18
6	Conditions on technical equipment, financial ability and other criteria to be fulfilled by the Concessionaire as well as evidence of the fulfilment of those conditions.	
7	The basic elements of the tender documents (Public invitation, documents pertaining to the bid)	ng
8	The Draft of the Concession Agreement and other accompanying agreements for implementation of the concession	. 21
	The main elements of the Concession Agreement:	21
	The main elements of the Sponsor Supported Agreement	. 22

9	Criteria for the selection of the best bid	. 23
10	Terms and conditions of the performing of the concession activities	. 23
11	Measures for environmental protection and enhancement of energy efficiency	. 23
12	The initial amount of concession fee	. 24
13	The method of determination of tariffs for the services	. 24
14	List of regulations applicable to the procedure of granting concessions and performance of the concessions activities	24

1 Description of the subject of the concession, the area borders, the territory, the space and site at which the concession activity shall be performed.

#### **Description of the Subject of the Concession**

The subject of concession is the research, design, engineering, financing, construction, operation, maintenance, revitalization and transfer of the hydropower plants on the river Moraca, on the basis of Build-Operate-Transfer (BOT) model for the exploitation of river Moraca watercourse (the "Project"). There are two main technical solutions presented by the Government of Montenegro (the "Government").

According to the technical solution prepared by EPCG in 1989 in cooperation with Energoprojekt (Serbia) and Elektroprojekt (Slovenia) (the Basic Technical Design I), the Project would be developed as a system of hydropower plants Andrijevo, Raslovici, Milunovici and Zlatica, the upper water level at the hydropower plant Andrijevo would be 285 meters above the sea level (msl), total system power would be 238.4 MW and average annual production of 693.7 GWh (or 721 GWh, in line with Technical and Economic Analysis of hydropower plants on the river Moraca prepared by Econ Pöyry AB in 2009).

According to the technical solution prepared by EPCG in cooperation with the Energoprojekt (Serbia) and Elektroprojekt (Slovenia) for HP Raslovici, HP Milunovici and HP Zlatica, and Water Management Master Plan of Montenegro for HP Andrijevo, the Project would be developed as a system of hydropower plants Andrijevo, Raslovici, Milunovici and Zlatica, the upper water level at hydropower plants Andrijevo would be 250 msl, the total power would be 238.4 MW and average annual production of 616 GWh (the Basic Technical Solution II).

The tender participants will be able to propose a technical solution of exploitation of the hydro potential of the main flow of the river Morača upstream from Zeta's outfall to Morača other than Basic Technical Solutions I and II (Alternative Technical Solutions), whereas the average annual production should be higher than 600 GWh. Alternative technical solutions have to be more favourable with respect to economic benefits and environmental impact compared to the Basic Technical Solutions I and II. The definite technical solution for the hydropower plants on the river Moraca, as well as their power and expected annual generation will be determined upon selection of the concessionaire.

# Area borders, the territory, the space and site at which the concession activity shall be performed.

Potential area of concession activity and Project development comprises the river Morača main flow upstream from Zeta's outfall to Morača.

The river Moraca upstream of the planned dam of HPP Zlatica occupies an area of approximately 790 km<sup>2</sup>, and the DPP scope for the multipurpose accumulations area on the

river Moraca area of 32.76 km<sup>2</sup>. The DPP scope limits for the Basic Technical Solutions I and II are envisioned in Annex 1.

The boundaries of DSP area, in the event of the adoption of the Alternative Technical Solution, will be within potential area of concession activity and will be determined on the basis of that Alternative Technical Solution.

Final boundary of the area where the concession activity will be performed is going to be established on the basis of the technical solution of applicant who has been awarded the concession and within the potential area of concession activity.

#### 2 The main parameters for assessment of economic feasibility of the investment

### Technical and economic analysis of hydropower plants on the river Moraca, Econ Pöyry AB and IFC

In 2009 Econ Pöyry AB, within the Technical and economic analysis of hydropower plants on the river Moraca, analyzed economic benefits and costs of the Project under the Basic Technical Solution I.

The economic benefits of the Project are as follows:

- Generated electricity;
- Avoided emissions of carbon dioxide:
- Benefits to the environment and society.

The economic costs of the Project are as follows:

- Investments in HPP on the river Moraca;
- Costs of rehabilitation of the Monastery Moraca, expropriation of the land and relocation of the roads;
- Costs of operation and maintenance of the HPP on the river Moraca;
- Costs of environment and society protection measures.

Projections of electricity prices used in economic analysis were prepared by Econ Pöyry AB on the basis of the assessment of movement of fossil fuels price for the period of the following 50 years.

Net present value (NPV) of economic benefits and economic costs of Basic Technical Solution I, calculated at a rate of 5.5% amounts to 474 million Euros, Economic Internal Rate of Return is 9.7% and the Parameter B/C (representing relation between discounted benefits and discounted costs) is 1.8.

IFC applied the same methodology as used by the Econ Pöyry AB for the Basic Technical Solution I, for calculation of values of the parameters for evaluation of the Project economic feasibility for the Basic technical solution II. NPV of economic benefits and economic costs of

the Basic Technical Solution II, calculated at a rate of 5.5% amounts to 404 million Euros, Economic Internal Rate of Return is 9.5% and the Coefficient B/C is 1.7.

If the Project would have been implemented based on the Alternative Technical Solution parameters values for the assessment of the Project economic feasibility, NPV, Economic Internal Rate of Return and the Coefficient B/C, would be changed but would remain positive: NPV would be higher than 0, the Economic Internal Rate of Return would be higher than the discount rate 5.5%, and the Coefficient B/C would be higher than 1.

### The economic impact assessment for construction of a hydropower plants system on the river Moraca.

An expert team prepared in September 2010 an analysis of the "Economic Impact Assessment for construction of hydropower plants system on the river Moraca" which assessed the impact of Project implementation to the gross domestic product (GDP), employment, fiscal balance and current account of the balance of payment for the period from 2010 to 2066.

The study elaborates three potential scenarios: a scenario under which HPP would not be constructed on river Moraca ("Zero Scenario"), a scenario under which the construction is performed in accordance with the Basic Technical Solution I, and the scenario under which the construction is performed in accordance with the Basic Technical Solution II.

The analysis assumed that Montenegro in 2018 will enter the ERM II regime ("the European Exchange Rate Mechanism") of complying with the Maastricht Criteria pertaining to inflation, interest rates, the amount of foreign debt and the level of fiscal deficit.

Information related to the costs and pace of construction, electricity production and electricity prices movement for Basic Technical Solution I were taken over from the Technical and Economic Analysis of hydropower plants on the river Moraca prepared by Econ Pöyry AB. For the purpose of preparation of Basic Technical Solution II, revised data on costs and pace of construction were taken over from the Detailed Spatial Plan for the multipurpose accumulations on the River Moraca (DSP).

Data on manpower required for construction of HPP on the river Moraca were taken over from the Basic Technical Solution I and Basic Technical Solutions II. Calculation of employment impact did not include the growth resulting from the positive externalities of construction of HPP on the river Moraca, in sectors which are not directly linked to its exploitation.

Calculation of effects on the current account of the balance of payment included data on the generation and sale of electricity from Technical and Economic Analysis of hydropower plants on the river Moraca prepared by Econ Pöyry AB are taken into account.

Calculation of fiscal impact, included increase in income on the basis of: the personal income tax, mandatory social insurance, indirect taxes, VAT on the portion of expenditures which will be taxed in the Montenegro, income tax in the hydro power plants construction phase and

hydro power plants exploitation phase, as well as the revenue from the concession and project fees.

Values of processed economic indicators for the period from the 2011 to 2066 for the Zero Scenario are given in the following Table:

	2016	2046	2066
GDP in millions of Euros (nominal prices / constant prices in 2010)	4568/ 3913	18758 / 8871	45673/ 14536
GDP per capita in Euros (nominal prices / constant prices in 2010)	7123/ 6102	25186/11911	55505/ 17665
Unemployment rate in %	14,7	8,0	7,2
Current account of the balance of payment in % of GDP	22,1%	6,9%	2,9%

#### **Basic Technical Solutions I impact**

Basic Technical Solutions I impact for the period of 2011-2016 (the construction period):

- GDP: GDP growth in the construction period 2011-2016 in comparison to Zero Scenario is 204 million Euros measured in nominal prices, or 186 million Euros measured in constant prices from 2010.
- GDP per capita: GDP per capita growth in 2011-2016 period in comparison in comparison to Zero Scenario is 322 Euro measured in nominal prices, or 294 Euros measured in constant prices from 2010.
- Unemployment rate: The number of employees in the construction of HPP on Moraca will vary from the maximum of 2642 to the minimum of 282. Corresponding decrease in unemployment rate in comparison to the Zero Scenario will vary from the minimum of 0.1%, maximum to 1, 2%. In the course of construction the project will engage an average of 1160 employees annually, while the project will induce employment in the sector of production and services for approximately 360 employees annually in average.

- Current account trade balance of the balance of payment: An increase of the current account of the balance of payment in comparison to the Zero Scenario in the period until 2015 will vary from the maximum of 2.6 percentage points (pp) (from the deficit of 23.9% of GDP in the Zero Scenario to the deficit of 26.5% of GDP in the scenario of the Basic Technical Solution I in 2013.) to not less than 1.2 percentage points (from the deficit of 23% of GDP in the Zero Scenario to the deficit of 24.2% of GDP in the scenario of the Basic Technical Solution I in 2015), and 2016 the deficit reduction will be 1.3 pp (from the deficit of 22.1% of GDP in the Zero Scenario to the deficit of 20.8% of GDP in the scenario of the Basic Technical Solution I).
- Fiscal impact: The cumulative positive impact to the budget of Montenegro for the period from 2011 to 2016 in comparison to the Zero Scenario is 84.6 million Euros measured in nominal prices, or 77.1 million Euros measured in constant prices from 2010.

#### Basic technical solution I impact for the period 2017-2046 (the period of concession)

- GDP: An increase of GDP in 2046, in comparison to the Zero scenario, is 303 million, measured in nominal prices, or 144 million measured in constant prices from the year 2010.
- GDP per capita: An increase of GDP per capita in 2046 in comparison to the zero scenarios is 407 EUR measured through nominal prices, or 193 EUR, measured in constant prices from the year 2010.
- Unemployment rate: Upon completion of the construction period the unemployment impact is insignificant
- Current account trade balance of the balance of payment: in 2046 a positive effect on the current account trade balance of the balance of payment in comparison to the Zero scenario is 4.5 pp (from 6.9% of GDP according to the zero scenario to 2.4% of GDP according to the scenario of the Basic Technical Solution I).
- Fiscal impact: The cumulative positive impact on the budget of Montenegro for the period from 2017 to 2046 in comparison to the Zero scenario is 672.5 million, measured in nominal prices, or 402 million measured in constant prices from the year 2010.

The Basic technical solutions I impact for the period 2047-2066 (the period after the transfer of hydropower on Moraca):

• GDP: An increase of GDP in 2066. in comparison to the Zero scenario is 794 million, measured in nominal prices, or 253 million, measured in constant prices from 2010.

- GDP per capita: An increase of GDP per capita in 2066 in comparison to the zero scenario is 965 EUR measured in the nominal prices, or 307 EUR measured in constant prices from the year 2010.
- Unemployment rate: Upon the completion of the construction period, the unemployment impact is insignificant.
- Current account trade balance of the balance of payment: In 2066 a positive effect on the current account trade balance of the balance of payment in comparison to the Zero scenario is 3.3 pp (from a deficit of 2.9% of GDP in Zero scenario to a surplus of 0.4% of GDP according to the scenario of the Basic Technical Solution I).
- Fiscal impact: The cumulative positive impact on the budget of Montenegro in the period from 2047 until 2066 in comparison to the Zero scenario is 825 million, measured in nominal prices, i.e. 314 million EUR measured in constant prices from 2010.

#### The Basic Technical Solution II impact

The Basic technical Solution II impact for the period 2011-2016 (the period of construction):

- GDP: An increase of GDP in the period of 2011-2016 in comparison to the Zero scenario is 185 million EUR, measured in nominal prices, or 169 million, measured in constant prices from 2010.
- GDP per capita: Growth of GDP per capita in the period of 2011-2016 in comparison to the Zero scenario is 293 EUR, measured in nominal prices, or 267 EUR measured in constant prices from 2010.
- Unemployment rate: The number of employees on the implementation of the Project will vary from a maximum of 2368 to a minimum of 253 employees. Corresponding reduction of an unemployment rate in comparison to the Zero scenario will vary from a minimum of 0.1% up to the maximum of 1.1% to a. In the course of construction, the project will engage an average of 1050 employees annually, while the project will induce employment in the sector of production and services of about 310 employees per year.
- Current account trade balance of the balance of payment: The increase of the current account trade balance of the balance of payment deficit in comparison to the Zero scenario in the period until 2015. will vary from a maximum of 2.1 pp (from a deficit of 23.9% of GDP in Zero scenario to the deficit of 26% of GDP in the scenario of the Basic Technical Solutions II in 2013) to at least 1 p. p. (from a deficit of 23% of GDP according to the zero scenario to 24% of GDP according to the scenario of the Basic Technical Solution II in 2015) and in 2016 the deficit reduction will be 1.2 pp (from a deficit of 22.1% of GDP according to the Zero scenario to a deficit of 20.9% of GDP according to the scenario of the Basic Technical Solutions II).

• Fiscal impact: The cumulative positive impact on the budget of Montenegro for the period from 2011 to 2016 in comparison to the Zero scenario is 76 million, measured in nominal prices, or 71.6 million, measured in constant prices from the year 2010.

#### The Basic Data Solutions II impact for the period 2017-2046 (the period of concession)

- GDP: An increase of GDP in the 2046 in comparison to Zero scenario is 276 million EUR, measured in nominal prices, i.e. EUR 131 million measured in constant prices from 2010.
- GDP per capita: An increase of GDP per capita in 2046 in comparison to the Zero scenario is 371 EUR, measured in nominal prices, or 175 EUR, measured in constant prices from 2010.
- Unemployment rate: Upon completion of the construction period the impact on unemployment is insignificant.
- Current account trade balance of the balance of payment: In 2046. a positive effect on the current account trade balance of the balance of payment in comparison to Zero scenario is 1.6 pp (from the 6.9% of GDP in Zero scenario to 5.3% of GDP in the scenario of the Basic Technical Solution II).
- Fiscal impact: The cumulative positive impact on the budget of Montenegro in the period from 2017 to 2046 in comparison to the Zero scenario is 622 million, measured in nominal prices, or 370 million, measured in constant prices from 2010.

# The Basic Data Solutions II impact for the period 2047-2066 (the period after transfer of the Moraca HPP's):

- GDP: Growth of GDP in 2066 in comparison to Zero scenario is EUR 722 million, measured in the nominal prices, or 230 million, measured in the constant prices from the year 2010.
- GDP per capita: Growth of GDP per capita in 2066 in comparison to the Zero scenario is 877 EUR, measured in nominal prices, or 279 EUR measured in constant prices from 2010.
- Unemployment rate: Upon completion of the construction period impact on the unemployment is insignificant.
- Current account trade balance of the balance of payment: In 2066 a positive effect on the current account trade balance of the balance of payments in comparison to the Zero scenario is 0.9 p.p. (from a deficit of 2.9% of GDP in a Zero scenario to a deficit of 1.8% of GDP according to the scenario of the Basic Technical Solution II).

• Fiscal impact: The cumulative positive impact on the budget of Montenegro from the 2047 to the 2066 in comparison to the Zero scenario is 751 million Euros, measured in the nominal prices, or 286 million Euros, measured in constant prices from the 2010.

#### 3 Minimum or maximum duration of the concession

Offered duration of the concession will be one of the criteria for evaluation of offers and therefore, duration of the concession will be determined in the tender procedure. The minimum duration of the concession is 25 years. In the evaluation process, offered duration of the concession will be adequately evaluated. The commencement of the concession will be defined by Commercial Operations Date. Commercial Operations Date is defined as later day of the following:

- 00:01 hours on the day, following the day in which each generation unit of the last hydropower plant on Moraca completely commenced with its commercial operation, and
- 00:01 hours on the day following the day in which the Concessionaire has obtained all necessary licenses for operation of HPP on Moraca.
- 4 List of the necessary technical documents with conditions for preparation, licenses, permits and approvals which should be obtained before commencement with the concession activity
- Water conditions, issued by the Water's Directorate.
- Strategic assessment of environmental impact, prepared by the Government. Approval to be issued by the Environmental Protection Agency
- Detailed Spatial Plan prepared and adopted by the Government.
- Urban-technical conditions.
- Approvals:
  - The Water Supply Approval, issued by the Public Enterprise Water Supply and Sewerage;
  - The Fire-protection Approval, issued by the Ministry of Internal Affairs, the Inspectorate for the protection of fire, explosives, hazards, and technical security of the facilities;
  - o The Environmental Approval, issued by the Environmental Protection Agency;

- The Sanitary Approval, issued by the Ministry of Health, Department of the health-sanitary inspection;
- The Traffic Approval issued by the Ministry of Maritime Affairs, Transport and Telecommunications, or Municipal Secretariat for Economy;
- o The Postal Permit, issued by the Telekom of Montenegro;
- o The Water Approval issued by the Water's Directory;
- The Agricultural Approval, issued by the Ministry of Agriculture, Forestry or Water Management or Municipal Secretariat for Economic Affairs;
- o The Geotechnical Approval granted by the Ministry of Economy;
- The Approval for Protection of Cultural Heritage issued by the Ministry of Culture, Sports and Media.
- Design documentation. Prepared by authorized institutions and design organizations.
- Revision of design documentation. Prepared by authorized institution.
- Report on assessment of environmental impact. Prepared by the Concessionaire and issued by the Agency for Environmental Protection.
- Building permit. Issued by the Ministry for Spatial Planning and Environment.
- Approval for connection to transmission network, issued by Prenos a.d.
- Water Permit. Issued by the Water's Directory.
- Utilization permit. Issued by the Ministry for Spatial Planning and Environment.
- A license for electricity generation. Issued by the Energy Regulatory Agency of Montenegro.
- 5 Excerpt from spatial-planning documentation, ownership structure and methods of resolution of proprietary relations, information on infrastructure and other facilities located in the areas for performance of concession activities;

#### **Excerpts from spatial-planning documentation**

According to the Law on Spatial Planning and Construction ("Official Gazette of Montenegro" no. 51/08 and 40/10), Detailed Spatial Plan is enacted for the areas determined for construction of the facilities of public interest for Montenegro, or of regional interest. This Law further prescribes obligation to obtain planning and technical requirements issued by the Ministry for planning, on the basis of the planning document, before commencement with construction or spatial modifications.

The aim of Detailed Spatial Plan for the locations of multipurpose reservoirs on the Moraca River ("**DSP**") is to create the conditions for construction of the multipurpose reservoirs through preparation of the relevant studies, analytical and planning documentation, which shall integrally review and analyze all aspects of purpose and organization of use of the subject area, in order to protect and enhance overall development of the pertinent area. The DSP establishes optimal allocation of the activities, physical structures and population in area impacted by future multipurpose hydro-reservoirs, and complies with financial, technical, technological, spatial criteria and principles of sustainable development.

DSP for the Main Technical Solution I and II contains detailed elaboration for particular zones and locations (4 multipurpose reservoirs on Moraca River), thus providing preconditions for implementation of investment projects and spatial planning on the locations requiring permanent spatial modifications.

DSP shall be prepared for the mid stream of the Moraca River, planned for construction of four hydro-power plants (HPP Zlatica, HPP Milunovici, HPP Raslovici and HPP Andrijevo), multipurpose reservoirs including areas around reservoirs necessary for realization of the road, electric, water supply, drainage and other infrastructures. For the Main Technical Solution I, reservoirs are situated from Zlatica (around 1,5 km upstream from the bridge in Smokovac) to Grlo (around 2,5 km upstream from Moraca Monastery), and for the Main Technical Solution II from Zlatica (around 1,5 km upstream from the bridge on Smokovac) to Moraca Monastery.

Moraca River basin, upstream from the dam of the HPP Zlatica occupies the area of 790 sq. km, and the DSP, i.e. the zone of detailed elaboration, occupies the area of 32,76 sq. km. The scope of DSP is divided into 10 following zones:

Zlatica 1 (1,24 sq. km), Zlatica 2 (0,78 sq. km), Zlatica 3 (3,48 sq km), Zlatica 4 (1,03 sq. km), Milunovići 1 (1,59 sq. km), Milunovići 2 (1,67 sq. km), Raslovići 1 (0,25 sq. km), Raslovići 2 (1,74 sq. km), Andrijevo 1 (17,71 sq. km) i Andrijevo 2 (3,27 sq. km).

In immediate surroundings of the multipurpose reservoirs i.e. in the area of DSP, planned balance of the use of space of 3276, 59 ha is determined as:

•	Agricultural land	288,69 ha (379,67 ha) 1;
•	Forests and forest areas	1454,60 ha (1707,53 ha);
•	Settlements	291,40 ha (303,34 ha);
•	Water areas	
	o Reservoirs	1013,82 ha (641,62 ha);
	<ul> <li>Moraca River</li> </ul>	1,04 ha (9,63 ha);
	<ul> <li>Confluents of the Moraca River</li> </ul>	9,17 ha (13,00 ha);
•	Traffic Roads	
	<ul> <li>Highway 0,5 km (0,5km)</li> </ul>	2,40 ha (2,40ha);
	<ul> <li>Main road 43 km (41,1km)</li> </ul>	51,97 ha (41,63 ha);
	o Regional and Local roads 49,6km (51,85km	36,30 ha (35,91 ha);
•	Cemeteries	1,53 ha (1,63 ha);
•	Tourism	61,59 ha (67,22 ha);
•	Sports and Recreation	6,85 ha (6,85 ha);
•	Religious Facilities	3,73 ha (3,87 ha);
•	Zones of the construction of the hydro power plant	facilities 59,84 ha (59,86 ha);

<sup>&</sup>lt;sup>1</sup> The numbers in the brackets relate to Main Technical Solution II

\_

With respect to regulatory aspect DSP is applied to:

- i. Direct issuance of the act on urban and technical conditions in accordance with DSP;
- ii. Preparation of overall projects of the hydro power plant facilities, sections of the main road, sections of the regional roads, etc.

#### Elements for urban technical conditions (urbanističko - tehnički uslovi) (UTC):

Preparation and adoption of DSP should secure the status of the complex and functional protection and quality spatial development of the areas where the reservoirs will be constructed.

In this respect, three categories of the UTC are defined:

1<sup>st</sup> category of the UTC for multipurpose reservoirs and integral facilities =: dams, power plants, distribution facilities, substations, transmission lines, tunnels, outlets, banks, "fishtrails", etc.;

- i. 2<sup>nd</sup> category of the UTC for accessory features necessary for maintenance of the multipurpose reservoirs: compounds for dam maintenance, metering stations, service docks and tie ups for the vessels, pedestals with sanitary and catering service features, information desks etc;
- ii. 3<sup>rd</sup> category of the UTC for construction of residential, commercial, social, catering, communal and other objects within the DSP area.

In the entire area of the DSP, UTC for facilities designated as category I and II will be defined directly from the planning document UTC.

The 3<sup>rd</sup> category of UTC will be defined by guidelines for construction of the objects within the scope area of the DSP.

#### 1st category of the SPR:

- I/1. Conditions for dams –derived from the relevant technical regulations and standards as well as from the climate, geological, seismic, hydrologic and similar conditions of micro location.
- I/2. Conditions for power plants with power houses, switchyard facilities and transmission lines stem from the relevant technical conditions and standards as well as from the climate, geological, seismic, hydrologic and similar conditions of micro location. The UTC for other elements of the power plants contains elements of the design of the facilities and environmental characteristics of the micro location affecting the design.
- I/3.Conditions for the "fish-trails" –derived from the relevant technical regulations and standards as well as from the requirements for of the animal migrations.
- I/4. Conditions for the main and local roads derived from the relevant technical regulations and standards. The UCT for the road network contain the elements of the design of the road facilities and environmental characteristics of the micro location affecting the design.

- I/5. Conditions for tunnels derived from the relevant technical regulations and standards as well as from the climate, geological, seismic, hydrologic and similar conditions of the micro location.
- I/6. Conditions for outlets Micro locations for these facilities, as well as connections with existing and planned local and other roads, will be determined on the basis of DSP. The conditions also derive from relevant technical regulations and standards as well as from climate, geological, seismic, hydrologic and similar conditions of the micro location of route.
- I/7. The conditions for the river banks derived from the relevant technical regulations and standards as well as from climate, geological, seismic, hydrologic and similar conditions of micro location of the route. Maximum height of the cutting and finishing processing of these objects is to be specified in accordance with natural and environmental characteristics of the micro location.
- I/8. The conditions for the road signs and traffic information the conditions are to be provided by the competent Ministry in line with international and domestic regulations and standards. The precondition is modern designing of these elements.
- I/9. The conditions for the fences —derived from the particular requirements of the micro location and design characteristics of the facilities.
- I/10. The conditions for the noise protection Follow from the relevant technical provisions and standards and requirements of the micro location.
- I/11. The condition for protection of greenery are to be defined on the basis of the characteristics of the micro location, surrounding landscape and relevant technical regulations and standards governing this matter.

#### 2<sup>nd</sup> category of the UTC:

Spatial and technical requirements for the mentioned facilities and areas with complex features are to be structured in the following manner and defined on the basis of technological requirements for particular type of the facility, characteristics of the micro location, surrounding landscape and relevant technical regulations and standards governing this matter:

- II/1. Conditions for pedestrian pathways
- II/2.Conditions for bicycle paths
- II/3.Conditions for service docks and tie ups for the vessels
- II/4. Conditions for open bathing areas
- II/5.Conditions for fishing centre with hatchery
- II/6. Conditions for resting areas on the shore with sanitary and catering service (parking, restrooms, restaurants, information desk etc.)
- II/7. Conditions for the roller coaster

### 3<sup>rd</sup> category of the UTC:

The limit of the DSP area represents the area where other dynamic spatial modifications are expected, besides planned multipurpose reservoirs, i.e. construction of the touristic, residential, commercial, recreational and other objects. Development of the rural settlements is also expected and by construction of the reservoirs, relocation of the existing roads, as well as

construction of the highway Bar – Boljare, they will become more accessible from the existing municipal, regional and governmental centres.

The ground for construction works within the area of the DSP is determined by the DSP or other planning document compliant with the DSP.

The necessary construction conditions will be obtained on the basis of DSP, and issued by the competent Ministry.

In case that in the area of DSP arises necessity for complex construction (touristic complex, manufacture complex, infrastructure etc.), the UTC will be defined on the basis of the DSP.

#### Ownership structure on the land - subject matter of the concession

As a result of absence of up - to-date cadastre data on large portion of the land in the detailed elaboration zone (DEZ) of DSP there are no precise data about the ownership structure. However, expropriation project analysis that had been prepared for Electric Power Company, as well as insight on the field, DSP determines that implementation of Basic technical solution I would require flooding of 268 objects total area of approximately 20740 m<sup>2</sup>. The Basic technical solution II would require flooding of 226 objects total area of approximately 16540m<sup>2</sup>. In both cases approximately 93% of the property is in private ownership.

Tender participants shall have the possibility to suggest technical solution different from Basic Technical Solutions I and II. In case of this option, the land- subject of the concession well as structure of the ownership will be established after selection of the Concessionaire.

#### The way of resolving proprietary issues

#### Need for the expropriation of the land

The expropriation will not be necessary for state owned land parcels. According to the Article 44, Section 2 of the Concession law the right of the Concessionaire to use the state owned is to be confirmed by the Concession agreement. In case any of the land parcels is in private ownership, the expropriation procedure is to be carried on, on the basis of a particular project analysis and the Concessionaire will be granted right of use on such land for the purpose of implementation of the concession.

Former owner of the expropriated real-estate has the right to receive fair compensation for expropriated real-estate in cash or by virtue of transfer of ownership or co-ownership over another suitable real-estate. Compensation in things and rights is possible only in case the owner of expropriated property consents to such type of compensation.

#### Procedure of the expropriation:

Expropriation is comprised of four phases:

- i. Establishment of public interest
- ii. Enactment of Expropriation decision by the Real-estate Directorate based on the Expropriation motion prepared by the Government (who is the beneficiary of the

expropriation). Party dissatisfied by the content of the decision is entitled to n appeal to the Ministry of finance.

- iii.Determination of the fair compensation. In case the previous owner and the beneficiary of the expropriation fails to reach an understanding on compensation the basic court where the real-estate is located will decide on compensation amount.
- iv. Registration of ownership rights on the real-estate.

With respect to the Project, adoption of DSP simultaneously represents the establishment of public interest for expropriation.

The previous owner of expropriated real-estate has the right to request annulment or alternation of the non appealable decision on expropriation if beneficiary of expropriation fails to execute at least third of the total value of envisaged works within three years as of the expropriation decision became non appealable. This request can be submitted after expiration of three years, but not later than six years upon the decision became non appealable.

## Data on infrastructural and other objects located in the area for execution of concession activity

#### Road traffic

There are parts of 846 km of highways, 950 km of the regional roads and 5 132km of local roads in Montenegro. Modern carriageway represents 79% of highways, 37% of regional roads and 60% of local roads.

With respect to the highways, in the basin are mostly located sections of the Adriatic highway M-2 Petrovac – Podgorica –Kolašin. Adriatic highway carries the E-65, E-80 designation in the European road network.

Corridor of Bar-Boljare motorway, of 169km overall length, has 29 km long Smokovac-Mateševo section in the Morača basin. This section of the motorway is connected to the Smokovac loop and continues towards Bioče, Pelev Brijeg and Lijeva Rijeka near Mateševo. At Pelev Brijeg and Duške the corridor joins the traffic network of Montenegro.

The following sections of the regional roads are located in Morača basin:

- Bioče Mateševo R-19
- Mioska Tušina (Boan) R-18

According to the DSP the future plans encompass: construction of Bar-Boljare motorway that will run for 0, 5 km through the DEZ, bicyclist and pedestrian pathways that will run for 128 km and panoramic lanes length of 5, 3 km.

Within DSP for the Basic technical solution I and II DEZ currently contains 40, 5km of highways, 0, 9 km of regional roads and 93km of local roads. According to DSP planned

situation for Basic technical solution comprises: 43,0 km of highways, 0,9km of regional roads and 48, 7 km of local roads, while planned situation for Basic technical solution II comprises: 41, 1km of highways, 0,9km of regional roads and 50,95 km of local roads.

If hydro power plants on the river Morača would have been constructed according to the Basic technical solution I it would require relocation of a portion of the highway in the length of 12487, 98 m, while construction in line with the Basic technical solution II would require relocation of 9687, 98m out of which 3454,5m in the Zlatica hydro power plant zone, 1000 m in the Raslovići hydro power plant zone and with respect to Andrijevo hydro power plant zone 7942,48 in the Basic technical solution I and 5142,48 in the Basic technical solution II. As compensation for inundated local road network after the establishment of reservoirs, it will be necessary to construct 19984m of local roads according to the Basic technical solution I, or 27 128 m, according to the Basic technical solution II.

#### Telecommunications and postal traffic

Along the corridor of highway Podgorica –Kolašin is installed a fibre-optical cable.

#### Energy systems

The Basin contains sections of the basic electrical energy grid voltage of t400 kV, 220 kV and 110 kV and sections of the corresponding distribution network that enables that almost all settlements in this zone (except for less accessible villages in central and northern part) are supplied with electrical energy.

Existing electrical energy grid within DSP consists of:

- Transmission Line (TL) of 35 kV of overall length of 56, 1 km with 5,5 km being in DEZ
- Transmission Line (TL) of 220 kV of overall length of 47, 8 km with 1,2 km being in DEZ.
- Transmission Line (TL) ) of 110 kV of overall length of 30, 2 km with 2,5 km being in DEZ
- Transmission Line (TL of 440 kV of overall length of 57, 2 km with 2, 8 km being in DEZ.

Overall length of all existing aforementioned transmission lines is 186, 8 km, whereas 11, 8 km is within DEZ.

According to the DSP data, construction of the following electric transmission lines is being planned:

Transmission Line (TL) of 220 kV of overall length of 8, 8 km with 0, 5 km being in DEZ Transmission Line (TL) of 110 kV of overall length of 50, 3 km with 4, 8 km being in DEZ Transmission Line (TL) of 2x220 kV of overall length of 2, 7 km with 0, 7 km being in DEZ.

Overall length of all existing aforementioned transmission lines is 61, 8 km, whereas 6 km is within DEZ.

#### Hydro technical systems

Hydro technical systems of Montenegro in Moraca basin consist only of one small hydro power plant – Lijeva Rijeka.

#### Usage of water for water supply

In the Moraca basin zone water supply for the most of the population is organized through water supply system. The following sources are used:

- "Bioce" source provides water for consumers of Bioce settlement
- "Duga" source provides water for consumers of Duga settlement
- "Lijeva Rijeka" source provides water for consumers of Lijeva Rijeka settlement

Besides the aforementioned there are few smaller wells that provide water for rural population of Brskut.

The "Bioce" source and "Duga" source are located at the DEZ.

### 6 Conditions on technical equipment, financial ability and other criteria to be fulfilled by the Concessionaire as well as evidence of the fulfilment of those conditions

In two stages tender procedure for the Project all qualified applicants are qualified on the basis of fulfilment of financial, technical and other criteria determined in the Prequalification documentation approved by the Government's Decision which was issued on the session dated 25 February 2010. All qualified bidders within their application delivered, an envelope containing documentation relevant for establishing the eligibility of the bidder as well as an envelope containing documentation relevant for establishing fulfilment of the prequalification criteria. The documentation is stated in article 4.4, 4.5 and 4.6 of the Prequalification documentation.

## 7 The basic elements of the tender documents (Public invitation, documents pertaining to the bid)

The concession will be granted through an international, transparent and competitive, two-stage procedure

Two-stage procedure for granting of the concession consists of pre-qualification procedure and procedure where Qualified Applicants present their bids.

In the pre-qualification procedure, in line with Public Invitation, interested applicants will be provided with Pre-qualification Document.

In the procedure of presentation of bids by the Qualified Applicants, the basic elements of the tender documents to be delivered to the Qualified Applicants are the following:

- Instructions for Qualified Bidders;
- The Draft of the Concession Agreement;
- The Draft of the Sponsor Support Agreement;
- Technical Requirements for the Project;
- Draft of the Novation Agreement.

### 8 The Draft of the Concession Agreement and other accompanying agreements for implementation of the concession

The Concession Agreement determines the rights and obligations of the Grantor and the Concessionaire with respect to the concession, while the Sponsor Support Agreement establishes obligation of financial support to the Concessionaire in implementation of the concession. Concessionaire and Sponsor are the same company (or consortium of companies) which was granted the concession. In accordance with Article 51 of the Law on Concessions, Concessionaire will establish a Montenegrin company in 100% ownership of the Concessionaire within 60 days from execution of the Concession Agreement for performance of the concession activity and promptly assign all rights and obligations under Concession Agreement to the mentioned new established company which enters in all rights and obligations of the Concessionaire under the Concession Agreement.

Upon fulfilment of the prescribed conditions, Concessionaire will execute with Prenos AD Transmission Network Connection Contract and Agreement on Operation and Maintenance of the Transmission Network.

#### The main elements of the Concession Agreement:

- Contracting Parties;
- The Documents which will be signed simultaneously with the Concession Agreement;
- Government's granting of the rights over the Project to Concessionaire
- Establishing of the Montenegrin company and transfer of the rights and obligations from Sponsors to the project company;
- Duration of the concession;
- The concession fee;
- Participation of the Government in implementation of the Project;

- Payments to the Government based on the participation of the Project;
- Ownership rights over the land required for development of the Project;
- Obligations of the parties related to the implementation of the Project;
- Obligations and rights of the Concessionaire on sale and distribution of electric energy;
- Obligations of the Concessionaire with respect to transfer of the Project to the Government;
- Changes of the laws and their impact on the rights and obligations of the parties;
- Representation and warranties (for example statements on (a) proper representation, execution and delivery, (b) enforceability and (c) on non conflict with Laws of Montenegro, etc.);
- The cases of breaching of the obligations by the Concessionaire and the Government, and the rights and obligates arisen from such breach;
- Obligations of the Concessionaire and the Government in case of termination of the Agreement;
- Obligations of the Concessionaire and the Government upon termination of the Agreement;
- Force Majeure definition and impact on rights and obligations of parties in case of Force Majeure;
- Dispute resolution- competent rules and authorities.

#### The main elements of the Sponsor Supported Agreement

- Contracting parties;
- Sponsor Obligations related to investment into the capital of project company;
- Restrictions to transfer share in founding capital of the project company;
- Performance guarantees;
- Cases of Sponsors' breaches of obligations and rights and obligations under that breaching;
- Payments to the Government's advisers;

- Representation and warranties;
- Dispute resolutions- competent rules and authorities.

#### 9 Criteria for the selection of the best bid

Bids shall consist of technical and financial offer Selection of the preferred bid will be based on evaluation the technical and financial offers. Bid evaluation will also include the quantity and value of annual electricity generation, the length of the construction period, the investment costs of the Government, concession fee, other fees related to the Government participation in the Project, the value of measures for environmental protection which will be undertaken by the Concessionaire, the value of hydropower plants on the river Morača after expiry of the concession, the length of the concession period and other.

#### 10 Terms and conditions of the performing of the concession activities

Terms and conditions of performance of the concession activities related to the Project will be defined in Concession Agreement and Sponsor Support Agreement. The drafts of both Agreements will be provided within Project's tender documents.

#### 11 Measures for environmental protection and enhancement of energy efficiency

In accordance with the Law on Strategic Environmental Assessment simultaneously with preparation of the DSP should be prepared the Report on strategic assessment of the environmental impact on the Project.

Concessionaire, as carrier of the Project, in line with the Law on Strategic Environmental Assessment is obliged to prepare the study on environmental assessment and ensures that Environmental Protection Agency consents to such study. The subject of the study is identification and evaluation of potential significant impacts of the Project and determination of the methods of prevention, elimination, mitigation or remedy of adverse impacts on the environment and society. In the course of preparation of study on environmental impact assessment for the Project, Concessionaire shall in particular take into account the results of the Report of strategic assessment of the impacts of the Project to environmental. The study of the environmental assessment will include inter alia, the following measures:

- for conservation of species threatened extinction and permanent destruction because of the realisation of the DPP;
- to mitigate the effects of induced seismicity and the effects of the possible activation of the slides and landslides;
- protection of cultural heritage;
- evaluation of the basin

#### 12 The initial amount of concession fee

The minimal (initial) amount of concession fee will be 2% of the income from sale of the electricity produced in the Project.

#### 13 The method of determination of tariffs for the services

Electricity price will be determined on the market.

# 14 List of regulations applicable to the procedure of granting concessions and performance of the concessions activities

The main regulations applicable to the procedure of granting concessions and performance of the concession activities are:

- The Law on concessions (Zakon o koncesijama, "Official Gazette of Montenegro" no.08/09);
- Energy Law (Zakon o energetici, "Official Gazette of Montenegro" no. 28/10);
- The Law on Obligations (Zakon o obligacionim odnosima "Official Gazette of Montenegro" no. 47/08);
- Law on State Property (Zakon o državnoj imovini "Official Gazette of Montenegro" no. 21/09);
- The Law On Waters (Zakon o vodama, "Official Gazette of Montenegro" no.27/07);
- The Law on Spatial Planning and Construction (Zakon o uređenju prostora i izgradnji objekata, "Official Gazette of Montenegro" no.51/08 i 40/10);
- Environmental Law (Zakon o životnoj sredini, "Official Gazette of Montenegro" no.12/96 and 40/10);
- The Law on Strategic Environmental Impact Assessment (Zakon o strateškoj procjeni uticaja na životnu sredinu, "Official Gazette of Montenegro" no.80/05);
- The Law on Environmental Impact Assessment (Zakon o procjeni uticaja na životnu sredinu, "Official Gazzete of Montenegro" no.80/05 and 40/10);
- The Law on Financing of Water Management (Zakon o finansiranju upravljanja vodama "Official Gazette of Montenegro" no.65/08);

- The Law on Integrated Prevention and Pollution Control (Zakon o integrisanom sprječavanju i kontroli zagađivanja, "Official Gazette of Montenegro" no.80/05);
- The Law on Waste Management (Zakon o upravljanju otpadom, "Official Gazette of Montenegro" no.80/05 and "Official Gazette of Montenegro" no.73/08);
- The Law on Cultural Property Protection (Zakon o zaštiti kulturnih dobara, "Official Gazette of Montenegro" no. 49/10)
- Decree on Projects for which Environmental Impact Assessment is performed (Uredba o projektima za koje se vrši procjena uticaja na životnu sredinu "Official Gazette of Montenegro" no.20/07);
- Rules on Method of Auditing for Preliminary and Main Designs (Pravilnik o načinu vršenja revizije idejnog i glavnog projekta, "Official Gazette of Montenegro" no. 81/08 from 26 December 2008);
- Rules on Manner of Preparation and Content of Tehnical Documentation (Pravilnik o načinu i sadržini tehničke dokumentacije "Official Gazette of Montenegro" no.22/02);
- Decree on detailed manner of conducting the procedure of public bidding in the open and two-stage procedure for granting concessions (Uredba o bližem načinu sprovođenja postupka javnog nadmetanja u otvorenom i dvostepenom postupku davanja koncesije, "Official Gazette of Montenegro" no. 67/09);
- Rules on Licenses in the Energy Sector of Montenegro (Pravilnik o licencama u energetskom sektoru Crne Gore, "Official Gazette of Montenegro" no. 50/04);
- Rules on Technical Standards for Construction of High-Rise Buildings in Seismic Areas (Pravilnik o tehničkim normativima za izgradnju objekata visokogradnje u seizmičkim područjima, "Official Gazette of Montenegro" no. 31/81 with its amendments published in the Official Gazette no. 49/82, 29/83, 21/88 i 52/90).

### **APPENDIX 1**

Scope limits of DSP for Basic Technical Solutions I and II DETALLINI PROSTORNI PLAN VIŠENAMJENSKIH AKUMULACIJA NA RIJECI MORAČI DETALED SPATIAL PLAN OF ACCUMULATION FOR SEVERAL PUROSES ON THE RIVER MORAČA