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REGIONAL STRATEGY FOR SUSTAINABLE HYDROPOWER IN THE WESTERN BALKANS

Background Report No. 4 Regulatory and institutional guidebook for hydropower development

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List of abbreviations and symbols

Abbr. & Symbols	Description / Meaning
AERS	Energy Regulatory Agency (Serbia)
AKBN	National Agency of Natural Resources (Albania)
ALB	Acronym used for Albania
ASAP	As soon as possible
BD	Brčko District
BiH	Acronym used for Bosnia and Herzegovina
BR	Background report
CfD	Contract for Differences
CGES	Crnogorski Elektroprenosni Sistem (Montenegrin TSO)
COTEE	Montenegrin Electricity Market Operator
СР	Contracting Party
DBOT	Develop-Build-Operate-Transfer
DG NEAR	Directorate-General for Neighbourhood and Enlargement Negotiations
DSO	Distribution System Operator
EAM	Energy Agency (the former Yugoslav Republic of Macedonia)
EC	European Commission
ECS	Energy Community Secretariat
ECT	Energy Community Treaty
EDS	Energy Development Strategy
EIA	Environmental Impact Assessment
ELEM	Elektrani na Makedonija (power utility of the former Yugoslav Republic of Macedonia)
EMS	Elektromreža Srbije (Serbian TSO)
EnC	Energy Community
ENTSO-E	European Network of Transmission System Operators for Electricity
EP BiH	Elektroprivreda Bosne i Hercegovine (power utility of (Federation of) BiH)
EPCG	Elektroprivreda Crne Gore (power utility of Montenegro)
EP HZHB	Elektroprivreda Hrvatske Zajednice Herceg Bosne (power utility of Croatian Community of Herceg Bosna)
EPS	Elektroprivreda Srbije (power utility of Republic of Serbia)
ERA	Energy Regulatory Agency (Montenegro)
ERC	Energy Regulatory Commission (the former Yugoslav Republic of Macedonia)
ERE	Energy Regulatory Authority (Albania)
ERO	Energy Regulatory Office (Kosovo)
ERS	Elektroprivreda Republike Srpske (power utility of Republika Srpska)
EU	European Union
EVN	Distribution System Operator (the former Yugoslav Republic of Macedonia)
FBiH	Federation of Bosnia and Herzegovina, entity of Bosnia and Herzegovina
FERC	Regulatory Commission for Energy in the FBiH
GIS	Geographic Information System
HPP	Hydro power plant
IFI	International Financing Institution
IMWC	Inter-Ministerial Water Council (Kosovo)



Abbr. & Symbols	Description / Meaning
I.O.L.R.	Institutional-Organisational-Legal-Regulatory (framework)
IPA	Instrument for Pre-accession Assistance
IPF	Infrastructure Project Facility
IPF3	Infrastructure Project Facility - Technical Assistance Window, 3rd (present) contract
KEDS	DSO of Kosovo
KEPA	Kosovo Environmental Protection Agency
KESH	Korporata Elektroenergjitike Shqiptare (power utility of Albania)
KOS	Acronym used for Kosovo
KOSTT	TSO of Kosovo
MAFRD	Ministry of Agriculture, Forestry and Rural Development (Kosovo)
MAFWE	Ministry of Agriculture, Forestry and Water Economy
MCA	Multi Criteria Assessment
ME	Ministry of Environment (Albania)
MEDTET	Ministry of Economic Development, Trade, Entrepreneurship and Tourism (Albania)
MEI	Ministry of Energy and Industry (Albania)
MEMI	FBiH Ministry of Energy Mining and Industry (BiH)
MEnv	Ministry of Environment (Albania)
MEPSO	TSO of the former Yugoslav Republic of Macedonia
MESP	Ministry of Environment and Spatial Planning (the former Yugoslav Republic of Macedonia)
MH ERS	Mixed Holding of ERS (RS/BiH)
MKD	Acronym used for the former Yugoslav Republic of Macedonia
MME	Ministry of Mining and Energy (Serbia)
MNE	Acronym used for Montenegro
MoARD	Ministry of Agriculture and Rural Development (Montenegro)
MoE	Ministry of Economy (Montenegro)
MoFTER	Ministry of Foreign Trade and Economic Relations (BiH)
MoSDT	Ministry of Sustainable Development and Tourism (Montenegro)
MoESP	Ministry of Environment and Spatial Planning (Kosovo)
MoTC	Ministry of Transport and Connections (the former Yugoslav Republic of Macedonia)
Mott MacDonald-IPF Consortium	The Consortium carrying out the present project under WBIF-IPF3
MSPCEE	Ministry of Spatial Planning, Civil Engineering and Ecology (RS/BiH)
MUD	Ministry of Urban Development (Albania)
NEEAP	National Energy Efficiency Action Plan
NGO	Non-governmental organisation
NOS BiH	Independent System Operator for BiH
NREAP	National Renewable Energy Action Plan
NTC	National Territorial Council (Albania)
NWC	National Water Council (Albania)
OSHEE	Distribution System Operator (Albania)
OST	Transmission System Operator (Albania)
PPA	Power Purchase Agreement
PSHPP	Pumped storage hydro power plant
REAP	Renewable Energy Action Plan



Abbr. & Symbols	Description / Meaning
RERS	Republika Srpska Energy Regulatory Commission
RES	Renewable energy source
RES-E	Electricity generated from RES
RS	Republika Srpska, Entity of Bosnia and Herzegovina
RSERC	Regulatory Commission for Energy of Republika Srpska
SAA	Stabilisation and Association Agreement
SAP	Stabilisation and Association Process
SEA	Strategic Environmental Assessment
SER	Acronym used for Serbia
SHPP	Small hydro power plant
SPV	Special Project Vehicle (Albania)
SRBiH	Spatial Plan of the Socialist Republic of BiH
ТА	Technical Assistance
ToR	Terms of Reference
TSO	Transmission System Operator
TYNDP	10-Year Network Development Plan
UCTE	Union for the Coordination of the Transmission of Electricity (predecessor of ENTSO-E)
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WBEC-REG-ENE-01	Designation of the subject Project
WBIF	Western Balkans Investment Framework
WB6	Western Balkans consisting of 6 countries: Albania, Bosnia and Herzegovina, Kosovo, the former Yugoslav Republic of Macedonia, Montenegro and Serbia
WFD	Water Framework Directive



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0 Preamble

The REGIONAL STRATEGY FOR SUSTAINABLE HYDROPOWER IN THE WESTERN BALKANS¹ — referred as "the Study" — is a sub-project under implementation by the WBIF-IPF3 Consortium led by Mott MacDonald, with the European Commission, DG NEAR D.5, being the Contracting Authority for the WBIF-IPF3 contract.

The six Western Balkans beneficiary countries comprise Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo*, Montenegro and Serbia - the WB6 region.

The work programme of the Study includes 13 Tasks as stipulated in the Terms of reference (ToR):

- Task 1: Hydropower role (past and future) in the regional and national context;
- Task 2: Assessment of the current situation in the institutional-organisational framework relevant for hydropower development;
- Task 3: Assessment of the current situation in the legal-regulatory framework relevant for hydropower development;
- Task 4: Assessment of hydrology baseline, water-management by country and by river basin with transboundary issues;
- Task 5: Grid connection issues in network development context;
- Task 6: Identification of HPP projects and acquiring relevant information for the HPP inventory and investment planning;
- Task 7: Environmental, Biodiversity and Climate Change Analysis on (i) river basin level and (ii) countrylevel of identified hydropower schemes;
- Task 8: Establishment of the central GIS database;
- Task 9: Development of a web-based GIS application;
- Task 10: Multi-Criteria Assessment (MCA) of prospective hydropower projects;
- Task 11: Drafting of Regional Action Plan on Hydropower Development and compilation of Final report on the Study;
- Task 12: Establishment of IT-supported Information and Document Management System;
- Task 13: Training and dissemination of Study results.

The Study deliverables encompass separate Background reports (BR) that focus on specific technical issues in professional areas related with hydropower sector development, e.g.:

- Background report n° 1 (BR-1) Past, present and future role of hydropower
- Background report n° 2 (BR-2) Hydrology, integrated water resources management and climate change considerations
- Background report n° 3 (BR-3) Environment considerations
- Background report n° 4 (BR-4) Regulatory and institutional guidebook for hydropower development
- Background report n° 5 (BR-5) Transboundary considerations
- Background report n° 6 (BR-6) Grid connection considerations
- Background report n° 7 (BR-7) Inventory of planned hydropower plant projects
- Background report n° 8 (BR-8) Identification of potential sustainable hydropower projects

This Background Report no. 4 (BR-4), is the output and deliverable of Tasks 2 and 3.

^{*} This designation is without prejudice to position on status, and is in line with UN Security Council Resolution 1244/99 and the International Court of Justice Opinion on the Kosovo declaration of independence

¹ The designated WBIF code of this sub-project is WBEC-REG-EN-01.



Enlargement process

The EU Enlargement process is the accession of new countries to the European Union (EU). It proved to be one of the most successful tools in promoting political, economic and societal reforms, and in consolidating peace, stability and democracy. The EU operates comprehensive approval procedures that ensure new countries will be able to play their part fully as members by complying with all the EU's standards and rules (**the** *"EU acquis"*). The conditions of memberships are covered by the Treaty on European Union.

Each country moves **step by step** towards EU **membership as it fulfils its commitments** to transpose, implement and enforce the Acquis.

The EU relations with the Western Balkans countries take place within a special framework known as the **Stabilisation and Association Process (SAP)** in view of stabilising the region and establishing free-trade agreements. To this end, all WB6 countries have signed contractual relationships (bilateral **Stabilisation and Association Agreements, or SAAs**) which entered into force, depending on the country, between 2004-2016.

The **accession negotiations** are another step in the accession process where the Commission monitors the candidate's progress in meeting its commitments on 35 different policy fields (chapters), such as transport, energy, environment and climate action, etc., each of which is negotiated separately.

At the time of writing (November 2017), there are four WB6 countries that have been granted **Candidate Country** status: the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Albania, while Bosnia and Herzegovina and Kosovo have the status of **Potential Candidate** countries at this date. With two countries, Montenegro and Serbia, the **accession negotiations** have already started and several of the chapters of the EU *acquis* have been opened.

To benefit from EU financing for projects, each country should respect the EU legislation relevant to that project, even if the national legislation has not been yet fully harmonised with the EU acquis.

The "Regional Strategy for Sustainable Hydropower in the Western Balkans" aims to set guidelines for a sustainable development of hydropower in the Western Balkans.

EU Acquis relevant to the Study

In the context of this Study, **the most relevant thematic areas are spread mainly over two Acquis Chapters** (15 on Energy and 27 on Environment) relating to water resources, energy, hydropower development and environmental aspects including climate change.

- Chapter 15 Energy Acquis consists of rules and policies, notably regarding competition and state aid (including in the coal sector), the internal energy market (opening up of the electricity and gas markets, promotion of renewable energy sources), energy efficiency, nuclear energy and nuclear safety and radiation protection.
- Chapter 27 relates to 10 sectors / areas: 1 Horizontal Sector, 2 Air Quality Sector, 3 Waste Management Sector, 4 - Water Quality Sector, 5 - Nature Protection Sector, 6 - Industrial Pollution Sector, 7 - Chemicals Sector, 8 - Noise Sector, 9 - Civil Protection Sector, and 10 - Climate Change Sector.

Commission President Juncker said in September 2017 in his State of the Union address that: *"If we want more stability in our neighbourhood, then we must also maintain a credible enlargement perspective for the Western Balkans".* To Serbia and Montenegro, as frontrunner candidates, the perspective was offered that they could be ready to join the EU by 2025. This perspective also applies to all the countries within the region. This timeline also corresponds to the period for preparing such major infrastructures and their lifetime. Consequently, WB6 countries have to demonstrate now that they are and will develop sustainable hydropower according to EU rules.

Relevant pieces of EU legislation and international agreements

Hydropower development should be done while respecting relevant EU legislation and international agreements to which the WB countries are Parties. This includes:

- Renewable Energy (Renewable Energy Directive 2009/28/EC)
- Energy Efficiency Directives (2012/27/EU; 2010/30/EU; 2010/31/EU)
- Environmental Impact Assessment Directive (Directive 2011/92/EU as amended by Directive 2014/52/EU) and Strategic Environmental Assessment Directive (Directive 2001/42/EC)



- Water Framework Directive (Directive 2000/60/EC)
- Habitats Directive (Directive 92/43/EEC) & Birds Directive (Directive 2009/147/EC)
- Floods Directive (Directive 2007/60/EC)
- Paris Agreement on climate change
- Aarhus Convention (the UNECE Convention on Access to Information, Public Participation in Decisionmaking and Access to Justice in Environmental Matters)
- Espoo Convention (the UNECE Convention on Environmental Impact Assessment in a Transboundary Context)
- Berne Convention (the Berne Convention on the Conservation of European Wildlife and Natural Habitats)

The framework conditions and legal obligations for hydropower development stem from the EU acquis and international obligations, the implementation of which should be supported through the Energy Community Treaty (to which all of the WB6 countries are signatories) as well as International River Basin Organisations.

As **Contracting Parties (CPs) to the Energy Community Treaty (ECT)**, the WB6 countries have obligations and deadlines to adopt and implement acquis closely related to the energy sector / market development and environment such as:

- Electricity (Directive concerning common rules for the internal market in electricity (Directive 2009/72/EC); Regulation on conditions for access to the network for cross-border exchanges in electricity (Regulation (EC) 714/2009); Regulation on submission and publication of data in electricity markets (Regulation (EU) 543/2013))
- Security of supply (Directive concerning measures to safeguard security of electricity supply and infrastructure investment (Directive 2005/89/EC)
- Infrastructure (Regulation on guidelines for trans-European energy infrastructure (Regulation (EU) 347/2013)
- Energy Efficiency Directives (2012/27/EU; 2010/30/EU; 2010/31/EU)
- Renewable Energy (Renewable Energy Directive 2009/28/EC)
- EIA Directive (Directive 2001/92/EU);
- SEA Directive (Directive 2001/42/EC);
- Birds Directive (Directive 79/409/EEC);
- Directive on environmental liability with regard to the prevention and remedying of environmental damage (Directive 2004/35/EC as amended by Directive 2006/21/EC, Directive 2009/31/EC)
- Large Combustion Plants Directive 2001/80/EC

<u>Note:</u> We recognise that close coordination between the energy, environment and climate change legislation and policies is necessary in the context of sustainable hydropower development.

However, to avoid duplications in the BRs, issues related to the WFD and Floods Directives are addressed in more detail in BR-2 (Hydrology, integrated water resources management and climate change considerations) and BR-5 (Transboundary considerations), respectively while all other Directives (in addition to the WFD and Floods Directives) comprising the EU environmental legislative package (Habitats, Birds and SEA/EIA) are addressed in more details in BR-3 (Environment considerations),

Small Hydropower Plants in the Regional Strategy for Sustainable Hydropower in the Western Balkans

While the 390 small hydropower plants in the Western Balkans 6 region represent almost 90% of all hydropower plants, they only produce 3-5% of the total hydropower generation and constitute 7% of the total hydropower capacity, most of hydropower energy and capacity in the region being delivered by the large hydropower plants.

This raises the question of the role of small hydro power plants and the pertinence of further developing such infrastructures. Their contribution to the global energy production and security of supply, or to the renewable energy sources targets, is extremely limited. In parallel, their impacts on the environment are severe, as they create multiple interruptions in water flows and fish passages, increase habitat deterioration and require individual



road access and grid connections. Furthermore, while most of these small hydropower plants were commissioned after 2005, when the state-support schemes – mainly feed-in tariffs which will be phased out after 2020 and hence it is expected that the private sector interest in developing small hydropower plants will diminish significantly.

Due to the large number of small hydropower existing plants and projects, and due to the questions on their role and pertinence, the Regional Strategy for Sustainable Hydropower in the Western Balkans focused on major hydropower contributors to the power system, that is to say large hydropower plants of a capacity above 10 MW. Nevertheless, wherever possible, small hydropower plants have also been addressed in the study.

1 Introduction

1.1 Objectives

The objective of this report was to investigate existing institutional and organisational aspects, together with the governing legal and regulatory framework in the WB6 countries that concern the development of hydropower generation projects, both from the regional perspective as well as from the position of the individual WB6 countries. This investigation led to the facts and conclusions that are presented in this report. The report also lists relevant institutions in WB6 as well as governing documents important for the process, describes their impact and recognises evident gaps. This gap analysis is used to produce a set of recommendations for improvement of the institutional, organisational, legal and regulatory (I.O.L.R.) framework for HPP development, also presented in this Background report.

1.2 Activities

This BR summarises activities under Task 2: "Assessment of the current situation in the institutionalorganisational framework relevant for hydropower development" and Task 3: "Assessment of the current situation in the legal-regulatory framework relevant for hydropower development" of this project. The work on these project tasks and the structure of this background report has been based on the following main activities undertaken for all WB6 countries:

- 1) Analysis of the existing I.O.L.R. framework in individual WB6 countries, identification of institutions and effective legislation;
- 2) Gap analysis of the existing I.O.L.R. framework in WB6 countries; and
- 3) Developing proposals for improvements of the existing I.O.L.R. framework in WB6 countries and in the region as a whole, with recommendations for follow-up actions.

1.3 Links with other tasks/background reports of the Study

This task/background report is closely connected with the following tasks/background reports of the Hydropower Development Study ("the Study"):

- Task 4: "Assessment of hydrology baseline, water-management by country and by river basin with transboundary issues" summarised in the background reports BR-2 (Hydrology, integrated water resources management and climate change considerations) and BR-5 (Transboundary considerations);
- Task 5: "Grid connection issues in network development context" summarised in BR-6 (Grid connection considerations); and
- Task 7: Environmental, Biodiversity and Climate Change Analysis on (i) river basin level and (ii) countrylevel of identified hydropower schemes, presented in BR-3 (Environment considerations).

2 Methodology

2.1 Methodology for I.O.L.R. framework gap analysis

Gap analysis of the I.O.L.R. framework in WB6 is an extraordinarily demanding task that involved several main work streams. Firstly, it was necessary to identify which institutions in each WB6 country are involved in the framework for development and implementation of HPP projects. The second step was to identify the roles and responsibilities of these previously identified institutions, as well as the interrelations between them, followed by the acquisition and compilation of all relevant documents that define the entire HPP development framework. In the next step, all the parts/phases/sequences of hydropower project development were identified as they are currently regulated in the effective legislation. Finally, the entire I.O.L.R. framework for HPP development was scrutinized for its feasibility, efficiency and transparency.

These activities, listed above, have been executed in very close coordination with relevant institutions in the WB6 countries. Assistance from all institutions was provided via National IPA Coordinators (NIPAC) and field activities were conducted under the umbrella of the line Ministries. Where applicable, the actual implementation of the I.O.L.R. framework for HPP development was also analysed from the HPP Developer's point of view by collecting practical experiences (and proposals for improvement) from those who already "passed along that road".

2.2 Methodology of development and presentation of I.O.L.R. flow charts

An I.O.L.R. flow chart was developed for each of the WB6 countries², with BiH having two I.O.L.R. flow charts, one for Federation of Bosnia and Herzegovina (FBiH) and one for the Republika Srpska (RS). These flow charts were developed with an aim to be: easy to understand, intuitive, informative, and easily comparable between the countries.

The overall template of the flow chart is organised in three vertical columns (see Annexes 1-2):

- 1. Phase designation and estimation of the duration
- 2. Main licensing stream; depicting the main steps in the project licensing
- 3. Conditional licensing steps; depicting conditional steps in project licensing

Column (1)

The expected range of duration is estimated for each of the steps and consequently for each phase and is shown to the left of the main project development stream. Smaller and less complex projects can be expected to conclude the licensing procedures closer to the shorter estimated time, while, larger, more complex projects will probably take longer. Very large projects can take significantly longer time to be implemented.

Institutions and authorised organisations are colour-coded as follows in Table 1.1.

²These I.O.L.R. flow charts are presented in Annex 1 of this report in PDF and in Annex 2 of this report in Visio.



Table 1.1: Denotation of colour-coded system in I.O.L.R. flow charts

Construction	Yellow background, red letters
Grid	Purple background, dark purple letters
Energy	Red background, dark red letters
Environment	Green background, dark green letters
Issuing concessions& Resources	Blue background, dark blue letters
General	Grey background, dark grey letters
HPP Developer	Light blue background, black letters

In addition to the colour-coding system, the steps that are not crucial for the licensing procedure are greyed out (40% transparent).

Columns (2) and (3) are both organised as follows:

HPP Developer activity/request -> Institution approached -> Institution output

These are depicted with symbols as follows:



Rectangle - Institutions and authorised organisations which the HPP Developer has to approach to request specific documents. Each of those is colour-coded per the explanation below.



The shape above represents documents produced by an HPP Developer, institution or authorised organisation which are needed for the licensing procedure. Colour coding is respective to the source/producer of each of the documents. If colour coding is applied to font and lines (background/filling remains white), the document represents "primary" documents which are produced for the licensing procedure. If the colour coding is applied also to the filling of the documents symbol, it represents a "secondary" document which an HPP Developer or institution completed as supporting documents for purposes of producing "primary" documents.



This shape denotes procedures or actions which HPP Developer needs to conduct within the licensing procedure. Procedures (actions) correspond to colour specific for HPP Developer (table below). Steps are shown in their required chronological order, one below the other. Steps which are not mandatory, i.e. which are required only if certain conditions are met (i.e. if the project is eligible for a renewables support scheme) are shown in an additional right-side column. Possible overlapping of steps is not depicted; however, it can be inferred as the requirements for starting each step are also listed. Thus, a step can start as soon as all its required conditions are met.

Steps are organised in 4 general project development phases:

- Prefeasibility phase
- Project development & design
- Construction
- Trials & operation

3 I.O.L.R. framework in WB6

All WB6 countries have signed the Stabilisation and Association Agreements (SAA) which, depending on the country, entered into force during 2004-2016. At the time of drafting this report, there are four WB6 countries that have been granted Candidate Country status: Albania, the former Yugoslav Republic of Macedonia, Montenegro and Serbia, while Kosovo and Bosnia and Herzegovina have the status of Potential Candidate countries. In two countries, Montenegro and Serbia, the accession negotiations have already started.

By signing the SAA, all WB6 countries have committed to accept, transpose and implement the whole EU *acquis* as in any EU Member State or (potential) candidate country. Therefore, in undertaking this study, one of the main assumptions was that all WB6 countries are adopting and will eventually be bound by the whole of the acquis legislation. Consequently, the methodologies applied in the Study were assumed to be the same across the whole region, as if acquis transposition is complete throughout the WB6.

However, due to the different status and implementation progress in EU-accession of the WB6 countries, the status of transposition and implementation of the acquis related to natural / water resources and the environment is different in the WB6 countries. The Study was therefore confronted with different current legal-regulatory frameworks in the WB6 countries, together with different prospective speeds of legislative change in the future.

The mandatory actions arise on the WB6 countries from the acquis under the SAA and conventions which (relating to the Study) comprise of:

- Renewable Energy (Renewable Energy Directive 2009/28/EC)
- Energy Efficiency Directives (2012/27/EU; 2010/30/EU; 2010/31/EU)
- Environmental Impact Assessment Directive (Directive 2011/92/EU as amended by Directive 2014/52/EU)
- Strategic Environmental Assessment Directive (Directive 2001/42/EC)
- Water Framework Directive (Directive 2000/60/EC)
- Habitats Directive (Directive 92/43/EEC)
- Birds Directive (Directive 2009/147/EC)
- Floods Directive (Directive 2007/60/EC)
- Paris Agreement on climate change (It is highly relevant to mention here that all the WB countries, with the exemption of Kosovo are parties to the Convention, they have all but the former Yugoslav Republic of Macedonia ratified the Paris Agreement and have submitted their contribution to it. It is closely linked to the implementation of the 2030 Agenda on the Sustainable Development, and specifically the Sustainable Development Goal no. 13 on Climate Change)
- Aarhus Convention (the UNECE Convention on Access to Information, Public Participation in Decisionmaking and Access to Justice in Environmental Matters)
- Espoo Convention (the UNECE Convention on Environmental Impact Assessment in a Transboundary Context)
- Berne Convention (the Berne Convention on the Conservation of European Wildlife and Natural Habitats)

Additional mandatory actions on the WB6 countries arise from their status as Contracting Parties (CPs) to the Energy Community Treaty (ECT), where the CPs to the ECT have clear obligations and deadlines to adopt and implement *acquis* closely related to the energy sector / market development as well as environment. Relevant to the Study are selected elements of EU energy *acquis* as transposed in the Energy Community:

- Electricity (Directive concerning common rules for the internal market in electricity (Directive 2009/72/EC); Regulation on conditions for access to the network for cross-border exchanges in electricity (Regulation (EC) 714/2009); Regulation on submission and publication of data in electricity markets (Regulation (EU) 543/2013))
- Security of supply (Directive concerning measures to safeguard security of electricity supply and infrastructure investment (Directive 2005/89/EC)



- Infrastructure (Regulation on guidelines for trans-European energy infrastructure (Regulation (EU) 347/2013)
- Energy Efficiency Directives (2012/27/EU; 2010/30/EU; 2010/31/EU)
- Renewable Energy (Renewable Energy Directive 2009/28/EC)
- Environmental acquis included in ECT: EIA Directive 2011/92/EU amended 2014/52/EU; SEA Directive 2001/42/EC; Birds Directive 79/409/EEC; Directive on environmental liability with regard to the prevention and remedying of environmental damage 2004/35/EC as amended by Directives 2006/21/EC, 2009/31/EC, 2013/30/EU).
- Large Combustion Plants Directive 2001/80/EC

In all WB6 countries basic legal framework has been adequately transposed and takes into account relevant EU Directives on EIA, SEA, WFD,Floods, Habitats and Birds Directives. However, there is a problem with implementation and lack of application of standard procedures on the part of competent authorities and investors. Major problem represents unwillingness to consider alternatives and appropriate justification for proposed solution, to propose adequate protection measures to avoid negative impact, to enable public participation or to notify another country in case of transboundary impact. All of the above represents serious obstacle for sustainable water/energy management and transparent decision-making.

Public participation and access to information is required by the WFD, Espoo, Berne and Arhus Conventions. All WB6 countries are signatories of Espoo Convention except for Kosovo and parties in Aarhus convention as a part of EU accession process.

Aiming at avoiding duplications in the BRs, issues related to the WFD and Floods Directives are addressed in more detail in BR-2 (Hydrology, integrated water resources management and climate change considerations) and BR-5 (Transboundary considerations), respectively, while all other Directives (in addition to the WFD and Floods Directives) comprising the EU environmental legislative package (Habitats, Birds, SEA and EIA) are addressed in more details in BR-3 (Environment considerations).

In the electricity sector, in particular, all WB6 countries committed to transform ownership, organisation and operations of the electrical transmission and distribution networks in accordance with the EU 3rd Energy Legislation Package. Consequently, transmission and distribution network operations are subjected to the same set of rules, with the prospect of completely unifying them under the ENTSO-E Network Codes umbrella due to the coordination and cooperation between regional TSOs at a very high level. This is partly due to the fact that generation, transport and consumption of electricity are real-time activities associated with high level of risks, and partly due to the fact that this region was operating separately from the main European interconnection from 1992 till 2004 in a small and vulnerable regional interconnection (known also as The Second UCTE Synchronous Zone), where close cooperation and mutual assistance was a must.

Looking at the I.O.L.R. framework for hydropower generation development in WB6, it must be noted that, even if final result of these projects affects mainly energy, in particular electricity, sector in WB6 countries, major impact on and from hydropower generation projects development is in other areas. Hydropower generation projects use natural water resources and their development have significant impact on the environment, on the society, even on other communities, cantons, entities, even countries, since the river basins are often spreading over several regional and even some WB6 neighbouring countries. In the project development process three main steps are identified:

- 1. Determining source of power obtaining concessions/rights for use of natural resource (water),
- 2. Enabling physical execution of the project obtaining location, land rights and construction permit, and
- 3. Ensuring delivery of the produced electricity network connection, PPA and operational permits.

Major challenge in project development and implementation, which stretches over all three main project steps, is compliance with the environmental and social requirements. The environmental and social criteria are highly positioned among concerns in determination and granting of water use concessions, they are key criteria in securing location and construction permits, and finally they have significant impact on the design and construction of network connection infrastructure and exploitation of hydro power plants (ecological minimum, fish paths, etc.). Similarly to the compliance with the Directives and Regulations in electricity sector from the EU 3rd Energy Package, WB6 countries through their acceptance to transpose environmental and water directives committed to scrutinise each project towards the requirements of these documents. Accordingly, permitting process described



in the further sections of this report strongly depends on the compliance of the designed facilities with the requirements of the main EU environmental and water directives, where the most important ones are the following:

Birds (2009/147/EC) **and Habitats** (92/43/EEC) **Directives (BHD)** - The main objective of the Birds Directive is to protect habitats for endangered and migratory bird species, since habitat loss and degradation are the most serious threats to the conservation of wild birds. Therefore, it is very closely connected to the Habitats Directive, whose ultimate objective is to protect, maintain or restore a favourable conservation status of selected species and habitats of Community importance. The Habitats Directive also seeks to establish and develop a coherent network of special areas of conservation (Natura 2000 sites). In addition, species (e.g. priority fish and other river species) outside a protected area are covered by the BHD; a particular focus of establishing a coherent network of protected areas is also developing habitat connectivity outside of the protected areas. Appropriate assessment³ is to be conducted after screening process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans. Appropriate assessment considers impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives.

Environmental Assessment Directives (EIA Directive 2014/52/EU amending 2011/92/EU and SEA 2001/42/EC Directive)⁴ - The common principle of both the SEA and EIA Directives is to ensure that plans, programmes and projects, respectively, likely to have significant effects on the environment are made subject to an environmental assessment, prior to a decision on their approval, authorisation or rejection. Consultation with the public is a key feature of all environmental assessment procedures. The EIA Directive includes special provisions for cases in which a project implemented in one Member State is likely to have significant effects on the environment of another Member State. Convention on Environmental Impact Assessment in a Transboundary Context (UNECE1991), known as the Espoo Convention, introduces specific rules for conducting an EIA of activities located on the territory of one contracting party, defined as the Party of origin, and likely to cause significant adverse transboundary impact in another contracting party, defined as the affected Party. The Directives on Environmental Assessment aim to provide a high level of protection of the environment and to contribute to the integration of environmental considerations at the earliest stage into the preparation of projects, plans and programmes (not only for spatial planning ones but also for other sectors such as energy strategies, plans and programmes) with a view to reducing their environmental and social impacts. They ensure public participation in decision-making and thereby strengthen the quality of decisions. The projects and programmes co-financed by the EU (notably Cohesion, Agricultural and Fisheries Policies) have to comply with the EIA and SEA Directives to receive approval for financial assistance. Hence the Directives on Environmental Assessment are crucial tools for sustainable development.

Water Framework Directive - Within the EU acquis communautaire a complex structure of legislative acts – of which the <u>Water Framework Directive (WFD)</u> 2000/60/EC; counting in a number of specific directives regarding certain types of waters, of waste and/or of environment to include within the programmes of measures) is the most prominent – addresses the issues of relevance to this report, including the one on Strategic Environmental Assessment (SEA) (linked with the WFD by the assessment of river basin management plans procedure), the set on Environmental Impact Assessment (including Directives on Landfill Waste, on Industrial Emissions, on Conservation of Wild Birds, on Habitats, on Carbon Capture & Storage), the so called Seveso III, and on the Promotion of RES. These are at a certain point of transposition and implementation into the national legislations of the acceding countries and all of them will be implemented before they conclude the negotiations and enter membership of the EU. The WFD establishes a legal framework to protect and restore clean water across Europe and to ensure its long-term, sustainable use. Its key elements are:

- an approach to water management based on river basins, the natural geographical and hydrological units;
- setting specific deadlines to protect aquatic ecosystems;
- addressing inland surface waters, transitional waters, coastal waters and groundwater;
- establishing innovative principles for water management, including public participation in planning;

⁴<u>http://ec.europa.eu/environment/eia/index_en.htm</u>

³Assessment of plans and projects significantly affecting Natura 2000 sites; Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, Environment DG, 2001



• integration of economic approaches, including the recovery of the cost of water services.

As the WFD is the key legislation, the WB6 countries are to transpose and implement it. Related to hydropower development, it deserves also a finer grained assessment. The WFD defines the following:

- Coordination in international river basin districts: international districts for river basins that cover the territory of more than one Member State are to be created and their work coordinated;
- Identification and assessment of surface waters, management of groundwaters: Member States should aim to achieve good status in all bodies of surface water and groundwater by 2015;
- Management of artificial and heavily modified water bodies: Member States can designate artificial and heavily modified water bodies;
- Recovery of the costs of providing water services: requirement for an economic analysis of water use with list of the elements that Member States should include in this analysis;
- Monitoring programmes: setting up monitoring programmes to meet the need and goals of the directive;
- Common standards: listing the quality elements to be measured to determine ecological status, classification of surface water bodies, and promotion of joint work on inter-calibration;
- Pollution: focusing pollutants that present significant risk to or via the aquatic environment with 33 currently listed as first priority substances, of which 13 priority hazardous substances are to be phased out completely within 20 years;
- Integrated water policy: directive regards implementation of several other directives as a minimum requirement for the implementation of measures of the basin management planning (for example, water management coordination at the regional level and on the river basin level practically exists through ICPDR and Sava River Basin Commission);
- Climate change: The Floods Directive requires Member States to assess risk from flooding, to map flood risks and to take adequate and coordinated measures to reduce the risk;

The WFD is not yet fully transposed in the WB6 countries, but by the time a hydropower scheme is moving into implementation, the WFD is expected to be fully transposed into the national legislative frameworks. An overview of WFD transposition in the legal framework of WB6 countries is shown in Table 3.4 of BR-5.

Floods Directive - EU Directive 2007/60/EC on the assessment and management of flood risks entered into force in 2007. The aim was to establish a framework for assessment and management of flood risks, having adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the EU. In the context of this BR flood protection is an important benefit of reservoir realisation of the many others, therefore EU Floods Directive is considered relevant also from the point of view of Transboundary Issues. It should be possible to develop sustainable flood protection in a particular River Basin without compromising the environmental objectives of the WFD. All flood risk management activities should be planned and carried out in line with Article 9 of Directive 2007/60/EC, which requires taking appropriate steps to coordinate the application of the Floods Directive with the WFD, focusing on opportunities for improving efficiency, information exchange and for achieving common synergies and benefits regarding the environmental objectives of the WFD. Flood protection is one of the main causes of river and habitat continuity interruption. A normal part of flood action plans are technical flood defence measures (construction of new dykes and consolidation of the banks). These plans must however be combined with the measures for restoration of river and habitat continuity interruptions. Appropriate regulations regarding land use and spatial planning (e.g. limitations related to land use in flood-prone areas) must be adopted in parallel with flood protection activities.

3.1 I.O.L.R. framework - Albania

Albania is a country which is one of the key focus areas in the Study, due to its high hydropower generation potential and very high number of already-issued concessions for development of hydropower generation facilities. Currently, the electricity generation sector in Albania is 100% hydropower based. Accordingly, Albanian electricity sector stakeholders have considerable experience from their hydropower generation development and operations activities. However, 85% of all the existing hydropower plants were constructed by 1985 (under the central planning economy system), when the entire process of hydropower generation development - from initial idea, through detailed study, to construction - was coordinated by the vertically integrated power utility. After unbundling in 2004 and partial privatisation of electricity sector(distribution) in 2009, this planning, development and coordination role was not immediately taken over by other institutions, partly due to the lack of immediate demand for new generation facilities caused by a significant drop in electricity demand. Also, due to the low final



prices of electricity, and low revenues / collection streams, the existing electricity generation incumbent KESH was not capable of continuing to develop new, or to refurbish existing generation facilities, so that utilisation of Albanian national hydropower potential could continue. Due to the political instability at those times, foreign HPP Developers also failed to invest in the power generation sector in Albania. So, apart from approximately 130 MW constructed in 7 medium-size HPPs of more than 10 MW of capacity during 2012-2015, in practice there were no major new power generation facilities constructed in Albania for more than 30 years.

Since June 24th 2014, Albania has become a candidate country for EU accession. Under Albania's Stabilisation and Association Agreement (SAA) with the European Union (EU) and being a signatory to the Energy Community Treaty (ECT), it is obligated to implement the *acquis communautaire*, which includes developing the energy sector based on the principles of market economy and integration with the European energy markets. The medium-term objective is to harmonise the entire legal framework with the *acquis* in order to align the Albanian energy market with European standards and norms, and also to provide support for the integration of Albania into the regional and European electricity transmission grids.

From the institutional point of view, the energy sector in Albania has made significant progress during the last decade, not in terms of establishing institutions (because they existed before) but in terms of their staffing, organisation, operations, efficiency and overall results. Their institutional and organisational framework is additionally being improved through the process of EU accession. However, in terms of capabilities, the Albanian institutions, in both the energy and water management sectors, still have some way to improve and develop, by gaining additional experience in HPP projects development under the current framework and addressing new market-based challenges. However, their progress seems to be positive and with further institutional support, positive results are likely. The main institutions relevant for the development of hydropower generation projects in Albania are presented in Table 3.1 below.

Stakeholder / Institution	Role / Responsibility	
Parliament of Albania	The Parliament of Albania adopts Energy Law, RES Law, and all other laws that have impact on the development of hydropower generation projects. This institution adopts National Energy Strategy and decides on concessions for major hydropower development projects. Also, national Parliament decides on loan agreements that support development of hydropower generation projects.	
Government of Albania	The Government of Albania prepares and proposes all acts and documents that National Parliament adopts. Also, Government adopts action plan for implementation of Energy Strategy and National Renewable Energy Action Plan (NREAP). The Government guides and endorses policy in the electricity sector, adopts incentive measures for the development of RES generation and coordinates large infrastructural multi-disciplinary hydropower generation projects.	
	MEI is fully responsible for the electricity sector. MEI is the responsible institution for the development of energy policies and mid-term and long-term strategies for the energy sector. MEI is also responsible for the assessment and revision of the requirements for the rights to concession for the construction of hydropower plants. The mission of the ministry in the sector of energy is to promote rapid and sustainable economic development through:	
Ministry of Energy and Industry (MEI)	 Preparation, periodical review and update of the National Energy Strategy; Promotion of energy efficiency and renewable resources, including small hydro power plants (SHPPs); 	
	 Promotion of private local or foreign investments in the sector of energy, building an attractive legal climate for these investments; 	
	 Development of market reforms in the power sector to meet the national objectives for the integration in EU and development of a rational electricity market; 	
	Formulation of the adequate legal framework;	
	Preparation for the privatisation of state energy companies.	
Ministry of Environment	MEnv is fully responsible for environmental protection, specifically for air, waste, chemicals, climate changes and of forests, protected areas and biodiversity.	

 Table 3.1: Main institutions/stakeholders and their roles/responsibilities in the hydro power sector in

 Albania

Stakeholder / Institution	Role / Responsibility
(MEnv)	Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into national legislation and their implementation are important part of the MEnv portfolio. MEnv is responsible for approving the strategic environmental assessments for any territorial or sector-based plan approved under the Law on planning and development. In addition, MEnv is responsible for policies related to climate change and is the focal point for the Albanian government in respect of the UNFCCC and Kyoto Protocol. MEnv also exercises the powers of the national authority in Albania for Clean Development Mechanism projects defined under the Kyoto Protocol.
Ministry of Agriculture, Rural Development and Water Administration (MARDWA)	Within MARDWA there is a national Directorate for Administration of Water Resources. The role of this Directorate is in supporting agricultural development through the sustainable management of irrigation, drainage and flood protection, improving efficiency of water resources usage for irrigation and reducing the risks of dam destruction and river and sea flooding. The "Water" Directorate, and the Ministry as a whole, are responsible for transposition of the EU Water Framework Directive and EU Directive on floods in Albanian legislation, as well as their further implementation. This part of the MARDWA is responsible for issuing all water use permits for hydro power generation projects. This Directorate also participates in preparation of concessions for the utilisation of water resources for generation of electricity. Last but not least, this institution coordinates priorities among different purposes and different users of water resources.
Ministry of Urban Development (MUD)	MUD is responsible for the development of spatial planning policies and issues licenses for the design, construction, supervision and testing of construction works. This Ministry is also responsible for issuing professional licenses for the individuals involved in the design, supervision and testing of construction works. Within MUD operates the National Agency of Territorial Planning, which is a public institution responsible for spatial and urban planning, which are crucial steps in the development process for new generation projects, especially hydropower generation.
National Territorial Council (NTC)	NTC is the decision-making body responsible for the adoption of the national territorial planning instruments defined by the law. NTC is a collegial body of the Council of Ministers. NTC has the following powers:
	 Decides on the approval, approval with changes, postponement for subsequent review or non-approval of the national territorial planning instruments;
	Decides on the approval of the identification of national importance of a territorial planning related issue;
	 Revises and adopts the compliance of the local planning instruments with the applicable national planning instruments;
	 Requires the development of national territorial and local plans from the relevant planning authorities; ensures compliance with technical and procedural standards defined by law.
	Approves construction projects where they are part of main development projects, including the construction of new power plants.
Ministry of Economic Development, Trade, Entrepreneurship and Tourism (MEDTET)	MEDTET is responsible for the overall development strategy for the country's economic development. Several other entities that play a role in Hydropower development are subordinated to this ministry. Within the MEDTET there is the National Licensing Centre (NLC), a public institution established by law with the mission to facilitate licensing procedures, authorisations and permits issued by public authorities. The NLC is designed to function as a "one-stop centre" (one-stop-shop) for all licenses, authorisations and permits issued by public authorities. Similarly, under the umbrella of MEDTET there is the Agency for Treatment of Concessions whose mission is to support the Contracting Authority in evaluating and negotiating the concessions in all areas, including the construction of hydropower plants.
National Agency of Natural Resources (AKBN)	AKBN focuses on the development and supervision of a rational use of Albania's natural resources, based on governmental policies and monitoring their use in mining, hydrocarbons and energy. AKBN has a number of responsibilities under the law for RES as the body responsible for RES development.
National Environmental	NEA is a subordinate institution under the Ministry of Environment, which is responsible



Stakeholder / Institution	Role / Responsibility	
Agency (NEA)	for reviewing the environmental impact assessment process for projects under law no. 10 440, dated 7.7.2011 "On environmental impact assessment", as amended, and for reviewing environmental permit applications. Further, this Agency is responsible for environmental monitoring.	
National Water Council (NWC) (Technical Secretariat)	NWC is a central decision-making authority and it determines the national policy over water resources. The Prime Minister chairs the NWS. NWC has its Technical Secretariat as its executive authority.	
Energy Regulatory Entity (ERE)	ERE is an independent public body responsible for the regulation of activities in the sectors of electricity and natural gas. ERE is the body responsible for issuing licenses to carry out activities of generation, transmission, distribution, supply and trade of electricity. It is responsible for the approval of the grid codes that provide to all electricity producers the rules for connection to and operation with the transmission and distribution networks. ERE has also the authority to adopt promotional tariffs (feed-in) to all eligible producers of electricity from renewable sources, and to define a standard agreement for the purchase of energy from the priority RES producer. An important role of ERE is the development and adoption of electricity market rules and monitoring of electricity market operations.	
Transmission System Operator (OST)	OST is a public company with 100% of state-owned shares. OST was created on 14/07/2004 as a result of the reform and the separation of the vertically integrated Albanian Power Corporation (KESH). OST performs roles of the Transmission Network Operator, Power System Operator and Market Operator.OST provides necessary transmission capacities for uninterrupted supply of electricity to final customers, for the transmission of electricity generated from domestic sources, as well as for the transit and exchanges with other countries in the region. OST develops the transmission system in accordance with (i) the requirements of the country's long-term supply of electricity, (ii) with plans for developing new sources of energy and (iii) coordinates the development of network interconnections with neighbouring countries. OST is dispatching power system facilities, managing power flows, acquiring and utilising necessary ancillary services, and coordinating parallel operation with other systems. An important role is that as the Operator of the electricity market, a function which is expanding gradually with steps being taken to create a free market for electricity in Albania, as well as its integration into the regional electricity market.	
Albanian Power Company (KESH)	KESH is a public electricity generation company and at the same time the largest producer of electricity in Albania. KESH administrates and controls the Drin River Cascade of hydropower plants (HPP Fierza, HPP Komani and HPP Vaui Dejes) with a total installed power of 1,350 MW. Through operating 79% of electricity generation capacities in the country, KESH provides about 70-75% of the electricity for electricity tariff customers, provides the energy needed to cover losses in the transmission system, and provides the balancing energy and ancillary services that guarantee security of power system operations.	
Electricity Distribution System Operator (OSHEE)	OSHEE is a legal actor, responsible for the safe, credible and effective development, maintenance and operation of the distribution system. The Electricity Distribution System Operator (DSO) owns the distribution system of high, medium and low voltage network assets and provides electricity supply to all consumers connected to its network. The DSO is obliged to connect to the distribution system all consumers and/or producers, in a transparent and non-discriminatory way, as foreseen by the regulations in force. It plays important role in the process of the development and integration of renewable energy sources in the power system of Albania, including SHPPs.	
Municipalities	Municipal authorities are in charge of spatial planning in their area, but only for SHPP projects. They issue location conditions and Location Permits for SHPPs.	
Other stakeholders	Academy of Sciences of Albania Institute of Geo-Sciences, Energy, Water and Environment Albanian Geological Survey NGOs	



3.1.1 Permitting Process - general

As indicated above, the main strategic institutions are the Ministry of Energy and Industry, the Energy Regulatory Entity and the Government of Albania. The Government of Albania has adopted the Energy Sector Strategy for 2006to 2020, which provides a quantitative description of the measures needed to increase energy efficiency and to introduce alternative sources of energy. The Energy Strategy is part of a national general strategy for the economic development of Albania. The Government has also adopted the National Renewable Energy Action Plan in line with the Energy Strategy and the Law on Renewable Sources of Energy⁵.

The Ministry of Energy and Industry (MEI) is the highest state authority in drafting policies and strategies applicable to the energy sector. The main mission objectives of MEI in the energy sector are the development of policies to ensure a safe and normal supply of energy to the consumers, to develop sustainable growth of the country's economy. It determines policies at the national level for developing different kinds of energy delivery systems, policies in the field of energy efficiency and measures for implementing these energy modalities. MEI has the authority to supervise the activity of companies with state-owned capital and it has the power to appoint all the members of the Supervisory Councils of these companies.

The core activities in the permitting procedure for hydropower development projects in Albania are related to the concession on water, where main players are National Agency of Natural Resources (AKBN) and National Water Council. All these activities are coordinated and monitored by the MEI. Ministry of Urban Development and National Territorial Council are key institutions for obtaining location conditions and permits, as well as land use rules and regulations. Ministry of Environment is a crucial institution for obtaining the environmental permit which is, if pending, a disqualifying criterion for the HPP project in a process of obtaining Construction Permit in Albania. Finally, the relevant network operators (OST and OSHEE) are involved in the grid connection issues/permits, but details related to the grid connections are given in the Background Report 5. In the sub-sections below are described various stages in the permitting process.

3.1.2 Concessions

The Albanian legal framework on concessions was put in place in 2006 and used extensively thereafter, especially in granting of concessions in the hydropower sector. It is notable that most of the concession award procedures have been based on the "unsolicited proposals⁶" procedure. The unsolicited proposals practice has actually hindered the development of a publicly-driven investment policy, because it is private HPP Developers rather than public sector planners who have selected the projects they want to undertake. This has meant that the government has not been in a position to drive the private sector participation strategy, but instead was responding to the private HPP Developers' interest. Due to the limited planning, management, and analytical capabilities of the public sector, the award of concession contracts was not always fully aligned to public interest. In the energy sector, there have been more than 500 concessions granted on the DBOT (Develop-Build-Operate-Transfer) principle for SHPPs, primarily awarded through unsolicited proposals. However, only 84 SHPPs are in the construction phase and 307 (with a total capacity of 1,127 MW) are still in the project development phase⁷. The new Law on Concessions and Public Private Partnerships⁸ (the Concession Law), which in conjunction with the Council of Ministers' Decision no. 575⁹, and Council of Ministers Decision no. 576¹⁰, introduced a number of changes relevant to the implementation of public-private partnerships (PPP) when compared to the provisions of the previous 2006 concessions law. Under the Concession Law¹¹, generation and distribution of electricity are among the areas of public services and infrastructure where concession/PPP projects may be awarded for these sectors, leaving room for different interpretations of the Concession Law. Identifying potential concession/PPP

⁵ Law on Renewable Sources of Energy, no. 138/2013.

⁶Unsolicited proposals procedure means that concessions were granted based on the proposal of the investor to the Agency.

⁷ Cost-Competitive Renewable Power Generation: Potential Across South-East Europe, IRENA, January 2017.

⁸Law on Concessions and Public Private Partnerships, No. 125/2013.

⁹Decision no. 575, dated 10.07.2013, on the approval of the rules for the evaluation and granting of concessions/public private partnerships.

¹⁰Decision no. 576 dated, 10.07.2013, on the approval of the rules for the identification, assessment, and granting of the concessions on hydropower plants.

¹¹ Article 4.



projects is task of the central government agencies or local government. The projects may also be identified by third parties, through unsolicited proposals, provided that the project identified has not already been procured through the activities/tenders of the central government agencies or local government. In case of unsolicited proposals for energy sector concessions, the Council of Ministers may grant a "bonus" of up to 10 percentage points to the contractor for an unsolicited proposal, to be used when comparing the given concessionaire's proposal with offers from other private sector partners. According to the Concession Law it is the responsibility of the contracting authority to prepare a feasibility study for the concession/PPP project. Like the previous law on concessions, establishing a "special project vehicle" may be required during the concession procedure, though its requirement it is left to the discretion of the contracting authority.

Concession contracts are generally awarded in a competitive procedure under the public procurement rules. The Concession Law establishes that the concession contract may be awarded to the bidder with the most economically advantageous offer. Therefore, in awarding the contract, the contracting authority may consider criteria, such as: quality, price, technical merit, aesthetic and functional characteristics, environmental, characteristics, running costs, cost effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion. Alternatively, the concession contract may be awarded to the bidder simply based on the best price, i.e. the highest offered concession fee. Under the concession law, the duration of concession contracts may not exceed thirty-five (35) years, however it may be extended due to subsequent amendments of the concession contract.

The new Concession Law seeks to increase transparency, efficiency, fairness, and long-term sustainability of PPPs. The procurement procedures are subject to the public procurement law as is the redress process where the Public Procurement Agency is charged with reviewing complaints from bidders.

Development of new generation facilities can also be done through the Energy Law¹², but only for those not being subject to concession. Depending on the installed capacity of the power plants, (<2 MW or >2 MW), the approval is granted by the Minister of Energy or the Council of Ministers. However, having in mind Article 4, paragraph 1 b) of the Concessions Law, we may conclude that developing/construction of large HPPs will always be organised in accordance with the stipulations of the Concessions Law¹³, and not in accordance with the Law on Energy.

3.1.3 Environmental Permits

In principle, an environmental permit is mandatory for all natural/legal persons (companies) exercising activities that have, or may have, an impact on the environment. Such an Environmental Permit is issued by the competent authority at the request of the company based on the technical documentation submitted and an analysis of environmental impact studies. An Environmental Permit is required for any type of power generation installation; hence it applies to HPPs, too.

The competent authorities for the approval of the Environmental Permit are the Ministry of Environment and the National Environmental Agency. The activities requiring a permit fall into two categories, depending on whether an in-depth evaluation or a short-form evaluation will have to be performed under the guidelines set by the Albanian Environmental Impact Assessment Law¹⁴. The Environmental Permit is supposed to be issued within five (5) weeks after the date of filing of the application.

3.1.4 Water Permit

A Water Permit, granted in the form of an approval, authorisation or concession, is required for the use of water by hydro power plants based on the Law on Water Reserves¹⁵. Concessions granted by the Government of Albania or its contracting authorities for the construction, use and operation of HPPs, do not substitute for the Water Permit. The Water Permit is issued by the water authorities at the local and central level for a period of up to thirty (30) years.

¹² Article 48.

¹³"Concessions/PPPs may be awarded for the realization of works and/or provision of services in and for the following sectors and purposes: a)...; b) Generation and distribution of electricity and heating energy;"...

¹⁴Law no. 10440, dated 7.7. 2011, on Environmental Impact Assessment.

¹⁵Law no. 8093, dated 21.3.1996, on Water Reserves.



3.1.5 Spatial and Construction Permits

The Law on Territorial Planning and Development¹⁶ (Territorial Planning Law) is the currently applicable regulation, regulating the principles on construction and related aspects. The mandatory process for the approval of construction begins with an application for the approval of a development permit, which must be obtained before commencing any new development. HPP Developers and concessionaires are, hence, obliged to get a development permit in accordance with the Albanian/municipal spatial plans.

Under the Territorial Planning Law, every physical or legal person, local or foreign, intending to carry out a new development/construction in Albania, either on private or public property (enjoying legal rights over the land), must apply for a development permit for any land development, or development of the structures upon it, or for the carrying out of work with regards to such structures.

As of 2011, the Site Conditions and Construction Permit have been merged into one, by virtue of the previous Law on Territorial Planning. According to this law, an Infrastructure Permit was to be issued by Ministry of Energy, in lieu of the municipalities. However, technical commissioning was still requested to be issued by the local planning authorities, after the construction of the SHPP is completed.

Recently, an electronic one-stop-shop system for applying for construction permits was introduced and it is expected to increase the transparency of the decision-making process in the institutions involved. However, the capacity of municipalities to prepare local development plans is still limited and seen as a barrier for issuance of development permits. The issuance of a construction permit is also regulated by Territorial Planning Law, according to which construction permit is required for new constructions, repair and restoration work, the erection of temporary structures, or demolition of existing structures, except where the implementing legislation referenced above may otherwise provide. A construction permit is only granted upon completion of a review and certification of compliance of the application with the effective building regulations and/or the stipulations contained in the development permit. Building permits which are contrary to the territorial planning legislation are considered null and void. The validity of the construction permit, i.e. the period within which the HPP Developer should commence with construction is one (1) year.

Issuance of construction permits, based upon a specific application, is done within sixty (60) days from the date of its submission. The ultimate competent authority for approving and issuing a construction permit in relation to an energy generation plant is the National Territory Council.

At the end of the development process and the construction of the installation, the responsible planning authority issues the use permit for the HPP. This use permit confirms the completion of work in compliance with the development permit and construction permit conditions.

The use permit is issued if the records of control confirm that the performance of work is in conformity with the permit conditions and safety requirements, according to the stages set forth in the development control regulations regarding, but not limited to, the foundations, civil, mechanical, electrical works, etc.

In those cases, where a decision has not been made within the time limits prescribed by the relevant legislation, and the applicant has fulfilled all the required administrative steps and requirements, the use permit is deemed approved, and is granted by the responsible planning authority within fifteen (15) days following the request of those concerned, followed by its publishing in the Territorial Planning Register.

In cases where private land, necessary for construction of an HPP is involved, (i) the HPP Developer may seek purchase of the land from the private owner, an issue which is to be covered through a contract for purchase of the land or through a long-term lease agreement, or (ii) the HPP Developer may ask for expropriation of the private land by the state. According to the Law on Expropriations¹⁷, developing of an energy project is deemed to be in public (general) interest, and hence privately-owned land may be expropriated when required, provided that a full and fair compensation was paid to the owner. However, the Law on Expropriations does not expressly mention responsibility for compensation payment costs to the expropriated owner, associated with the expropriated land. Instead, the Law on Restitution and Compensation of Properties sets the compensation levels, according to the list of prices on a region-by-region basis. Nevertheless, where HPP projects are involved, typically, the beneficiary (the concessionaire/HPP Developer) is responsible for providing the compensation

¹⁶Law no. 107/2014, dated 31.09. 2014, on territorial planning and development.

¹⁷Law on Expropriation, no. 8561, dated 22.12.1999.



payment to the private owners. The procedure for expropriation is led by the Ministry of Economic Development, while the decision for expropriation is taken by the Council of Ministers. Once the expropriation is completed, the title of the property is automatically granted to the state, which can then be either leased to the concessionaire, or the concessionaire may be granted right of use of the property. In such cases, the state-owned land is either (i) given on long term lease, (ii) used by granted right-of-way, and (iii) land ownership transfer of the HPP site from the state or local authority to the concessionaire, by means of Concession Contract. If the usufruct option is exercised, the land enjoyment may be granted for maximum of thirty (30) years, whilst in case of long term lease, the lease period may be longer than thirty (30) years.

3.1.6 Energy Permit

Electricity generation is an activity requiring an electricity generation license (for any electricity producer above 1 MW of installed capacity). Despite the fact that a concessionaire does not need to establish a legal presence in Albania (for example to register a SPV¹⁸), the electricity generation license can only be issued to established legal person in Albania. The legal person (a company) must be maintained during the full term of the electricity generation license, which is issued for the period of up to thirty (30) years. The Energy Regulatory Entity is the competent authority for issuance of the electricity generation license. The issuance of the license may take up to four (4) months.

3.1.7 RES Incentive Scheme

In 2013, Albania introduced new legislation abandoning the system of FiT and replacing it with the new system of feed-in premiums in accordance with applicable State Aid legislation on EU (State Aid Guidelines from 2014). Existing users of the previous FiT system will have the right in future to opt-out from the FiT-based supporting scheme to the newly-established RE support scheme. HPPs with an installed capacity not exceeding 15 MW (defined as SHPPs in Albania) still qualify as Preferential Producers, being eligible to conclude a Contract for Differences (CfD) for a term of fifteen (15) years for the purchase of electricity with the newly established RE Operator. The winners of the competitive bidding process, will benefit from the difference between the strike price (determining the maximum level of the reward that can be granted to each project of renewable energy) and reference price (being the price of the traded product in the organised electricity market, or until its creation, a comparable market price for the same product). The tendering (competitive bidding) process terms and procedures, as well as cases of restriction of this process will be proposed by the Minister of Energy and approved by the decision of the Council of Ministers of Albania (the Government).Under the new Law on Promotion of the Use of Energy from Renewable Sources (No. 7/2017), the Minister of Energy will determine limitations to the competitive process, relative to specific technologies in cases when technology neutral competitive process may lead to non-acceptable results of the competitive process.

As a general rule, however, the beneficiaries of the support scheme, under a CfD and the maximal level of such support, will be determined in a tendering process, open to all producers of electricity from renewable sources, on the basis of clear, transparent and non-discriminatory criteria, unless in cases when: (i) only one or a very limited number of projects are eligible for a competitive tendering process; (ii) a tendering process could bring a noticeable higher support levels; or (iii) a competitive process would noticeable result in lower prices.

Important new development is a deflection from the present balancing requirements for RE producers. Namely, per Article 8(4) of the Law, "Priority producers of electricity are responsible for balancing. Producers become a responsible party for balancing, by signing a contract with the transmission system operator or by signing a contract for the transfer of the balancing responsibility to another responsible balancing party, thus becoming a member of a balancing group, in accordance with the respective Market Rules and procedures approved by ERE..."

When it comes to small RE producers, the conditions related to CfD and the competitive process for new generation capacities, do not apply to producers with installed capacity up to 2 MW, except in cases of electricity produced from wind energy, where the exception applies for installed capacity of electricity up to 3 MW or 3 production units of for demonstration projects. The purchase price of electricity from hydropower plants with installed capacity up to 2 MW will be based on a methodology approved by the Council of Ministers, considering

¹⁸SPV- Special Project Vehicle, company established in accordance with the local legislation in Albania; all permits are issued to this company and this company takes care about project financing.



the price of electricity in the organised market, or up to creation of organised market of electricity and will take into account comparable prices in the organised markets of neighbouring countries, plus a fixed bonus for the promotion of these types of energy sources, and providing a reasonable return on investment value. In any case, this price shall not be lower than the price approved by ERE for this kind of technology, at the time of entry into force of the Law.

The guarantees of origin¹⁹ are issued by the ERE, *inter alia*, for all the energy produced from HPPs on an annual basis (less energy used for pumping reserves in case of PSHPPs).

The issuance of the guarantees of origin requires that RES power plant is first qualified as such by the ERE. The qualification procedure lasts up to ninety (90) days. Upon request, the ERE will issue the guarantee of origin annually for the actual (real) amount of electricity produced by the already qualified plants and only if the plant is already in operation.

It is still unclear how the changes in the RES support scheme will be applied, as most of the secondary legislation is expected to be adopted within period of 12 months from the date of entering into force of the Law, including the methodology for competitive bidding, as well as for supporting measures for small RE producers, which will influence the development of hydropower generation projects. Establishment of the Albanian Power Exchange as trading platform is also ongoing and its full operationality is expected to contribute to electricity/RE market reform.

3.2 I.O.L.R. framework - Bosnia and Herzegovina²⁰

Bosnia and Herzegovina (BiH) is a state consisting of two administrative divisions (entities), FBiH and RS, and one internationally supervised district around city of Brčko in the north of the country. Only several areas are administered and governed at the state level, while most of the legal jurisdiction is at the entity level. Entities have their own parliaments, governments and ministries. FBiH entity consists of 10 cantons, and each canton consists of cities and municipalities. Cantons in FBiH also have their own governments and ministries, and legal jurisdiction in FBiH is split between entity and cantons, with numerous overlaps in implementation and unclear rights and responsibilities. According to the FBiH Constitution (article 3.4), where authority is not by the Law explicitly assigned to FBiH entity, it should be executed at the cantonal level or jointly between entity level and cantonal level. Another entity in BiH, RS entity, consists only of cities and municipalities, and most of the legislative power and initiative is at the entity level.

The Institutional, organisational/administrative and legal system at the BiH state level is very complex and inefficient. There are a lot of overlaps and conflicts among various institutions at different levels concerning their authority on different topics. On the other hand, there are a lot of gaps in legislation, and numbers of important areas are either not covered with appropriate legislation, or the effective legislation is incomplete and ambiguous. Almost by default, secondary legislation does not exist, or its adoption is heavily delayed. The reason for this is that, according to the legislation, important decisions at the state level require the full consensus of the representatives of all constitutive nations, which in practice is rather difficult to obtain. In the FBiH entity, the situation is quite similar; the difference is that this common understanding must be reached between two out of the three constitutive nations, with an additional difficulty in vertical harmonisation between the entity and the cantons. From that point of view, RS entity is in slightly better position, and for that reason legal framework is more developed and institutional framework is more efficient.

BiH submitted its application to become an EU candidate country in early 2016, while the Stabilisation and Association Agreement (SAA) was ratified on June 1st, 2015. It is expected that the harmonisation with EU legislation through the association process will improve current situation in the country's institutional framework.

These issues, concerning the functioning of the BiH institutions, directly influence the overall institutionalorganisational framework for development of hydropower generation projects in BiH. This country has significant hydro power potential, part of which has been already utilised, but like in most of the regional countries there were no major developments in this area during last three decades.

¹⁹"Guarantees of origin" are certificates which are basis for HPP developers to receive incentives provided for electricity produced from renewable energy sources.

²⁰ Certain parts of this section have been taken out from the USAID's Energy Investment Activity-EIA Project: Draft Report on the Permitting Regime and Obstacles to Investment in the Energy Infrastructure Projects in Bosnia and Herzegovina.

 Table 3.2: Main institutions/stakeholders and their roles/responsibilities in the hydro power sector in

 Bosnia and Herzegovina

Stakeholder / Institution	Role / Responsibility
	State Level
Parliamentary Assembly of BiH	The Parliamentary Assembly of BiH adopts legislative acts in the electricity sector which are common for the entire state, in particular, Laws related to State Electricity Regulatory Commission (SERC), the Transmission Company (Elektroprenos BiH) and Independent System Operator for BiH (NOS BiH), as well as the Water Act. Existing laws in electricity sector are from 2004 and a revision process is on-going. SERC is not dealing with the power generation sector (except in Brčko District where the scope is negligible), but Transmission Company and NOS BiH have huge impact on HPP development projects, because they define the connection and operation rules in the power system.
Ministry of Foreign Trade and Economic Relations (MoFTER)	MoFTER has duties and responsibilities only in areas under BIH state jurisdiction related to coordination and harmonisation of entity activities in the energy sector related to international cooperation and common projects funded by IFIs. MoFTER also coordinates activities on the preparation of energy sector legislation at the BiH state level. MoFTER compiled the NREAP at the BiH level using REAPs from the two entities. Since most of legal power is at the entity level, MoFTER doesn't have actual power concerning energy sector operations.
State Electricity Regulatory Commission (SERC)	SERC is an independent institution of BiH, which has jurisdiction over and responsibility for transmission of electricity, transmission system operation and international trade in electricity as well as for generation, distribution and supply of electricity for customers in Brčko District BiH. SERC does not have direct influence on HPP development projects, although through regulation of power system operations (approval of Transmission Grid Code) and market operations (approval of Market Rules) this indirect impact may be significant.
Independent System Operator for BiH (NOS BiH)	Public company NOS BiH (owned by FBiH and RS) acts as the power system operator for BiH. NOS BiH is responsible for the power system balancing, stability, electricity transfers with neighbouring power systems, and provision of system services. NOS BiH develops Transmission Grid Code and Market Rules and, together with Elektroprenos BiH, plays important role in connection of new generation facilities to the transmission network.
BiH Transmission Company (Elektroprenos BiH)	Elektroprenos BiH owns, develops, maintains and operates the transmission network in BiH. This public company (owned by FBiH and RS) is responsible, together with NOS BiH, for setting rules for connection to the transmission network. In this sense, Elektroprenos BiH has indirect influence on the development of large HPP projects only.
	Entity Level – FBiH
FBiH Parliament	FBiH Parliament adopts the Electricity Law, RES Law, Law on Construction, Environmental Law, Concession Law, and all other laws that have impact on the development of hydropower generation projects. This institution adopts the entity Energy Strategy and approves, upon proposal of the Government, Energy permits for hydropower development projects above 30 MW.
FBiH Government	FBiH Government prepares and proposes all legal acts and documents that FBiH Parliament adopts. Also, Government adopts the action plan for implementation of Energy Strategy and the entity Renewable Energy Action Plan (NREAP). The Government creates and implements policy in the electricity sector, grants concessions for electricity generation projects above 5 MW, and adopts legislation from its jurisdiction (by-laws, decrees, etc.). The FBiH Government creates and develops the RES generation framework in FBiH and decides on incentive measures for investments in RES generation. The role of the Government is to propose to the FBiH Parliament the approval of HPP generation projects above 30 MW. For HPP projects below 30 MW in the jurisdiction of MEMI, the FBiH Government issues approval directly.
Regulatory Commission for	FERC, established by the Electricity Law, is a specialised, autonomous, independent



Stakeholder / Institution	Role / Responsibility
Energy in FBiH (FERC)	and non-profit organisation in the electricity sector of FBiH. The FERC jurisdictions are:
	 supervision and regulation of the relations between power generation, distribution and electricity customers, including power traders,
	defining tariffs for distribution systems users and for non-eligible customers,
	 issuing and revocation of licenses for generation, distribution and supply of electricity,
	 issuing the preliminary construction permits and licenses for use of power facilities except for the facilities for power transmission,
	defining and adoption of General Conditions for Electricity Supply
	approval of the Distribution Grid Code,
	 development and adoption of by-laws on RES generation.
	MEMI is main institutional stakeholder for HPP generation development projects. MEMI is responsible for the following activities:
	Creates policy in the energy sector, including RES,
	 Issuing Energy Permits for HPPs > 5 MW (single) or cascade with units > 2 MW each,
Federal Ministry of Energy, Mining and Industry (MEMI)	 Implements enacted policy and enforces the laws as determined by the legislative body,
	 Executes administrative supervision of implementation of the laws and other regulations,
	• Enacts regulations for implementation of the laws and other by-laws and decrees,
	Makes proposals and recommendations in the field of legislation within its scope.
Federal Ministry of Spatial Planning	The FBiH Ministry of Spatial Planning, where HPP projects are concerned, plays an important role in preparation of spatial and urban plans, protection of cultural and historical heritage, and in issuing construction permits. The rule in BiH is that the institution which issues spatial planning documents also issues construction permits. The FBiH Ministry for Spatial Planning is competent to decide on a request and issue the Construction Permit for the generation facilities in cases listed in Article 40 (1) of the
	FBiH Law on Spatial Planning ²¹ ,
Federal Ministry of Environment and Tourism	The FBiH Ministry of Environment and Tourism has dual role concerning development of HPP generation projects. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into the FBiH entity legislation and their implementation are important part of the Ministry and its Environmental department portfolio. In the area of environmental protection, the Ministry decides on the need for EIA study, issues environmental conditions, and upon successful completion of EIA issues Environmental Permit. In the area of tourism, the Ministry issues an opinion on potential impact of HPP generation projects on touristic activities and establishes related project development constraints/conditions to be met.
Federal Ministry of Agriculture, Water Management and Forestry	The Federal Ministry of Agriculture, Water Management and Forestry is the highest authority governing water management in FBiH. The Ministry's Water Sector performs following roles:
	 Preparation of legislation and regulations in the field of water management, including transposition of the EU Water Framework Directive and EU Directive on floods into FBiH legislation, as well as their further implementation.; Preparation of strategies and development policies for water management;

²¹Article 40(2), FBiH Law on Spatial Planning, states: "1.) Facilities and works covering territories of two or more Cantons; 2.)
Facilities and works in the interest of the Federation in the area and location that are important for FBiH; 3.) On inter-state borders; 4.) Free zones; 5.) Facilities and activities that can have an impact to the environment, life and health of FBiH Citizens;
6.) Facilities and works of interest and importance to FBiH; 7.) Facilities and works in the areas of national monuments."

Stakeholder / Institution	Role / Responsibility
	 Monitoring water resources and the preparation of information on water management;
	 Implementation of procedures for preparation and adoption of development
	documents integrated water management;
	 Implementation of procedures for the award of water concessions;
	Supervision of the work of water agencies in FBiH.
Sava River Basin Agency	The Agency for Sava River Basin in Sarajevo manages the water area which includes part of the international Danube river basin (part of the international Sava river sub- basin) on the territory of FBiH inside BiH. The Agency, among others, performs the following tasks:
	 Organises, collects and distributes data on water resources in accordance with the provisions of the Law on Waters in FBiH, including the establishment and maintenance of water management information system (IMS);
	 Organises hydrological monitoring and water quality monitoring, monitoring of the ecological status of surface water, prepares a report on the state of water and proposes the necessary preventive and corrective measures;
	 Prepares a water management plan for the respective river basin district and organises preparation of technical documentation for specific water management issues.
Adriatic Sea Watershed Agency	The Agency covers the water area of the Adriatic Sea drainage - the river basins of the rivers Neretva, Cetina and Krka within FBiH inside BiH. The Agency's activities are defined by articles 29, 155 and 156 of the Water Act, and includes also the following tasks:
	 organising the collection, management and distribution of data on water resources in accordance with the provisions of the Act including the establishment and maintenance of the water information system;
	• preparation of the water management plan for the respective river basin district, organise technical documentation for specific water management issues,
	 issuance of water acts in accordance with the law;
	 issuing of expert opinions according to the requirements for the issuance of water use permits within the competence of the county / cantonal ministry responsible for water;
	 issuing of expert water-related opinions on documents within the competence of other federal and county / cantonal ministries upon request by such authorities.
Operator for renewable energy sources and efficient cogeneration in FBiH	The Operator of renewable energy sources and efficient cogeneration (RES&EC Operator) in FBiH was established in 2014 with headquarters in Mostar. The FBiH Operator RES&EC performs, among others, the following duties:
	 Adopts Rules and decides on the status of privileged or temporary privileged producer of electricity from renewable energy,
	Establishes and maintains a register of producers using renewable energy,
	 Establishes the Register and makes certificates of origin for producers who use RES,
	 Concludes PPA contracts with privileged producers (who are entitled to an incentive) for the purchase and payment of electricity,
	 Pays for electricity produced by RES, and recovers these payments from suppliers, in accordance with the legislation,
	• Acts as balance responsible party (BRP) for the producers of electricity from RES.
PE Elektroprivreda BiH	Public Enterprise Elektroprivreda Bosne i Hercegovine (EP BiH), Sarajevo, is the joint stock company for generation, distribution and supply of electricity, covering one part of FBiH. EP BiH owns, maintains and operates all thermal power plants in FBiH, as well as 3 HPPs with an installed capacity of 504 MW in the river basin of Neretva. EP BiH runs its own generation dispatch centre which optimises generation of electricity and. through
	market-based mechanisms, provides ancillary services for the power system of BiH. EP

Stakeholder / Institution	Role / Responsibility
	BiH Distribution Division currently performs both DSO and public supply functions. After the unbundling of supply business, which is in process, DSO should also separate from EP BiH. For the time being, EP BiH is in charge for connections of SHPPs to the grid in their area of responsibility. EP BiH adopts the Distribution Grid Code for its network.
PE Elektroprivreda HZHB	Public Enterprise Elektroprivreda Hrvatske Zajednice Herceg Bosne (EP HZHB), Mostar, is a joint stock company for generation, distribution and supply of electricity, covering another part of FBiH. EP HZHB owns, maintains and operates only HPPs, with an installed capacity of 412 MW, plus the major reversible HPP Čapljina with 440/360 MW installed capacity. EP HZHB runs its own generation dispatch centre which optimises generation of electricity from available sources. EP HZHB Distribution Division currently performs both DSO and public supply functions, and it is responsible for connections of SHPPs to the distribution grid. EP HZHB adopts the Distribution Grid Code for its network.
	Cantonal Level –FBiH
Cantonal Governments and Ministries	FBiH is composed of ten Cantons, the competencies of which are set out in the Constitution of FBiH. Each Canton has its own government and adopts its own laws (harmonised with the FBiH legislation). Most of the cantons have Ministries similar to those at the entity level, but there is no unique form of organisation or policy for ministries dealing with energy, construction and environmental issues at the Cantonal level. Cantonal Governments grant concessions for electricity generation projects up to 5 MW. Location and construction permits are issued subject to the physical location and size of the project.
Municipalities	Cantons in FBiH are composed of 79 municipalities in total. Their competencies are regulated by the Law on Principles of Local Self-Government in FBiH. Article 8 of this Law lists roles of municipalities in the implementation of spatial planning, environmental policies, water management and municipal natural resources, competencies which cannot be restricted or refused by Federal or Cantonal authorities, except in specific cases and to the extent defined by the law. In practice, Municipalities in FBiH practically have no authority concerning development of HPP generation projects. All activities are either at the entity level or at the cantonal level.
	Entity Level – RS
RS Parliament	The RS Parliament adopts Electricity Law, Energy Law, RES Law, Law on Spatial Planning and Construction, Environmental Law, Concession Law, and all other laws that impact on the development of hydropower generation projects. This institution adopts entity Energy Strategy and decides on concessions for major hydropower development projects.
RS Government	The RS Government prepares and proposes all legal acts and documents that RS Parliament adopts. Also, the Government adopts the action plan for implementation of Energy Strategy and entity Renewable Energy Action Plan (REAP). The Government creates and implements policy in the electricity sector, grants concessions for use of natural resources for electricity generation projects, and adopts legislation from its jurisdiction (by-laws, decrees, etc.). The RS Government creates and develops the RES generation framework in RS, and decides on incentive measures for investments in RES generation. The role of the Government is to support and coordinate major hydropower generation projects and to provide guarantees for their financing.
RS Energy Regulatory Commission (RERS)	 RERS develops by-laws on RES, approves Distribution Grid Code and issues licenses for generation and distribution/supply of electricity. RERS is also responsible for: Decide on tariffs for public enterprises in electricity sector in RS; Issuing permits for construction of power plants above 1 MW (energy permit); Issuing licenses for production of electricity after construction of the plant, also for units above 1 MW; Certification of the generation plant that produces electricity using RES;
	Granting a preliminary right to receive incentives for generation from RES (before



Stakeholder / Institution	Role / Responsibility
	the construction):
	Granting rights to incentives for generation from RES (after construction).
Ministry of Industry, Energy and Mining of the RS	The Ministry of Industry, Energy and Mining of the Republic of Srpska is the main stakeholder in the hydropower generation sector in RS. The Ministry is responsible for the entire energy sector, it develops energy policy, prepares strategic documents for the Government, controls the public share in MH ERS, and creates/implements the RES generation framework. If applicable, the Ministry issues Concession Permits for hydropower generation projects, and maintains the register of hydropower generation projects in RS.
Ministry of Spatial Planning, Civil Engineering and Ecology of the RS	The Ministry of Spatial Planning, Civil Engineering and Ecology of the RS is the entity which is in charge for all major construction projects in RS, including construction of power generation facilities. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into the RS entity legislation and their implementation are important part of the Ministry and its Environmental department portfolio. The Ministry issues the Location Permit, Construction Permit and Use Permit for projects above 1 MW, and decides on the necessity to undertake an EIA study depending on the prospective impact that HPP projects may have on the environment due to their nature, size or location.
Ministry of Agriculture, Forestry and Water Management of the RS	The Ministry of Agriculture, Forestry and Water Management of the RS, Water Management Division, is responsible for the following activities related to the water sector in the Republic of Srpska entity: studies-analysis, management, monitoring, establishment and maintenance of water information system, keeping a water registry, preparation of strategies, programs, coordination of activities of other public entities in the water sector, transposition of the EU Water Framework Directive and EU Directive on floods into RS entity legislation, including their further implementation, and other activities defined by the law. The Water Department also develops or contributes to the following documents: Law on waters, General plan of water sector development, Sustainable development studies, Water sector action plan, Water conditions for development of SHPPs.
PE MH Elektroprivreda RS – Generation Division	Public Enterprise Mixed Holding Company Elektroprivreda Republike Srpske (ERS) is the joint stock company for generation, distribution and supply of electricity. ERS owns, maintains and operates majority of electricity generation facilities in the Republika Srpska entity, including all HPPs with an installed capacity of 604 MW in the river basins of Drina, Trebišnjica and Vrbas. ERS has its own generation dispatch centre which optimises generation of electricity and, through market-based mechanisms, provides ancillary services for the power system of BiH. ERS performs only coordination of distribution network operations since the distribution companies in ERS are separated by ownership. ERS is a single buyer for the electricity produced by RES, and Operator for renewable generation facilities in RS.
5 Distribution Companies: Elektrokrajina, Elektrodoboj, Elektrobijeljina, ED Pale I Elektrohercegovina	These Distribution Companies have mixed ownership (majority is state-owned and a certain percentage is owned by different funds and private persons). They maintain and operate distribution networks and perform role of the public electricity supplier in their respective areas. Distribution companies are responsible for grid connection of SHPPs and their operational coordination, and they develop and adopt Distribution Grid Code and Grid Connections Rulebook for their networks.
Public Enterprise "Vode Srpske"	 Public Enterprise "Vode Srpske" controls and manages waters, public water areas, and hydrotechnical systems, rivers, streams, lakes, in the RS territory in a way prescribed by the Law on waters and other relevant legislation. Among others, this public enterprise: Organises operations of water sector at regional and river basin level; Proposes mid and long-term water sector development plans and programs; Monitors implementation of the water sector plans.
Municipalities	There are 63 Municipalities in the Republika Srpska. The Law on Local Self- Government regulates their competencies. Although according to the Article 12 of this Law, municipalities in RS have independent competencies in public services such as environmental protection and water management, where HPP projects are concerned these issues are resolved at the entity level. On the other hand, for the construction,



Stakeholder / Institution	Role / Responsibility	
	Municipalities in RS issue location conditions, Location Permits and Construction Permits for RES generation units below 1 MW.	
Brčko District (BD)		
BD Government-Department for Agriculture, Forestry and Water Management	The Department for Agriculture, Forestry and Water Management executes professional, administrative and other works from the Brčko District Government jurisdiction in implementation of legislation and regulations related to water management issues in the territory of Brčko District, under the guidance and supervision of the city mayor.	
BD Government-Department for Spatial Planning and Proprietary-Legal Affairs	The Department for Spatial Planning and Proprietary-Legal Affairs is responsible for the following activities in Brčko District:	
	Spatial and urban planning;	
	Issuing locational conditions and consents;	
	Environmental protection and issuing of Ecological Permits;	
	Proprietary-Legal Affairs;	
	Protection of cultural and historical heritage in investment projects.	
	From the above, it is obvious that role of this Department in infrastructural projects is crucial.	
PE Komunalno Brčko	Public Enterprise "Komunalno Brčko" was established in 28.12.2007 by the decision of the Assembly of Brčko District. The main activity of the company is the provision of services of general interest in the area of Brčko District, which primarily refers to the distribution of electricity, production and distribution of water, transport and disposal of municipal waste, and maintenance of public areas.	
Other stakeholders	BiH Academy of Sciences and Arts	
	RS Academy of Sciences and Arts	
	NGOs	

3.2.1 BiH level

3.2.1.1 Permitting Process-general

Bosnia and Herzegovina is characterised by a complex political and constitutional structure. According to its complex constitutional structure and legal system, the jurisdiction for conducting processes and steps for the development of infrastructure projects is divided among different government levels in the country (the state, entity level and the Brčko District (BD), and cantonal level). Thus, the permitting procedure for the development of energy infrastructure projects is primarily regulated at the entity level: FBiH and RS. Further, due to the division of competences between FBiH and its ten (10) cantons, many permitting areas relevant to HPP development in FBiH are regulated by both FBiH and cantonal legislation (e.g., concessions, spatial planning). Consequently, the permitting procedure in FBiH is conducted at the FBiH and/or cantonal level. In contrast, the permitting procedure in RS is more centralised at the entity level. Local authorities are also involved in some specific permitting processes and steps in both entities.

Although the permitting procedure is implemented at the entity level, the issuance of some important approvals and permits are within the competence of the state level institutions/bodies, such as concessions in cases when the law authorises the state to issue concessions, and connection to the transmission network (110 kV, 220 kV, and 400 kV). The role of the state-level institutions in implementing energy infrastructure projects/HPP projects is likely to become more prominent given that almost all planned and bigger energy infrastructure projects will have an inter-entity and/or inter-state (regional) element (i.e., construction of HPPs on rivers running through both BiH entities and between countries such as the HPPs on the Drina River), for which the jurisdiction is at the state level, pursuant to the BiH Constitution.

Hence, even though the entity level permitting legal and regulatory framework is the main focus of this report, the relevant part of the permits pertaining to the construction of energy infrastructure projects at the state level are highlighted here. Despite its special status, the key features of the Brčko District (BD) permitting legal and



regulatory framework are not included, since BD has no electricity generation facilities and no potential for development of HPPs.

Legislation in both entities requires development of the Project Documentation, and prescribes the same type of documentation. To avoid inconsistencies, note that the term Project or Technical documentation – is used to identify the same type of documentation, and therefore has the same meaning throughout BiH. Thus, an HPP Developer needs to develop project documentation for the planned construction of a generation facility (HPP in this case) and submit it to the competent entity/BD institutions, along with the applications for the most important permits in the permitting procedure: The Urban Permit (FBiH)/Location Conditions (RS), and the Construction Permit.



Source: USAID Energy Investment Activity-EIA Project: Draft Report on the Permitting Regime and Obstacles to Investment in the Energy Infrastructure Projects in Bosnia and Herzegovina

Figure 3.1: Types and Stages of the Development of Project Documentation

The deeper the HPP Developer gets into the permitting procedure the more detailed Project Documentation is required. The types and stages of the development of Project Documentation in the permitting procedure in relation to the Urban Permit (FBiH)/Location Condition (RS) and the Construction Permit are illustrated in Figure 3.1 above.

The following are the types of Project Documentation whose development is required at different stages of project development:

Preliminary Project Design

The Preliminary Project Design comprises of harmonised architectural drawings, documents and studies, which outline the basic architectural, functional and technical solutions for a planned facility at the specific location. The Preliminary Project Design must be prepared before an Urban Permit (FBiH)/Location Conditions (RS) is sought, and it becomes part of the issued Urban Permit or Location Conditions.

Main Project Design

The Main Project Design includes harmonised architectural drawings, documents and studies, which outline technical solutions for the planned facility, ensuring that the key terms and conditions for construction are met. The Main Project Design must be developed in accordance to the Urban Permit/Location Conditions and consistent with the Preliminary Project Design. Depending on the type of generation facility and proposed technical solutions, the Main Project Design comprises the following sections: i) architectural designs; ii) construction designs; iii) installation design; iv) technological process design; and v) steps for the installation of equipment. The Construction Permit is issued based on the Main Project Design.

Detailed Project Design



The Detailed Project Design is a further-developed type of Project Documentation, which is required only if detailed drawings and textual explanation could not be provided under the Main Project Design, given the type of facility and other specific circumstances related to the construction. The Detailed Design elaborates technical solutions in detail and must be developed coherent with the Main Project Design.

As-Built Design

The As-Built Design is an addition to the Main Project Design, which includes all changes and adjustments that occurred during the process of construction. These modifications should be in line with the Construction Permit. The technical inspection of the facility, which precedes the issuance of the Use Permit, is performed based on the As-Built Design.

3.2.1.2 Concessions

The state level legislative framework governing HPP development steps and processes is not fully developed. The procedure for designation of status of a "general (public) interest" to an energy infrastructure project (or any other project) at the state level is not defined by any law or regulation. Also, no regulation authorises a body or an institution to designate such status. The BiH Law on Concessions prescribes the requirement for an "assessment of whether a general (public) interest exists," and defines it as the responsibility of a competent state ministry where a bidder submits its proposal for a concession for which there was no public invitation (unsolicited proposal)²². However, the BiH Law does not identify the authorised body or institution tasked to designate such status nor does it prescribe the procedure for it. Further, the legal framework at the state level does not define how such public interest is harmonised or coordinated with the entity public interest and that of other government levels in BiH. The procedure of determining the public interest is provided by entity laws: examples are the laws on entity governments, laws on spatial planning and construction and laws on expropriation. However, the adoption of a Spatial Plan at the state level is not prescribed by the existing legislative framework and adoption of Spatial Plans are the competences of entities and BD²³. There has been no attempt thus far to coordinate the development or to harmonise Spatial Plans of entities and/or other government levels.

There are two procedures at the state level that the HPP Developer is required to complete to develop an energy infrastructure/HPP project in BiH: the first procedure includes obtaining a concession from BiH, provided the state and not another level of government is authorised to grant such a concession, and the second procedure pertains to the connection of new facilities to the transmission network.

The BiH Law on Concessions is one of the fourteen (14) laws on concessions in BiH. Apart from the BiH Law on Concessions, there are two (2) entity laws on concessions, ten (10) cantonal laws, and the BD Law on Concessions. These laws are not fully harmonised and are often contradictory. The abundance of laws on concessions has been identified as a major obstacle for the development of the area of concessions in BiH by a comprehensive review conducted by OECD/SIGMA in 2008, funded by the EU (the OECD/SIGMA/EU Review).

Still, the concessionaire is (at state, entity and cantonal level) defined as a legal person existing under the laws of BIH or the respective entity, thus providing the basis for non-recourse HPP project financing. In each case, it is the local company) being a party to the concession contract at any level of the government. We should consider this fact each time when concessions are elaborated further in the document.

The term concession is a very broadly defined by Article 3 of the BiH Law on Concessions as the "right granted by a Conceding Party to provide the construction of infrastructure and/or services and to exploit natural resources under terms and conditions agreed on by a Conceding Party and Concessionaire."

Article 4 of the BiH Law on Concessions prescribes the authority for the BiH Council of Ministers to make decisions on the type and subject of the concession to be granted, subject to approval by the BiH Parliamentary Assembly. As to the institutional structure in the area of concessions at the state level, the BiH Commission for Concessions is established and functions as an independent regulatory legal entity, which, pursuant to the BiH Law on Concessions, has an important role in the procedure for granting concessions, "that fall under exclusive

²² Article 25, BiH Law on Concessions ("Official Gazette of BiH," No. 32/02 and 56/04).

²³ Similarly, there are no laws or procedures at the state level facilitating the acquisition or the right to use land for development of energy infrastructure/HPP projects in BiH. The laws regulating land property and other land related rights are under entity and BD jurisdiction.



competence of BIH"²⁴. Finally, the BiH Law prescribes two methods for granting concessions: 1) public tender, and 2) unsolicited proposal.

Even though the BiH Law on Concessions was adopted in 2002, and BiH Commission on Concessions commenced its work in 2005, it is worth noting that no concession has been granted at state level thus far. Besides a complex political structure, ambiguity of the provisions of the BiH Law on Concessions is also one of the reasons for inefficiency of the process of granting concessions at the state level.

Specifically, the BiH Law on Concessions does not define a body or a procedure for the designation of a public (general) interest in the process of granting concessions. Further, the insufficiently clear wording of Article $1(2)^{25}$, read in conjunction with Article 6 of the Law on Concessions, contributes to a variety of interpretations, as to the competences for concession granting (state versus entity level). The ambiguity of the law, creates room for different interpretations of the underlined text in the footnote, related to the jurisdiction of BIH and to the cases where concession property extends to the entities, stalling the concession granting process.

3.2.2 Federation of Bosnia and Herzegovina

3.2.2.1 Permitting Process-general

Acquiring "public (general) interest" status of energy infrastructure/HPP projects in FBIH is determined in a concession granting procedure under the Law on Concessions of FBIH, but also in expropriation procedure, where the public interest in FBiH is determined by the Law on Expropriation. All government levels in FBiH can determine projects to be in the "public or general interest" in accordance with their jurisdiction. However, whether a project is in the public interest of FBiH is determined by the FBiH Government together with the particular canton, through its cantonal government. Ideally, the procedure for development of an HPP should start with the Spatial Plan, where respective HPP is already envisaged, based on a previously conducted strategic environmental impact assessment and related procedures including the public participation process. However, this is often not the case, because FBIH's Spatial Plan is obsolete, and does not incorporate the state-of-play in urban planning. The BiH/FBiH/Cantonal Laws on Concessions need to be amended and harmonised, to avoid situations causing legal uncertainty of the concession granting process.

The permitting procedure for the construction of energy infrastructure facilities/HPP projects in FBiH is conducted at the FBiH and/or cantonal level, depending on the type and size of a facility as well as their respective competences. This applies for all processes and steps within one permitting procedure. In practice, this means that the HPP Developer might obtain some permits at the level of FBIH and other(s) at the cantonal level. The lack of legislative clarity that pertains to the issue of jurisdiction for the issuance of certain permits is often stressed by HPP Developers as the major cause of delays in the permitting procedure.

There are several documents (e.g., permits, approvals, consents, certificates) that the HPP Developer must acquire through different processes and process steps in order to begin the construction and complete an energy infrastructure project. Those processes and steps are governed by laws and regulations from the different sectors/areas (e.g., concessions, spatial planning, construction, water management), which are usually adopted at both the FBIH and cantonal levels. Often, the laws regulating the subject areas at the FBIH level and those adopted at the cantonal level are not harmonised. The most illustrative example is the area of concessions. Thus, Article 3 of the FBiH Law on Concessions defines the "energy facilities that can be subject to concessions," among other public goods, in the following way:

- "... 2. Use of river flows and other water in the areas or the interest of two or more Cantons;
- 3. The construction of hydro power facilities of installed capacities over 5 MW;
- 4. The construction and use of hydro accumulations in the areas or interest of two or more Cantons;

²⁴ Article 6 of the BIH Law on Concessions.

²⁵"This Law sets forth the conditions under which local and foreign legal persons may be granted concessions that are under the <u>jurisdiction of BiH</u>, pursuant to the Constitution and laws of BiH and where it concerns the representation of the international subjectivity of BiH, as well as in the <u>cases where concession property extends to FBiH and RS</u> for providing infrastructure and services, exploitation of natural resources and facilities used for their exploitation, financing, design, construction, rehabilitation, maintenance and/or operation of such infrastructure and all accompanying facilities thereto."


5. Research or use of energy and other mineral resources."

On the other hand, cantonal laws on concessions define the list of public goods and/or types of energy facilities that can be subject to concessions in a non-uniform manner, in a different way to the FBiH Law on Concessions. As an example, Article 7 the Law on Concessions of Herzegovina-Neretva Canton, prescribes the list of public goods/generation facilities, among others, for which a concession can be granted, including those using renewable energy sources (RES), in the following way:

"b) use of water and water goods for:

5) Production of electricity of installed capacities up to 5 MW,..."

There are also situations where the laws governing various sectors pertaining to a permitting procedure across FBIH are not harmonised between themselves. For example, the terms "hydro power facilities" and "hydro accumulations" are used in the sector of concessions at the FBIH level, without defining the terms, whilst other sectoral laws refer to a "generation facility" as an "electro-energy object", again without defining the terms.

The issuance of some permits consists of multiple steps and/or the issuance of progressive administrative decisions/acts as the permitting procedure progresses, which lead to the issuance of a final permit from that category. For example, a Water Permit is acquired at the end of the process (before the issuance of the Use Permit), but only after the Preliminary Water Consent and the Water Consent for that facility had been issued earlier in the procedure. All those water acts are issued by the same authority – the Water Management Agency – in the same permitting procedure and following the collection of required information. The Preliminary Water Permit contains the conditions and methods for use of water, and the documentation requirements; the Water Consent confirms the submission of the required documentation; and the Water Permit defines the operational conditions and disposal of waste.

We shall, however, stick only at those procedural steps required for the development of large HPPs (not falling in the category of the SHPPs, being defined as HPPs with less than 10 MW of installed capacity), and which because of the existing policy cannot be beneficiaries of the RES incentives in FBIH, such as Feed in Tariff (guaranteed off-take price for electricity produced by the generation facilities using renewable energy sources).

3.2.2.2 Concessions

Constructing an HPP requires acquiring a concession. A concession can be granted at the level of FBiH, or, as stated in the 2002 FBiH Law on Concessions, at the cantonal level pursuant to the respective Cantonal Laws. The legislative framework governing Concessions in FBiH, which includes the FBiH Concessions Law and 10 cantonal laws on concessions is not fully harmonised, particularly concerning the requirements for construction of RES generation, including HPPs.

Even though the FBiH Law on Concessions does not specify at which stage of the permitting procedure a concession should be acquired, The HPP Developers usually request a concession at an early stage of the process, immediately after the development of a Feasibility Study and prior to an application for the Urban Permit. The granted concession anchors the subject of the concession, and the right of the HPP Developer (the concessionaire) to apply for other permits and to negotiate financing of the project. In short, the concession should provide legal certainty for the HPP Developers, especially if the concession contract is developed in accordance with international best practices, which unfortunately is not the case in FBiH.

Still, according to the 2014 Annual Report of the FBiH Commission for Concessions (the Annual Report), a total of two (2) Concessions have been granted at the FBiH level thus far: 1) HPP Vranduk – EP BiH (2012); and 2) HPP Janjići – EP BiH (2014). The Annual Report noted that HPP Mostarsko Blato – that was already constructed by EP HZHB - requested a Concession in 2013 retroactively because it could not get an operational license from the Federation Energy Regulatory Commission (FERC), but this procedure has not been completed yet. The very fact that concessions have been granted only to local incumbent companies, speaks a lot about the transparency and openness of the process to interested private sector HPP Developers. At cantonal level, however, a dozen concessions have been granted to SHPP Developers, but these are smaller scale investments.

The term "Concession" is defined by the FBiH Law on Concessions somewhat differently than by the state law: "The right to perform an economic activity through the use of natural resources, the resources in public use, and the performance of an activity in the public interest pursuant to this Law." Furthermore, Article 3 of the FBiH Law on Concessions stipulates the list of objects or areas that may be subject to Concessions, including the energy



resources. Article 6 of the FBiH Law on Concessions prescribes the projects for which the FBiH Government has the authority to grant Concessions, including energy infrastructure facilities:

- "2. use of river flows and other water in the areas or in the interest of two or more Cantons;
- 3. the construction of hydro power facilities of installed capacities over 5 MW;
- 4. the construction and use of hydro accumulations in the areas of interest for two or more Cantons;"

The Amendments to the FBiH Law on Concessions, passed in 2006, added a new requirement for the FBiH Government when deciding on Concessions under Article 6 of the FBiH Law on Concessions: namely, if Concession has an impact predominantly on one municipality, a prior approval from the Municipal Council if the local community is also required. The FBiH ministries, or other bodies designated by the FBiH Government to grant Concessions, play the role of Conceding Parties in the Concession Process. Competent ministries and bodies have the prime responsibility for the determination of a potential Concession, preparation of responses to unsolicited proposals, and for implementing procedures for approving Concessions, including negotiations with potential Concessionaires. To initiate the procedure for Concessions, listed under Article 6 of the FBiH Law on Concessions, the FBiH Government prior approval is required. The entire procedure is subject to control by the FBiH Government and the FBiH Commission for Concessions, which is established as a professional and permanent body, similar to the BiH Commission for Concessions.

The laws on concessions allow the granting Concessions based on unsolicited proposals, without a public tender being organised (which is not in line with EU best practices), or based on public tender. Most of the concessions have been granted according to unsolicited proposals and according to the Performance Report, the main factors influencing the length of the procedure are pending approvals from the Municipal Council and late approvals of a Concession by the competent bodies.

Further, the concession laws, as an option, allow the bidder to prepare a Feasibility Study for the Concession, instead of requiring its development from a Conceding Party (Contracting Authority). This applies to both procedures: public announcement (tender) and unsolicited proposals. Through the transfer of this task from the Conceding Party to the bidder, the definition of requirements of the Conceding Party is done by its future partner, who is by default interested to be selected to be the private partner on the specific project, and, therefore, has a vital interest in presenting the needs and benefits of the Conceding Party in very positive sense.

A Concession Contract can be concluded for a period of up to thirty (30) years. Exceptionally, the period can be extended to a maximum of fifty (50) years.

Apart from the laws, many cantons have adopted their own cantonal regulations defining the Concession Procedure, authorities, and other Concession matters. Consequently, each Canton has its own structure and procedure governing the area of Concessions, which are different from other Cantons. In addition, some municipalities, being a lower level of authority in each canton, also have its own local government and regulations affecting certain aspects of concessions.

Concession Fees comprise two types of payments. The first type of payment is a lump sum, which is paid immediately after the Concession Contract is concluded, and cannot be less than 1.5% of the total planned investment. The second type of payment is paid as an annual fee, calculated based on generated revenue.

3.2.2.3 Environmental Permitting

An Environmental Permit is required as a precondition for the issuance of an urban permit for all generation facilities for which an Environmental Impact Assessment (EIA) is compulsory. This includes HPPs.

The FBiH Regulation on Plants and Facilities that regulates the requirement for an EIA defines the types of generation and other energy infrastructure facilities that require an EIA. In addition to determining the types of plants and facilities for which an EIA is compulsory and thus cannot be constructed without an Environmental Permit, the FBiH Regulation on Plants and Facilities also determines the jurisdiction of FBiH in issuing an Environmental Permit for a certain category of projects, including those from the energy sector. Thus, according to Article 4(a) of the FBiH Regulation on Plants and Facilities, an EIA is mandatory for the following:

"…



4. Facilities for production of hydro-power energy over 5 MW of installed capacity for the individual facility, or 2 MW for several facilities located within distance less than 2 km from each other,

5. Construction of power lines:

-110 kV, if they are a part of the transmission network,

-220 kV and more."

FBIH Ministry for Environment and Tourism is also the responsible institution for issuing of the Environmental Permit, for generation facilities other than energy objects listed under Article 4(a) above, after the EIA is conducted.

Moreover, under its Article 6, the BiH Regulation on Plants and Facilities also defines a second group of plants and facilities from the energy sector, for which the FBiH Ministry for Environment is authorised to issue an Environmental Permit after the FBiH Ministry for Environment has assessed, in each individual case, whether an EIA is necessary. These power plants and facilities include smaller power plants (wind power plants with less than 2 MW installed capacity) and SHPPs up to 1 MW installed capacity.

However, an Environmental Permit is issued at cantonal level by relevant cantonal ministries for those energy objects and generation facilities for which an EIA is not required.

The validity of an Environmental Permit spans to a period of five (5) years. Its re-obtainment after the conclusion of the five-year period, may be considered as an important project development risk, having in mind typical period of economic exploitation of an HPP, which normally spans far beyond five years.

At the end, it is unclear whether according to FBiH regulations the term "Environmental Permit" requires a procedure to be carried out in accordance with the EIA Directive 2011/92/EU²⁶ or the IE Directive (the former IPPC Directive). It is certainly necessary to align these processes with the dynamics of issuing of construction permits (urban permit, construction permit and operation permits) as one of the key acts in during construction process.

3.2.2.4 Water Permits

To acquire the right to use water by the new generation facility, a HPP Developer must go through different steps to acquire administrative documents, which will gradually lead to the final stage of obtaining a Water Permit. As the permitting procedure progresses, the competent authorities require more detailed information. The authorities make and issue administrative decisions - water acts - during this process.

Water acts are administrative documents through which water use and water waste are defined. The issuance of these water acts is regulated by the FBiH Law on Water²⁷ and the FBiH Regulation on Content, Form, Terms and Method of Issuance and Maintenance of Water Acts²⁸ (the FBiH Regulation on Water Acts). There are three types of water acts that are required to be obtained for any use of water by certain commercial activities, including energy facilities, which extend the volume of a general (ordinary) use of water, regardless of its impact. Thus, along with the permitting procedure for the construction of a new generation facility, the HPP Developer needs to obtain the following three water acts: (i) Preliminary Water Consent; (ii) Water Consent; and (iii) Water Permit.

Preliminary Water Consent: The Preliminary Water Consent is an administrative act, which defines the conditions for the right to use water and the allowed methods of such consumption, as well as the terms that need to be fulfilled by the HPP Developer's documentation for the construction of new or the reconstruction or removal of existing facilities that can permanently, temporarily or occasionally have an impact on the water regime. The issuance of a Preliminary Water Consent is mandatory for all energy facilities and is sought in the process of acquiring an Environmental Permit or an Urban Permit. In case of HPP construction, the Preliminary Water Consent has to be obtained prior to the concession.

The new FBiH Regulation on Water Acts, adopted recently in 2015, requires a Water Study for the Issuance of the Preliminary Water Consent, which is a new requirement. The Water Study needs to be prepared by the

²⁶Amended Environmental Impact Assessment (EIA) Directive (2014/52/EU) entered into force on 15 May 2014 to simplify the rules for assessing the potential effects of projects on the environment.

²⁷FBiH Law on Water ("Official Gazette of FBiH," No. 70/06).

²⁸FBiH Regulation on Content, Form, Terms and Method of Issuance and Maintenance of Water Acts ("Official Gazette of FBiH," No. 31/15).



authorised legal entity that is included in the official list of authorised entities. The issued Preliminary Water Consent is valid up to three (3) years, during which period the request for Water Consent must be submitted.

Water Consent: The Water Consent is the second step in acquiring a final water permit. The Water Consent verifies that the documentation submitted by the HPP Developer with the request for the issuance of Water Consent meets the terms and conditions defined by the Preliminary Water Consent and water regulations.

A Water Consent needs to be obtained in the permitting process for the construction or reconstruction of all facilities for which the Preliminary Water Consent is required (including HPPs) and issued in the previous stage. A Water Consent needs to be acquired before the issuance of a Construction Permit.

Water Permit: The Water Permit defines the purpose, the method and conditions for the use of water, the terms and condition for disposal of water waste and solid and liquid waste, and other terms and conditions as necessary. A Water Permit certifies that the terms defined by a Water Consent are met. A Water Permit is issued on a temporary basis, up to a maximum of fifteen (15) years. The acquired rights to use water or the release of water waste by one HPP Developer cannot be transferred to another.

Again, competences are divided between the FBiH and cantonal authorities, or more specifically, between the two FBiH Agencies for Water Management: The Agency for Sava Basin and the Agency for the Adriatic Sea Basin on the one hand (Water Management Agencies), and the Cantonal Ministries competent for the issuance of Water Acts on the other. Competencies for the issuance of water acts between Water Management Agencies and competent Cantonal Ministries are divided based on the rivers' categories, among other criteria. Thus, Water Management Agencies are, for example, in charge of the issuance of water acts related to the construction of HPPs on bigger rivers falling under Category 1 (for example, the Bosna, Neretva, Drina and Una Rivers), while Cantonal Ministries are authorised to decide a water request for the construction of HPPs on the rivers under Category 2 (smaller rivers), and up to 5 MW of installed capacity.

3.2.2.5 Spatial and Construction Permits

Like at the state level, there is no spatial plan for FBiH. The FBiH Spatial Plan Proposal (2008-2028), was discussed by the FBiH Parliament, but it has not been adopted yet. Until the adoption of the FBiH Spatial Plan, the Spatial Plan of the Socialist Republic of BiH (SRBiH) for the period from 1981 to 2000 has been applied, where it has not been contrary to the FBiH Constitution. The SRBiH Spatial Plan envisaged the construction of, inter alia, hydropower plants but did not foresee the construction of non-conventional renewable energy power plants. Given that the Spatial Plan of SRBiH was adopted back in 1981, for the entire territory of BiH, existing at that point time under a different political and constitutional structure, it is not clear to what extent such plan has been or, could have been implemented. To make things more complicated, there are cantonal spatial plans that have been adopted at the cantonal levels. Some of the 10 Cantons in FBiH have adopted a Spatial Plan (Sarajevo Canton, Zenica-Doboj Canton, Tuzla Canton, Una-Sana Canton, Bosnia- Podrinje Canton and Herzegovina-Neretva Canton), while other Cantons do not have spatial plans, adding to the complexity of planning development of large HPPs. At present, certain power facilities are envisaged by the existing spatial planning documents in FBiH (such as the hydropower plants in the upper- Neretva River - Bjelimići, Glavatičevo and Konjić), but some are not. The construction of HPPs is possible in some areas in accordance with the current spatial plans because the land use is broadly defined. However, the size and type of such facilities is often not defined by the existing plans, which prevent their construction.

The adoption and harmonisation of spatial plans (where adopted) at all government levels in BiH is of critical importance for the construction of energy infrastructure/HPP projects, having in mind that the urban permit, which is one of the key permits in the permitting procedure, cannot be obtained unless generation or transmission facilities are included in the existing spatial planning documents. The absence of the FBiH Spatial Plan creates not only an obstacle for the construction of power facilities located on the territories of two or more Cantons, but also those that are located on the territory of both BiH entities.

The two most important permits during the development and construction phase are: 1) the Urban Permit, and 2) the Construction Permit. Most of the other permits/approvals and consents are obtained as a precondition for the issuance of these two permits, such as the Consent of other users of the location.

Consent of Other Users of the Location: To apply for an Urban Permit, the HPP Developer must also obtain written approvals (consents) from all users operating at the location (users operating on the soil and space above the location site) where a generation facility will be constructed. In accordance with the Law on Spatial Planning



and Land Utilisation of the FBiH (Law on Spatial Planning), an Urban Permit specifies urban and technical conditions for a specific location. These conditions are determined and evaluated on a case-by-case basis, depending on the number of Users at the location, which usually include consents issued by Telecom Companies, Gas Companies, Public Road Management Companies, Water, Sewerage and other Utility Companies. Each User must issue a written consent separately and define the conditions, if necessary, that must be met if a generation facility is to be constructed at the site, which is prolonging and burdening the process of getting to the Urban Permit.

Urban Permit: The Urban Permit is one of the main (key) permits in the permitting procedure for the construction of a generation facility. Through issuance of an Urban Permit, a competent body at the respective government level (FBiH, Canton, or municipality), certifies that the construction of a specific plant or a facility is in line with spatial planning documents and other terms and condition envisioned for that area (location), as well as other pertinent laws and regulations.

When requesting an Urban Permit, the HPP Developer is obliged to submit a Preliminary Design, together with other previously obtained permits.

The FBiH Ministry for Spatial Planning is authorised to issue Urban Permits in the following cases:

- "1.) Facilities and works covering the territories of two or more Cantons
- 2.) Facilities and works in the interest of FBiH in the areas and locations that are important for FBiH
- 3.) On inter-state borders
- 4.) Free zones
- 5.) Facilities and activities that can have an impact on the environment, life and health of FBiH citizens
- 6.) Facilities and works in the interest of and importance for FBiH
- 7.) Facilities and works in the areas of national monuments."

Prior to the issuance of an Urban Permit the FBiH Ministry for Spatial Planning is obliged to obtain an opinion from the cantonal authorities.

However, the issuance of an Urban Permit for generation facilities other than those listed in Article 40 (above) of the FBiH Law on Spatial Planning and Land Utilisation is within the competence of Cantons (cantonal and/or municipal authorities), and therefore such procedure is defined by cantonal laws on spatial planning and construction.

An Urban Permit determines the urban and technical requirements for a specific generation facility, which the HPP Developer must meet, including the terms and conditions specified under previously-obtained permits, such as the Preliminary Water Permit, the Environmental Permit, the Initial Electric Power Permit, Consent of Other User of the Location, and Pre-approval of Connection. The FBiH Law on Spatial Planning and cantonal laws on spatial planning and construction allow the competent authorities to request other documents, if necessary, depending on the complexity of the construction. The Urban Permit is valid for one (1) year, during which period the Construction Permit must be requested.

Construction Permit: A HPP Developer, after having acquired an Urban Permit, Water Consent, Energy Permit, Electric Power Permit and developed the Main Project Design for the construction of the generation facility, can then request a Construction Permit. The Construction Permit is one of the main permits in the permitting procedure in addition to the Urban Permit. In addition to the above-listed documentation, one of the preconditions for obtaining a Construction Permit is that property and legal issues at the construction site have been resolved.

As a rule, the authorities that have issued an Urban Permit in an earlier phase of the permitting procedure are authorised for the issuance of the Construction Permit for that generation facility, as well as for the Use Permit at the later stage. Thus, the FBiH Ministry for Spatial Planning is competent to decide on a request for Construction Permit of the generation facilities listed in Article 40 (1) of the FBiH Law on Spatial Planning, while competent Cantonal Ministries are competent to decide on the request for a Construction Permit for the facilities defined by the Cantonal Laws.

The competent authority for the issuance of a Construction Permit (FBiH/Canton) is obliged to determine whether the Main Project Design is developed in accordance with the terms and conditions defined by the previously-



issued Urban Permit for that facility. A Construction Permit will expire if construction works do not commence within one year following the final date of the issuance. However, the Construction Permit can be extended for an additional year, if the delays can be justified.

Regarding the construction of energy generation projects, especially bigger HPPs, HPP Developers usually approach the construction of those facilities sequentially, in stages. In such cases, the HPP Developer must request a Preliminary Consent for the Construction of a Part of the Facility Complex. Such approval is prescribed by Article 61 of the FBiH Law on Spatial Planning and can be issued for one or more facilities that are part of the planned facility complex. The Preliminary Consent for Construction of a Part of a Facility Complex determines the parts of a "facility complex," their functional /technological connections, and the order of issuance of an individual approval for construction of them. The Urban Permit for the entire facility complex must be obtained before the Preliminary Consent for Construction of the Facility Complex is requested.

Use Permit: After the power generation facility has been constructed, or a part of such facility, which is a separate economic or technological unit that can be utilised, it can become operational, provided the HPP Developer has obtained a Use Permit. The request for the issuance of a Use Permit must be accompanied with the previously obtained Construction Permit. A Use Permit is issued after a technical inspection of the facility is performed. Competent authorities are required to perform a technical inspection within 30 days following the date of the submission of a request.

Land Rights: Before the construction of a power generation facility begins, the HPP Developer must resolve all legal and property issues at the construction site. This means that the HPP Developer must either obtain the ownership of the land or acquire the right to use the land to construct on it. If the HPP Developer cannot reach an agreement with owners, the property can still be acquired through the process of expropriation, if public interest for the construction has been declared by the competent authority.

A decision as to the public interest can be declared by the Government of FBiH, Cantonal Government or Municipal Government, depending on the location of the generation facility. According to the FBiH Law on Expropriation, if the generation facility is located (or construction is performed) across the areas of two or more cantons, the public interest for construction will be declared by the FBiH Government. If the generation facility is located across the areas of two or more municipalities, the public interest will be declared by the Cantonal Government; and where the facility is only located in one municipality, the public interest will be declared by the Municipal Government.

However, according to the interpretation of the Law on Expropriation²⁹ by FBIH's competent authorities, its provisions are not applicable for private HPP Developers, since it prescribes that only the FBiH, Canton, Municipality, public company and/or its 100% owned subsidiary, can be the expropriation beneficiary and that the property can only be expropriated after the public interest for construction has been declared by the competent authority in favour and based on the proposal of the expropriation beneficiary.

The procedure for the declaration of public interest can be initiated by expropriation beneficiaries, and the Proposal for Expropriation must contain an expropriation analysis (geodetic and cadastral plan of the area of expropriation, information on real estate, the assessment of property value, the aim and purpose of expropriation and other data for determining the public interest).

According to the FBiH Law on Expropriation, property can be taken without the consent of the owner by competent authorities and designated to the public use. The property (real estate) can be expropriated completely or partially for the purposes defined by the Law on Expropriation and it is expropriated either for government use or assigned to the third parties who have the obligation to dedicate it to the public use (private HPP Developers excluded).

As mentioned previously, in addition to the FBiH Law on Expropriation, the legal basis for the determination of public interest can be found in the FBiH Law on Concessions. Specifically, the procedure for granting concessions can also include the designation of public interest.

In February 2010, the FBIH Government adopted a Decision on Determination of the Public Interest and Preparation for the Construction of Priority Electro-Energy Objects in FBiH³⁰, and declared the public interest for

²⁹ Official Gazette of FBiH, No. 70/07, 36/10, 25/12 and 34/16.

³⁰ http://www.fbihvlada.gov.ba/bosanski/zakoni/2010/odluke/38hrv.htm.



the construction of 6 thermal power plants, 17 hydro power plants³¹ and 6 wind power plants. It is notable that besides the FBiH Law on Expropriation, this Decision was based on the Law on the Government of FBiH and the FBiH Law on Electricity.

3.2.2.6 Energy Permitting

Approval of Project Documentation – Compliance with the Electricity Law: A new process step in the permitting procedure for the construction of generation facilities was introduced by the FBiH Law on Electricity³², adopted in 2013. Specifically, Article 101, paragraph 1, of the FBiH Law on Electricity provides that HPP Developers are required to acquire an Approval of the Project Documentation Regarding Compliance with the Electricity Law and other Regulations from the FBiH Ministry for Energy, Mining and Industry (MEMI). The HPP Developer modifies and develops Project Documentation throughout the permitting procedure. In this stage, the Project Documentation is developed as the Main Project Design. The Approval of the Project Documentation, or the Main Project Design, by MEMI must be obtained before the application for a Construction Permit is submitted to the authorities that are competent to decide on a request for a Construction Permit.

As an example, the Review of the Project Documentation (the Main Project Design) for the construction of the generation facilities for which FBiH has competence includes the following:

"a) Level of harmonisation of the Project Documentation with regulatory, technical and other regulations, standards, technical norms and recommendations governing the area of construction of generation facilities that are of importance for FBiH;

- b) Complexity of the Project Documentation;
- c) Technical Revision;
- d) Procedures of the development of Project Documentation."

In addition, the Review of Project Documentation for the generation facilities that use renewable energy resource as their primary source of energy, checks the documentation's harmonisation with the Action Plan for the Use of Renewable Energy Resources in FBiH (the Action Plan for RES), as adopted in April 2016.

Energy Permit: The Energy Permit is defined by the FBiH Law on Electricity as an administrative act issued by MEMI in the permitting procedure that precedes the construction and/or reconstruction of a generation facility. The FBiH Law on Electricity prescribes the competences of MEMI in issuing energy permits for all generation facilities, including those that are within Cantonal competences. Article 78(3) of the FBiH Law on Electricity, prescribes that FBiH is authorised for issuance of the Energy Permits for the construction of the following generation facilities:

"1) Hydro-energy objects above 5 MW of installed capacity and a few subsequent hydro- energy objects, each above 2 MW of installed capacity, and 2 km distance from each other;..."

Further, Article 78 prescribes that Energy Permits for the construction of generation facilities, listed under the above-cited paragraph (3), of installed capacities of 30 MW or over, are issued by MEMI, following the approval by the FBiH Government and the FBiH Parliament. However, for the construction of generation facilities of less of 30 MW of installed power, MEMI needs only FBIH Government approval.

According to the FBiH Regulation on Procedure, Criteria, Form, and Content of the Request for the Issuance of Energy Permit for Construction of New and Reconstruction of Existing Generation Capacities MEMI is required to finalise the Energy Permit request within three (3) months from the date of its notification that the request has been completed, unless MEMI decides that two (2) additional months are needed to complete the procedure. MEMI issues a permit in the form of a certificate consisting of the Energy Permit and the terms and conditions for its issuance. The Energy Permit can be issued for a maximum of a five (5) year period, which is not in correlation with the concession period for HPPs nor with the typical operating period of HPP.

³¹ The following HPPs have been designated as priority HPPs: 1. HPP Ustikolina, 64 MW; 2. HPP Vranduk, 23 MW; 3. HPP Unac (Rmanj Manastir), 74 MW; 4. HPP Vrilo, 52 MW; 5. HPP Kablić, 52 MW; 6. HPP Kruševo with HPP Zeleni vir (9,75+2,13) MW; 7. HPP Vrhpolje, 80 MW; 8. HPP Glavatičevo, 3x 9,5 MW; 9. HPP Bjelimići, 2x50 MW; 10. HPP Čaplje, 12 MW; 11. HPP Han Skela, 12 MW; 12. HPP Vinac, 11.5 MW; 13. HPP Babino Selo, 11.5 MW; 14. HPP Ugar Ušće, 12 MW; 15. HPP Vrletna Kosa, 11.2 MW; 16. HPP Ivik,11.2 MW; 17. PSHPP Bjelimići 2x300 MW.

³²FBiH Law on Electricity ("Official Gazette of FBiH", No. 66/13).



License for Electricity Generation: To perform activities in the electricity market after the construction of a generation facility has been completed, the HPP Developer must first obtain a License from the FBiH Regulatory Commission for Energy (FERC). The proceedings related to the license application, criteria, conditions and license contents are defined by the Licensing Rules issued by FERC.

An HPP Developer that intends to perform the activity of electricity generation has an obligation to file an application for a license from the Federation Energy Regulatory Commission. FERC is authorised to issue a License for Electricity Generation. An application is required to be submitted in the prescribed form, along with several documents, approvals and permits listed under Articles 22 and 23 of the Licensing Rules, including: Water Permit, Environmental Permit, Concession Contract, Electric Power Permit and Use Permit. A decision on the issuance of License is made within 60 days from the day of submission of the completed application, and the validity period of the license is thirty (30) years.

3.2.2.7 RES Incentive Scheme

FBIH Law on use of renewable energy sources and efficient co-generation, the RES Law (Official Gazette of FBIH 70/13 and 5/14), the government Decree on RES generation incentivising and determination of levy, and the RES Decree (Official Gazette of FBiH 48/14), spell out a transparent methodology for setting guaranteed price for the whole period of incentives and for granting guaranteed status of potential privileged producers.

Thee RES Law established the Operator for Renewable Energy Sources and Efficient Cogeneration (the "RES Operator") and vested key responsibility to, *inter alia*, off-take electricity generated from RES under the guaranteed prices.

There are potentially three (3) categories of RES producers in FBIH (HPP projects falling under category of RES producers): (i) privileged; (ii) qualified and; (iii) non-privileged RES producers.

<u>Privileged producers</u> are eligible of receiving guaranteed price (the FiT price), along with other incentives in accordance with the RES applicable legislation, under the condition they have entered the dynamic quota³³ and thus are being subject of guaranteed price.

<u>Qualified producers</u> are eligible for receiving reference price³⁴. This group of RES producers is outside the dynamic quota for guaranteed price, in case this one has been fulfilled, but they are still within the RES targets as established with the NREAP. They are eligible of receiving other incentives in accordance with the RES applicable legislation.

<u>Non-privileged producers</u> are those RES producers being outside the dynamic quota and RES targets as established with the NREAP, and those are not being subject of any incentives in accordance with the RES applicable legislation, nor are they eligible for receiving of guaranteed and/or reference price.

In its capacity, the RES Operator is obliged to purchase electricity generated by privileged producers (under the guaranteed price) until the total generation of electricity supported by the feed-in tariff reaches the set targets, and by other RES generators (under the reference price) only until the total generation from RES in FBIH reaches the set targets as defined by the REAP. Hence, potential large HPPs to be developed in future have three (3) potential options for selling of electricity. These three options are the following:

- Selling all generated electricity to the RES Operator under a guaranteed price;
- Selling generated electricity to the RES Operator under a reference price;
- Selling generated electricity at the electricity market.

Large HPPs will potentially benefit from either second or third option (to include also selling of electricity on the spot market, balancing and ancillary service), as being with more than 10 MW of installed capacity they are ineligible for acquiring privileged producer status and offtake of the electricity produced under a guaranteed price. Having in mind their ineligibility for acquiring privileged producer status, we have not elaborated the permitting process regarding registration of the HPP as a privileged producer, but only permitting process related to its registration as a qualified producer.

³³Dynamic quota is target installed SHPP generation capacity for each year of the NREAP. Only electricity producers which are within this quota are eligible to receive FiT for the produced electricity.

³⁴Reference price is price for which are eligible all RES electricity producers – it is lower than guaranteed price.



To obtain qualified producer status, an HPP Developer must first acquire a license for generation, which is also issued by FERC. Qualified Producer Status expires together with the license for generation. An HPP Developer has to enclose the Water Permit, the Environmental Permit and the Use Permit with its Qualified Producer Status application.

3.2.3 Republika Srpska

3.2.3.1 Permitting Process-general

The permitting procedure in RS is more streamlined than the permitting procedure in FBiH, because of the RS centralised organisational structure, consisting only of the entity and municipal levels (without Cantons) and concentration of the competences for the issuance of required permits lies within only a few entity-level ministries/institutions. In addition, the strategic framework documents for the implementation of energy infrastructure projects, such as the RS Energy Sector Development Strategy 2030 and the RS Spatial Plan 2025, have been adopted and are in place.

The issuance of some permits consists of multiple steps and/or the issuance of progressive administrative decisions/acts as the permitting procedure progresses, which lead to the issuance of a final permit from that category. Hence, in the case of a Water Permit, two administrative decisions/acts – the Water Guidelines and the Water Consent – are required before the Water Permit is issued at the end of the process (before the issuance of the Use Permit). All those water acts are issued by the same authority – the RS Water Management Agency/local authority – in the same permitting procedure after the collection of required information. The Water Guidelines contain the conditions and methods of use of water, and the documentation requirements; the Water Consent confirms the submission of the required documentation; and the Water Permit defines the operational conditions and disposal of waste.

The public (general) interest for construction of energy/HPP projects is granted by the Government of Republic of Srpska and it can be determined in the process of granting Concessions, if the procedure is initiated by an interested party. This procedure is prescribed by the RS Regulation on the Evaluation of the Public Interest when the procedure is initiated by an interested party (the Regulation on Evaluation of the Public Interest when the procedure is initiated by an interested party (the Regulation on Evaluation of the Public Interest³⁵). The competent RS Ministry assesses whether a public interest exists on the basis of a Feasibility Study developed for the project and a document on the Policy for Granting Concessions (the Policy Document on Concessions³⁶). Then, the RS Commission for Concessions approves the Ministry's assessment on the public interest and allows negotiations with the bidder. The final step includes the verification of the status of the "public interest" by the RS Government. If, however, the concession procedure is initiated by the RS competent institution/body, then the public interest is "assumed".

Public interest can also be determined in the process of expropriation. This procedure is prescribed by the RS Law on Expropriation³⁷, which can be implemented, among other things, for the purpose of the construction or works related to energy infrastructure projects³⁸. It is assumed that the public interest is already determined, if a separate law prescribes that the construction of specific facilities or construction works is in the public interest. The expropriation beneficiary³⁹ is required to submit a Proposal for Expropriation to the RS Government, after obtaining the opinion from the Municipal Council, on whose territory the construction is planned.

3.2.3.2 Concessions

The area of concessions in RS is governed by the RS Law on Concessions⁴⁰ (the RS Law). Adoption of Law on Concessions was followed by implementing regulations, such as the Regulation on the Procedure for Transfer of

³⁵ http://koncesije-rs.org/dokumenti/zakoni/UPzaProcjenuPSamoIn%20Lat.pdf.

³⁶ http://koncesije-rs.org/dokumenti/zakoni/Politika_dodjela%20Lat.pdf.

³⁷ RS Law on Expropriation ("Official Gazette of RS" Nos. 112/06, 37/07, 66/08, 110/08 and 121/10).

³⁸ Article 3, RS Law on Expropriation.

³⁹ Article 6, RS Law on Expropriation: "The expropriation beneficiaries are Republika Srpska and local communities unless another law prescribes otherwise."

⁴⁰ RS Law on Concessions ("Official Gazette of RS" No. 59/13).



Concession Contract and Change of Ownership Structure of the Concessionaires⁴¹ (the Regulation on Transfer of Concession Contract), and the Regulation on Content and Maintenance of the Registry of Concession Contracts⁴² (the Concession Registry), both adopted in 2014. However, to date the Policy Document on Concessions, developed under the previous Law on Concessions, which was adopted in 2005, has not been updated.

The term "concession" is defined by the RS Law as "the right to perform economic activities through the use of public goods, natural resources and other goods of general interest, as well as the right to perform activities of general interest." Republika Srpska or a local community or, more specifically, the RS Government on behalf of RS and the Municipal Assembly on behalf of the local community, perform the role of Conceding Party. In fact, the RS Government is authorised to grant concessions for all subjects prescribed by Article 6 of the RS Law other than for communal activities, which is the only exclusive competence of a local community. Hence, granting concessions for large HPPs falls under RS exclusive competence. A concessionaire is legal entity, registered in accordance with the RS laws and regulations. Article 6, paragraph (1), item v) of the RS Law on Concessions defines the energy facilities that are "subject to concessions" as follows: "The construction and use of energy facilities of over 250 kW of installed capacity, apart from energy facilities using biomass, biogas and solar facilities with photo-voltaic panels on facilities, irrespective of the facility's installed capacity."

Unlike the BiH Law on Concessions and the FBiH Law on Concessions envisioning two methods for granting concessions: a) public tender, and b) unsolicited proposal, the RS Law, prescribes three (3) separate procedures for granting concessions, each of them comprising elements of both methods - public tender and unsolicited proposal. In Article 11 of the Law on Concessions, these three different procedures are entitled as the procedure initiated by "i) a competent body/institution, ii) an interested party, or a procedure conducted through iii) a direct agreement."

Under the first type of procedure involving the initiative of a competent RS body/institution for granting a concession, the envisioned method is a public tender. Prior to the tendering procedure, a competent body develops a Feasibility Study⁴³ or requests the development of a Feasibility Study from the potential bidders through a public tender.

The second type of procedure refers to a situation when an interested party has initiated a procedure for granting a concession⁴⁴. In essence, it is an unsolicited proposal, however, more detailed, specific, and containing elements of public tender, when compared to the one existing in FBIH. Under this procedure, the public interest for the proposed concession must be evaluated first; and, if the public interest is determined, then the competent body is obliged to launch a public tender and invite the party that initiated the procedure to apply along with other bidders. When the bids are evaluated, the offer of the interested party is entitled to a bonus of up to 10% points of the total points to be assigned to the bidders.

Article 26 of the RS Law prescribes the third type of procedure for granting concession through direct agreement in the following cases:

"a) Bids of the public companies which perform activities of public interest, when such an activity is subject to concession;

b) Implementation of the existing agreements, signed by the Government or public companies, pertaining to the implementation of concessions;

c) Extension of the concession period for granted concessions."

The third type clearly favours EPRS to be involved and to benefit from this procedure.

A Concession Contract can be concluded for a maximum of fifty (50) years. Concession fees are determined separately for each concession by the Concession Contract, considering the following parameters, among others: the type, category, quantity, and purpose of a concession, the market price of the natural resource, length of the

⁴¹ Regulation on the Procedure for Transfer of Concession Contract and Change of Ownership Structure of the Concessionaires ("Official Gazette of RS," No. 65/14)

⁴² http://koncesije-rs.org/dokumenti/zakoni/Pravilnik%20o%20sadr.%20nac.%20vodj%20ug%20Lat.pdf.

⁴³ A Feasibility Study is a document containing technical, financial, economic, environmental, and legal analyses, which justifies granting of the concession.

⁴⁴An interested party cannot initiate a procedure for a concession for which a procedure has already been initiated by a competent RS body/institution.



concession contract, and risk and anticipated profit. The Law prescribes that concession fees comprise two types of payments: (i) a lump sum paid after the Concession Contact is concluded, and (ii) fees for the use of public goods expressed in a percentage (%) of the generated annual revenue.

As a unique feature, Article 40 of the RS Law on Concessions partially introduces the concept of "step-in rights", allowing transfer of concession to a third party or a financial institution (e.g., a bank), which provided financing for the concessionaire. This mechanism can be used if the concessionaire has not been able to meet its obligations contained in the loan contract with the financing institution. The procedure for the transfer of the concession to a third party or a creditor is prescribed by the Regulation on Transfer of Concession Contract.

3.2.3.3 Environmental Permitting

The issuance of the environmental permit in RS encompasses is required for projects that can have a significant impact on the environment because of its nature, size, or location, and in such case an Environmental Impact Assessment (EIA) must be developed. Energy infrastructure projects for which an EIA is mandatory are as follows:

"energy industry: . . .

ii) hydro power facilities with the output of 5 MW and over for each individual facility;

iv) construction of power lines of 220 kV and over, and a length of 15 km and more."45

The core steps for an EIA include identification, determination, analysis, and an assessment of a direct or indirect impact of the project on the environment. Pursuant to Article 61(2) of the RS Law on Protection of Environment, the EIA is implemented through two phases: (i) the preliminary EIA procedure, and (ii) the EIA procedure."

A decision on whether an EIA is mandatory for the project and what the scope of the EIA should be, is determined during the preliminary EIA phase. The final decision on the preliminary EIA phase is published on the web site of the competent ministry. The HPP Developer is then obliged to submit a request for the development of the EIA Study to a licensed legal entity that is authorised for the development of EIA Study by the Ministry of Spatial Planning, Civil Engineering and Ecology (MSPCEE) within six (6) months from the final preliminary EIA decision. Following the development of the EIA Study, the HPP Developer is required to inform the general public and interested parties about the developed EIA Study through an announcement in one daily newspaper that is available in the local community where the construction is planned. Additionally, the HPP Developer is obliged to allow access to the EIA Study by all interested parties free of charge, and to arrange one public consultation on the EIA Study to get feedback. The next step encompasses a Review of the EIA Study by the licensed legal entity authorised by MSPCEE for conducting review of EIA Studies. The objective of this Review by the licensed legal entity is to assess the quality of the EIA from an expert point of view. The HPP Developer is required to update the EIA Study in accordance with the comments made under the Review procedure and then re-submit the updated version to the competent authority. If approved, the EIA Study is valid for two (2) years. Within a two-year period from the date of the EIA approval, the project developer must obtain the Construction and Environmental Permits.

According to the RS Regulation on facilities that can be constructed and become operational only if an environmental permit is issued⁴⁶ (the RS regulation on Environmental Permit), the MSPCEE is authorised for the issuance of the Environmental Permits for all projects for which the EIA is mandatory.

Energy permit: Before the construction or major reconstruction of an existing facility begins, the HPP Developer must obtain a Permit for Construction of Power Facilities with Installed Capacity Exceeding 1 MW from RSERC. This permit is issued prior to the Construction Permit, and it issuance is a pre-condition for obtaining a Construction Permit.

The Energy Permit request is accompanied by a significant number of other documents and major permits, including a: Feasibility Study, EIA Study, Environmental Permit, Water Permit, Connection Conditions (Elektroprenos BiH/NOS BiH and DSOs), Location Conditions and Concession Contract.

⁴⁵ Article 2 (1) a), RS Regulation on Projects for which EIA is Conducted and Criteria for Decision-Making on Mandatory Implementation of EIA and the EIA Scope ("Official Gazette of RS," No. 124/12).

⁴⁶ RS Regulation on Facilities That Can Be Constructed and Become Operational Only if Environmental Permit Is Issued ("Official Gazette of the RS", No. 124/12).



The Energy Permit is issued in a form of a Decision, confirming that the facility was planned and designed adequately regarding its impact on the power system, design of the installations, energy efficiency and the environment. The Decision is issued within 60 days following the date of submission of the completed application to RSERC, and it is valid for a maximum of six (6) years.

3.2.3.4 Water Permits

Under the RS Law on Water⁴⁷, water acts are issued in accordance with a separate procedure prescribed by the RS Law on Water and the general provisions of the RS Law on Administrative Procedure. There are three types of Water acts that must be obtained by an energy/HPP facility for any use of water exceeding the ordinary use of water or disposal of waste water, regardless of the facility's impact on the water regime. Specifically, in the permitting procedure for the construction of an energy facility, the HPP Developer needs to acquire the following Water acts: (i) Water Guidelines; (ii) Water Consent; and (iii) Water Permit. The stages at which these Water acts are issued in relation to the Location Conditions and the Construction Permit in RS permitting procedures are illustrated by Figure 3.2 below. Water acts are issued upon written request of HPP Developers or a competent authority, or upon the request of the administrative body competent for the issuance of the Urban Permit.



Source: USAID Energy Investment Activity-EIA Project: Draft Report on the Permitting Regime and Obstacles to Investment in the Energy Infrastructure Projects in Bosnia and Herzegovina.

Figure 3.2: Types and Stages of the Development of Project Documentation (RS)

According to Article 127 (1) of the RS Law on Water, the RS Water Agency has the authority to issue Water acts, among others, for the construction of the following facilities/activities: "hydro power plants (HPPs); all accumulations on the RS territory; disposal of technological waste water; and facilities that use five (5) litres of water or more in one second."

Water Guidelines: Water Guidelines determine mandatory terms and conditions to be included in the Project Documentation for the construction of new or reconstruction of an existing generation facility and for other non-construction activities, which can have an impact on the water regime on a permanent or temporary basis. Issued Water Guidelines are valid for the period of one (1) year.

The RS administrative bodies/institutions that are authorised to grant concessions are required to obtain Water Guidelines before a Concession procedure is initiated.

Water Consent: According to Article 139 of the RS Law on Water, a Water Consent is required for the construction, reconstruction or removal of an existing energy facility, if such facility can have an impact on the

 $^{^{\}rm 47}$ RS Law on Water ("Official Gazette of RS ", Nos. 50/06, 92/09 and 121/12).



quality and quantity of water, or more specifically, if water regimes can be impacted on a permanent or temporary basis.

A Water Consent determines that the Project Documentation attached to the request for Water Consent is in line with the Water Guidelines, water regulation and planning documents. The issued Water Consent is a precondition for the issuance of the Construction Permit. A Water Consent is issued in the form of a document and is valid for the period of one (1) year, unless the works on construction have commenced within this period.

Water Permit: A Water Permit must be obtained for all facilities for which a Water Consent is required, including generation facilities. It verifies that all terms and conditions specified under the Water Consent are met. Further, a Water Permit determines the purpose, ways and terms for the use of water, the water regime for the disposal of waste water, and other conditions. A Water Permit is the final Water act and is a precondition for the issuance of the Use Permit for any generation facility. A Water Permit is issued for a limited period, a maximum of fifteen (15) years, which is not in line with the duration of the concession for an HPP.

3.2.3.5 Spatial Planning and Construction Permits

Unlike FBIH, RS has adopted the RS Spatial Plan. The RS Spatial Plan 2025 contains a map of strategic priorities, including energy infrastructure facilities. The generation facilities from the PECI list are also included in the RS Spatial Plan: HPP Dabar, HPP Buk Bijela, HPP Foča, HPP Paunci, HPP Sutjeska, HPP Tegare, HPP Rogačica and HPP Dubravica. However, HPP Dubrovnik is not in the plan.

In short, given that the spatial planning documents are quite developed in RS, including detailed spatial planning documents, such as the zoning plan, urban plan, regulation plan, and plan of parcelisation, an Urban Permit is not issued in RS; instead, Location Conditions are issued.

Further, the issuance of an Environmental Permit includes the development of a Preliminary Environment Impact Assessment (EIA) study prior to the issuance of Locations Conditions. After the Location Conditions are issued, the EIA Study is updated, provided the Preliminary EIA had determined that an EIA Study needed to be conducted. The Environmental Permit is issued in the preparatory stage for the Construction Permit.

Hence, the two most important permits related to development of energy infrastructure/HPP projects in RS are: 1) the Location Conditions, and 2) the Construction Permit.

Consent of the Other Users of the Location: Before applying for Location Conditions in RS, a HPP Developer must obtain written approvals (consents) from all users operating at the specific location. According to the RS Law on Spatial Planning and Construction⁴⁸, with an application for Location Conditions, the HPP Developer must submit approvals of the location for the future facility from the public utility companies, and the public companies for managing public infrastructure. However, if the area of construction is already included in the existing spatial planning documentation (such as zoning plan or a regulation plan), these approvals on location are not needed, since all aspects of the construction on the specific location are already evaluated and included in the spatial planning documents.

Location Conditions: The Location Conditions have the same meaning and purpose as the Urban Permit in FBiH; but since RS has developed spatial planning documents, then Location Conditions, which encompass comprehensive and detailed information on the terms and conditions for the construction at the specific location, are issued instead of Urban Permit. The Location Conditions is a technical document, which defines the terms and conditions for the planning and construction of a generation facility (or reconstruction), and is issued on the basis of the RS Law on Spatial Planning and Construction, other pertinent RS laws and regulations, and detailed spatial planning documents. The detailed (implementing) spatial planning documents, which are the basis for the issuance of the Location Conditions are as follows: zoning plan, zoning plan for the areas designated for special purpose, regulation plan, urban plan, and plan for parcelisation.

If detailed spatial planning documents are not developed/adopted for the specific area where the project is to be located, then the Location Conditions are issued based on the spatial planning documents available for that location. Additionally, an expert opinion must be sought from a legal entity that is licensed for the development of spatial planning documents. Regardless of the status of the development of spatial planning documents, the Location Conditions include two compulsory documents:

⁴⁸ RS Law on Spatial Planning and Construction.



- (i) a verified excerpt from the spatial planning documents; and
- (ii) a document specifying urban-technical conditions.

The document defining urban-technical conditions for the construction of a generation facility and the use of land includes the following information:

- a) the purpose of the facility;
- b) the size, shape and photographs of the land parcel;
- c) the terms for constructing the facility;
- d) the need for the development of a Preliminary Design;
- e) the terms and conditions related to the construction vis-à-vis neighbouring objects;
- f) the terms for the protection of the environment in accordance with the regulations governing the area of environment (i.e., whether the EIA is mandatory for the project and the scope of the EIA);
- g) the need and methods for the geo-mechanical examination of the soil; and
- h) other terms and conditions relevant for the facility.

According to Article 60(2), the RS Ministry for Spatial Planning is competent for the issuance of Location Conditions for the construction of the facilities located on the territory of two or more municipalities and also has competence for issuance of Location Conditions for energy infrastructure facilities, including HPPs and power lines of 110 kV of installed capacity and over, and power stations of The Ministry for Spatial Planning, Civil Engineering and Development (MSPCEE) required to issue Location Conditions within 15 days from the date of the submission of the completed request. However, for projects that can have significant impact on the environment, Location Conditions can only be issued by the competent authority, provided that the final document (certificate) on the EIA implementation and its scope is previously obtained.

Construction Permit. The Construction Permit allows the construction of generation facilities at a planned location. The HPP Developer is required to develop a Main Project Design before submitting the request for the Construction Permit. The Main Project Design needs to ensure harmonisation of the construction with all spatial planning documents by meeting the required terms and conditions defined by previously issued Location Conditions.

The request for the issuance of the Construction Permit includes: The Location Conditions; proof that property issues have been resolved; the Concession Contract; Main Project Design; the Report on the Review of the Technical Documentation (Project Documentation); and the Environmental Permit.

A Construction Permit for HPP construction is issued by MSPCEE in accordance with Article 60(2) of the RS Law on Spatial Planning and Construction and it may be issued for the entire facility or a part of a facility which comprises a technical, technological, and/or a functional unit. The construction must begin within a period of three (3) years following the final date of the issuance of a Construction Permit.

Use Permit. A newly constructed energy facility cannot become operational before a Use Permit is acquired from the competent authority. The HPP Developer must submit its request for Use Permit to the competent authority that has issued the Construction Permit, once the works on the facility have been completed. Prior to the issuance of a Use Permit, a Technical Inspection of a generation facility must be performed. The Technical Inspection encompasses inspection of the completed works and their compliance with the Construction Permit and technical documentation that were the basis for the construction. The Technical Inspection ensures compliance of the works with the technical regulations and standards pertaining to the specific types of works, including materials, installations and equipment. A Technical Inspection must be performed within 15 days following the date of the submission of the request.

Based on the opinion of the Committee that performs the Technical Review, the competent authority can issue a permit for a testing period, allowing the temporary use of the facility during the testing period for the energy facilities. The permit for a testing period can be issued only if the Technical Review has confirmed that the facility has been constructed in accordance with the Construction Permit, and that the operation of the facility will not endanger the life, health, environment and the neighbouring buildings. The testing phase can last up to a maximum of one (1) year; and in the case of particularly complex technological process, the testing phase can be extended for one additional year.



Land Rights: If the HPP Developer cannot obtain the ownership of the land through negotiation with owners or acquire the right to use the land or construct on it, then the property can be expropriated for the purpose of the construction of the facilities that are of a "general interest," including energy facilities.

For the expropriation to begin, the public interest for the construction has to be declared by the RS Government. A proposal for the declaration of the public interest is submitted by the expropriation beneficiaries (being RS or municipalities) to the RS Government, together with an Elaboration on Expropriation, which contains data on the area of expropriation (geodetic and cadastral plan), data on the property and its owners, purpose of the expropriation and the estimated value of the property. After obtaining an opinion on expropriation from the municipality, the RS Government adopts a decision on expropriation. The expropriated property is transferred to the HPP Developer for construction of the facility in accordance with the terms and conditions defined by the Contract.

3.2.3.6 Energy Permitting

License for Generation for Facilities with Installed Capacity Exceeding 1 MW: After construction is completed and the Use Permit for the facility is issued, the HPP Developer must obtain a License from RSERC to perform activities on electricity market. The procedure for the issuance of a License and its conditions and content are defined by the RS Rulebook on Licenses.

The HPP Developer that plans to perform an activity in electricity market has the obligation to apply for a License for that specific activity (generation, distribution, supply or trade). Accordingly, among other licenses, RSERC is authorised for the issuance of the License for Generation of Electricity for Hydro Power Plants (Generation License).

To produce electricity in the power plant, the HPP Developer must obtain a License for Generation. Along with the application, the HPP Developer must enclose the following: information on the power facility and technical parameters, proof of meeting the requirements regarding the establishment of the system of quality control and the system of environmental protection control in the power facility, proof of the nature of the primary source of energy, Water Permit, Environmental Permit, Concession Contract, Connection Agreement (DSO or Elektroprenos BiH/NOS BiH) and Use Permit.

The decision on the issuance of the Generation License is made within 60 days following the date of the submission of the completed application to RSERC. The License is valid for a period of thirty (30) years maximum.

Project Registry: According to Article 39 of the RS Law on RES, a natural or legal person (HPP Developer) constructing a generation plant has the obligation to register the project in the Register of Projects, maintained by MIER, within 30 days from the issuance of Construction Permit or conclusion of the Contract on Concession. The Register of Projects contains all RES and efficient cogeneration projects in RS, with an aim of monitoring of the goals set by the RS Action Plan regarding the participation of RES in the final (gross) consumption of electricity. Although the registration is mandatory for all RES projects, it does not provide the priority in allocation of incentives, since incentives are granted based on submission of the completed application to SERC.

3.2.3.7 RES Incentive Scheme

The system of incentives for the production of electricity from RES and efficient cogeneration in RS was established by the RS Law on Renewable Energy Sources and Efficient Co-generation⁴⁹ (RS Law on RES).

In RS, eligible RES producers are entitled to different benefits. For example, the DSO is required to inform the RES producer of whether it is feasible to connect to the system and the possibilities of connection, and the precise timeframe for the connection at the DSO's expense. The RES producer is also entitled to priority dispatching of electricity according to the daily schedule. Finally, the RES producer is entitled to obligatory purchase of electricity at currently valid Feed-in tariffs, and the Right to a Premium in the case of self-consumption or the sale of electricity in the RS market.

⁴⁹RS Law on Renewable Energy Sources and Efficient Co-generation ("Official Gazette of RS," Nos. 39/13 and 108/13).



The RS Action Plan for Renewable Energy Sources (the RS Action Plan) defines the total quotas for incentives as well as the quantities of incentives for each specific technology. The amounts of the Feed-in tariff and the Premium Price that is paid to the producers are determined by an RSERC decision, which must be approved by the RS Government. The prices are evaluated at least once a year.

Incentives are given to the producers for the following types of facilities, provided that they do not exceed the total quantities of incentives determined by the RS Action Plan:

- a) Hydro power plants with installed capacity up to 10 MW
- b) Wind power plants with installed capacity up to 10 MW
- c) Solar photovoltaic power plant with installed capacity up to 1 MW.

Having in mind that large HPPs are not eligible for incentives under the RS legislation we shall not cover permitting system for incentivising RES and the related guaranteed offtake. Hence, large HPPs (with installed capacity above 10 MW) are only in the position to sell generated electricity at the electricity spot market.

3.3 I.O.L.R. framework - The former Yugoslav Republic of Macedonia

Utilisation of hydropower in the former Yugoslav Republic of Macedonia has a tradition since the early 20th century and has been subject to continuous reforms and improvements of the development framework. The most recent large hydropower projects built in the former Yugoslav Republic of Macedonia are HPP Kozjak (2004) and HPP Sveta Petka (2012). The leading role for planning of the energy sector development, including hydropower development, is with the Ministry of Economy, which in accordance with the Energy Law is responsible for the energy policies (preparation and implementation of strategies, action plans, programs and so on). The Ministry of Environment and Physical Planning as the responsible institution for the overall water policies in the former Yugoslav Republic of Macedonia has a leading role in development of hydropower on a project level as part of its broader scope of responsibilities in relation to securing and managing water use as a national resource.

The Government of the former Yugoslav Republic of Macedonia makes the decisions for development of HPP projects. Those are based on a wide range of considerations including:

- Policy and Legislation water, energy, environment, agriculture etc.
- Market integration
- Strategies and Action Plans Water, Energy and RE, Sustainability
- New initiatives
- Market monitoring and analysis
- Adequacy of supply, etc.

Hydropower development models in terms of state/public or private investment or PPP vary on a case by case basis for the HPPs. Opening of the market in the last decade was supposed to provide a basis to stimulate investment in the energy sector, including hydropower. However, the regional and broader market conditions over recent period have not been conducive to development of new large hydropower projects without direct state support.

Therefore, the former Yugoslav Republic of Macedonia is looking at innovative approaches to find ways to successfully develop new large hydropower plants under current and near-to-mid-term market conditions. One of the potential obstacles is the fact that, looking at the description of roles and responsibilities of individual institutions in the electricity and water sectors, including the highest-level institutions such as Government or Ministries, neither of them has in its portfolio the role of long-term planning and development of hydropower generation. Accordingly, there is no planned budget for updates of existing projects or for the development of new ones. The only source of funds is technical assistance of the international donors' community.

Table 3.3: Main institutions/stakeholders and their roles/responsibilities in the hydro power sector in the former Yugoslav Republic of Macedonia

Stakeholder / Institution	Role / Responsibility
Parliament of the former	The Parliament of the former Yugoslav Republic of Macedonia adopts electricity sector



Stakeholder / Institution	Role / Responsibility	
Yugoslav Republic of Macedonia	legislation - Energy Law, which includes the articles for renewable energy, as well as the Water Law. Parliament also adopts the national Energy and Water Strategies, national spatial plan and other strategic documents.	
Government of the former Yugoslav Republic of Macedonia	The Government of the former Yugoslav Republic of Macedonia (GoM) makes the decisions to initiate development of hydropower projects, as well as final approvals on projects. The Ministry of Economy prepares and the GoM adopts all energy sector legislative documents adopted by Parliament and adopts energy sector Action Plans (NEEAP and NREAP). The Government determines the preferential feed-in tariffs for electricity generation from RES and their validity period. Also, the GoM decides on the total installed capacity of preferential generators for each renewable energy source separately, based on the achieved results from the Strategy on Renewable Energy Sources,	
Ministry of Economy (ME) – Energy Department	ME is in charge of energy policy development. Responsibilities include preparation of the energy strategy, preparation and implementation of legislative framework and coordination of activities in the energy sector. The Ministry of Economy, Energy Department, is in charge for all activities related to the development of electricity generation from renewable energy sources. This Ministry creates policy for the development of SHPPs.	
Ministry of Environment and Spatial Planning (MESP)	MESP is the responsible institution for the overall water policies in Macedonia and has a leading role in development of hydropower on a project level as part of its broader scope of responsibilities in relation to securing and managing water use as a national resource. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into national legislation and their implementation are important part of the MESP and its Environmental directorate portfolio. The Water sector of MESP is responsible for transposition of the EU Water Framework Directive and EU Directive on floods into the national legislation, as well as their further implementation. The MESP is also the relevant institution for reviewing and approving environmental impact studies (EIS) for HPP projects above 1 MW, and environmental impact study for HPPs above 10 MW. In case of new HPPs built in protected areas/locations, the MESP may require an environmental impact assessment study regardless of technology and installed capacity. This Ministry grants concessions for utilisation of natural hydro potential for electricity generation.	
Ministry of Agriculture,	MAFWE performs the activities related to:	
Forestry and Water Economy	 agriculture, forestry and water economy; 	
(MAFWE)	 Utilisation of agricultural land, forests and other natural treasures; 	
	 hunting and fishing; observing and studying the situation with waters, maintenance and improvement of the water regime; irrigation systems; hydrological, agrometeorological measuring, as well as anti-hail protection; studying and researching of meteorological, hydrological and bio-meteorological occurrences and processes; 	
Energy Regulatory Commission (ERC)	ERC is a regulatory body that is fully independent from the interests of the energy industry and the government. The ERC is responsible for tariff regulation and adoption of methodologies for setting prices of electricity, gas, geothermal energy, central heating and oil. The ERC issues electricity generation licenses and grants preferential producer status (in practice, these are grants of the preferential feed-in tariffs) for electricity generation from renewable energy sources. It is also responsible for entry into the register of renewable energy power plants and acquiring status for preferential electricity producers from RES.	
Energy Agency (EAM)	The role of the EAM is to initiate, coordinate, study and prepare relevant documents and make suggestions to the Ministry of Economy, and involve domestic and foreign specialised companies and experts as needed. The Agency provides support to the ME in development of the RES strategy and NREAP. Its duty is also to develop the state energy balance and submit it to the ME. In the renewable energy project development process, the Energy Agency shall keep and maintain Register of RES power plants, and it is responsible for issuing guarantees of origin for electricity generated from renewable	



Stakeholder / Institution	Role / Responsibility	
	energy sources, keeping register on those certificates and issuing consent for measurement of the wind potential.	
Joint Stock Company Macedonian Power Plants- AD ELEM	AD ELEM is the main power generation company in the former Yugoslav Republic of Macedonia, it owns and operates the majority of large HPPs in the country, 8 HPPs with 560 MW of installed capacity. It also operates 847 MW of coal-fired TPPs, as well as a 36.8 MW wind park. Besides electricity generation as a core business, other energy businesses are part of the company portfolio. As a state-owned company AD ELEM:	
	 may lead or give support for development of new large HPP projects from the national strategic framework (on the basis of government decision) 	
	proposes development of new energy generation project initiatives	
Transmission System and Market Operator - MEPSO	MEPSO AD is a fully state-owned company, which was established in 2005 with the unbundling of vertically integrated Electric Power Company. According to the licenses for Transmission System Operator and Electricity Market Operator issued by the Energy Regulatory Commission (ERC), in compliance with the Grid Code and Market Rules, MEPSO is responsible for:	
	Ensures non-discriminatory access to the transmission network,	
	Providing connection and use of the transmission network,	
	 Provide safe, continuous and quality transmission of electricity through the transmission network, providing the operational functionality of the transmission network by maintaining an appropriate level of reliability and availability of all facilities in the transmission network, 	
	 Maintenance, planning and development of the 400 kV and 110 kV transmission network and interconnections, 	
	 Operation of transmission system, dispatching and transit of electricity, including cross-border flows and balancing of the power system 	
	MEPSO organises, records and controls the trade in capacity and electricity in the country, as well as concludes PPAs for purchase of electricity produced from referential producers.	
Distribution System Operator (EVN)	EVN Macedonia is the unit of Austrian utility EVN AG. EVN Macedonia is a company which has power distribution and supply license on the territory of the former Yugoslav Republic of Macedonia as its primary activity. The company operates and controls electrical networks up to the voltage level of 35 kV. It owns power generation facilities from several SHPPs and 1 HPP of 13.6 MW of capacity. It is responsible for connection of new RES-based HPPs to the distribution network. EVN developed and implements electricity distribution grid code determining connections and operations of the distribution network.	
Municipalities	The country has 84 municipalities and the city of Skopje. The municipal governments play important role when dealing with development of new renewable energy power plants with capacity below 1 MW. Thus, municipal governments are in charge of preparation of urban planning documentation on the municipal level, issuing construction permits and permits for use. The municipalities are consulted for connection to power distribution grid and approval for environmental impact surveys. Municipalities are the relevant institution for reviewing and approving environmental impact surveys when renewable energy plants have an installed capacity below 1 MW.	
Other stakeholders	National Academy of Sciences and Arts State Inspectorate for urbanism and construction Land Cadastre NGOs	

3.3.1 Permitting Process - general

The permitting procedure in former Yugoslav Republic of Macedonia is developed and streamlined due to centralised organisational structure, and past experiences of the country, both in large hydropower and concessions for SHPPs. The strategic framework for the implementation of energy infrastructure projects such as



the Strategy for Energy Sector Development by 2030 and the NREAP, as well as the Spatial Plan 2002-2020 have been adopted and are in place.

The permitting procedure related to development of the HPPs has at its core the granting of the water use licence and is established around the regulations covering the water sector. Key institutions involved in the permitting procedure, thus, are the Ministry of Environment and Spatial Planning (MESP) and the Ministry of Economy (MoE). As the project development advances, Ministry of Transport and Connections (MoTC) (securing of land) and the Energy Regulatory Commission (ERC) (energy related licensing) play important roles. Depending on the voltage level, the DSO or the TSO is involved during the grid connection process.

Under the Energy Law⁵⁰, electricity generation facilities above 10 MW of installed capacity may be developed only through the "authorisation for construction of new energy generation facilities" that is granted by the Government, on the proposal of the Ministry of Economy. However, such authorisation is not necessary when the project is conditioned with the need to obtain a concession for use of waters, which is a prerequisite for the development of hydropower plants. In such circumstances, i.e. when concession is required, the terms and conditions for the construction of the HPP are laid down in the bidding documentation and the concession agreement (Energy Law, Article 49).

According to the Law on Waters⁵¹ (Article 6), water is considered a good of general (public) interest, and water concession is required for "generation of electricity by mean of hydro-electrical facilities"⁵², hence in case of use of water for electricity generation public interest is assumed. In addition, Article 4 of the Law on Concessions and Public Private Partnerships⁵³ (Law on Concessions and PPPs) defines the concessions for goods of public interest "as concessions having a good of public interest as an object". The same law provides for two (2) different procedures for granting concession: (i) as PPP or (ii) as concessions for goods of public interest. In each situation, a decision of the GoM (in case of energy infrastructure/HPP development) is required, confirming the public interest.

3.3.2 Concessions

Prior to commencing the procedure for PPP or concessions for goods of public interest, the contracting authority prepares the feasibility study⁵⁴ which serves as the basis for granting a decision for tendering out the concession/PPP. In cases PPP is established or partially involves existing facility, the procedure used is the one as outlined in the Law on Public Procurement⁵⁵, being in line with EU directives in this area. That said, a PPP may be established following any of the following procedures: (i) open procedure; (ii) restricted procedure; (iii) negotiated procedure and; (iv) competitive dialogue. The GoM has (unsuccessfully though) utilised a PPP related procedure for establishing of PPP on River Crna, involving ELEM (public partner) and potential private partner in large HPP project development⁵⁶, where the whole transaction involved development of new HPP(s) and transfer of operation of existing/operating HPPs, from the public sector to a private partner.

In case of awarding a concession for goods of public interest (water), the procedure outlined in the Law on Concessions and PPPs is followed as well as the procedure as/if established in the specific laws (in this case, Law on Waters). The procedure as established in a Law on Concessions and PPPs is in essence a public tender procedure, which may be adjusted depending on the object of the concession. This law, also outlines the two potential award criteria: (i) economically most favourable bid; or (ii) highest concession fee.

However, both the Law on Concessions (Article 10) and the Law on Waters (Article 55-a) establish important procedural exceptions. The first one is related to granting of the concession to goods of public interest to public enterprises established by the former Yugoslav Republic of Macedonia, and/or the municipalities, and to the state-owned enterprises, in which RM⁵⁷ and/or municipalities have majority control-in which case the Law on

⁵⁰Energy Law, Official Gazette of RM 16/2011.

⁵¹ Law on Waters, Official Gazette of RM 87/2008.

⁵² Article 53 of Law on Waters, Official Gazette of RM 87/2008.

⁵³ Law on Concessions and Public Private Partnerships, Official Gazette of RM 6/2012.

⁵⁴ Article 16 of Law on Concessions and PPPs, Official Gazette of RM 6/2002.

⁵⁵ Law on Public Procurement, Official Gazette of RM 136/07.

⁵⁶ Also known as Chebren and Galište HPP.

⁵⁷ State owned electricity generation company-ELEM, falls in this category.



Concessions and PPPs does not apply. Article 10 of Law on Concessions and PPPs, is silent as to the direction of the procedure to be followed in these specific cases.

Article 55-a of the Law on Waters, diverts from regularly established procedures in other direction. Namely it allows that, public enterprises established by the RM, and/or the municipalities, and state-owned enterprises, in which RM and/or municipalities have majority control, furnish an unsolicited proposal and be granted water concession without a public call (tender).

Hence, there are potentially three (3) scenarios for developing large HPPs in the country:

- 1. By unsolicited proposal, if exclusively public enterprises, and/or the municipalities, and state-owned enterprises, in which state and/or municipalities have majority control are involved in project development;
- 2. By establishing PPP, if public partner (the above referred category) and private partner (an HPP Developer) are involved, following the procedures as established by the Law on Public Procurement; and
- 3. By granting of water concession, following the competitive procedure as outlined in the Law on Concessions and PPPs and the Law on Water, in case of no involvement of public partner.

In 2nd and 3rd cases, the private partner and concessionaire could be a foreign legal person or a locallyestablished company (SPV). Article 42 of the law on Concessions and PPPs provides strong wording for step-in rights provisions to be entered in the concession contract and the contract for establishing of the PPP (offered to the winning bidder(s)), thus easing financing options of the potential HPP project and de-risking financing of HPP projects.

Once granted, the concession may be terminated in cases where:

- The water permit is repealed or terminated,
- The concessionaire did not start the activity defined by the concession agreement,
- The concession agreement expires,
- Early concession buy-out for higher public interest,
- Exceptional case of unilateral termination of the concession agreement,
- Bankruptcy or liquidation of the concessionaire,
- Other circumstances prescribed by the concession agreement.

3.3.3 Environmental permitting

The procedure of obtaining the Environmental Permit is an obligatory process defined by the Law on Environment which is a *lexgeneralis* legislation for this subject matter, that is a framework law integrating EU acquis across different areas for protection of the environment and consists of the following steps:

- (i) Letter of Notification to MESP. Scoping advice provided by MESP, etc.
- (ii) preparation of Environmental Impact Assessment (EIA);
- (iii) organisation of public hearing and consultation; and
- (iv) approval of the Study by competent authority. Responsibility for issuing and procedure for obtaining of the environmental permit is regulated by the Law on Environment and related secondary legislation.

All HPPs are subject to the requirement of preparing and submitting an EIA. Therefore, they may not be constructed or start their operation before a positive decision on the EIA is obtained in accordance with the Law on Environment⁵⁸ (see Law on Waters, Article 177). The EIA contains:

- Description of the project, along with information on the location, the nature and the size of the project and the required land area;
- Description of the environment and its location;
- Description of the natural, cultural and historical heritage and a description of the area;

⁵⁸ The Law on Environment, Official Gazette of RM 53/05.



- Description of the types and quantities of the expected emissions, especially of the air emissions and the wastewater, solid waste, as well as other information necessary for evaluation of the project's broader environmental impact;
- Description of the measures for prevention, reduction and elimination of the environmental impact, as well as of the measures of restoring into previous condition;
- Description of the environmental impacts of the project, taking into account the scientific development and the accepted methods for evaluation;
- Description of the characteristics of the technology used;
- Description of the alternative solutions for the realisation of the project that the HPP Developer must take into consideration and the main reasons for selecting the proposed alternative; the zero alternative is always included;
- Summary of the submitted study, without technical details;
- Analysis of the difficulties (technical deficiencies or lack of knowledge) with which the HPP Developer or the expert were faced during the preparation of the study; and
- Proposal about the scope and characteristics of potential changes that would require an update of the EIA.

The HPP Developer should obtain an approval of the EIA. The Environment Directorate, a body under the competence of the MESP is responsible for reviewing and approving the EIA (in case of HPPs of above 1 MW). Approval of the EIA is issued in the form of an administrative act. There is a wide level of possibility for "interventions" (starting from an appeal or administrative dispute) of the parties and individuals willing to challenge proposed solutions in the project from the environmental point of view. The legislation provides wide-ranging possibilities for NGOs and other interested parties to take legal actions in the process of issuance of an Environmental Permit.

3.3.4 Water Permits

As pointed out before, use of waters for electricity generation may be carried out only based on a water concession for electricity generation (Law on Waters, Article 53). The maximum duration of a concession for water use for power generation is dependent on the assumed installed capacity of the HPP. Thus, in accordance with Article 57 of Law on Waters: (i) for HPPs with capacity between 2 and 10 MW, the maximum concession period is fifty (50) years; while for (ii) for HPPs with capacity of more than 10 MW, it is up to seventy (70) years.

In the case of a water concession, the concessionaire is liable to a water concession fee, composed consisting of two parts. Namely:

- A single fee that is paid upon the acquisition of the concession, and
- An annual fee that is paid each year of the duration of the concession.

The HPP Developer is obliged to pay the concession fee upfront, as an introductory fee, or in instalments. The single fee for electricity generation may not be less than ten times the annual fee according to the revenue forecast for the first operational year (Law on Waters, Article 58). The annual fee is established with the concession contract and is provided within the tender documentation.

The award and signing of the concession agreement for the use of waters for electricity generation is subject to acquisition of a specific water permit issued by the MESP (Law on Waters, Article 56). However, the winning bidder of a public tender is automatically granted a water permitaccording to the procedure introduced in Law on Waters. Still, the water permit will not enter into force, if the winning bidder of a public tender fails to sign the concession contract with the contracting authority. The duration of water permit is set at ten (10) years, however as an exception may be issued for the period of concession duration.

The MESP may propose to the GoM the repealing of a water permit and effectively limit the quantities of water available for generation of electricity, e.g. in case of shortage of drinking water. The GoM is entitled to repeal the water permit for the achievement of a higher public interest (generally drinking water). In such cases, the user is entitled to seek compensation of losses in compliance with the rules on compensation of damages (Law on Waters, Article 52).

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Users of waters, including users of waters for electricity generation, are liable to a water usage fee. The liability to a water usage fee starts on the day of entry in force of the water permit. The water usage fee for power generation equals 1% of the production cost of one kWh at the entry of the HPP and it is different from the concession fee described above. The power producer is liable to pay the water usage fee on monthly basis toa special treasury account (Law on Waters, Article 213).

3.3.5 Spatial and Construction Permits

The Law on Spatial and Urban Planning⁵⁹ is the core legislation for the spatial planning system in the former Yugoslav Republic of Macedonia. A prerequisite for the construction of an energy generation facility (including HPPs) in a certain area i.e. the obtainment of a construction permit is that such facility is included in the respective urban planning documents. The former Yugoslav Republic of Macedonia has recently streamlined the urban planning procedure by introducing the concept of "infrastructure project"⁶⁰ (being essentially urban planning project documentation), transferring the obligation for its development to an interested HPP Developer, and abandoning the issuance of location conditions. Namely, now it is the HPP Developer which develops an "infrastructure project" based on the spatial planning documents available for that location, which is later submitted for approval to the Ministry of Transport and Communications (MoTC) and/or the Municipality, as applicable. The condition for Utilisation of the "infrastructure project" mechanism is developing of the infrastructure project containing different components, at least on of each represents "line infrastructure" component (electrical line, tunnel, road, bridge, etc.). This reform, dramatically improved the timing for developing urban planning documentation.

Construction permit. A construction permit is required to build hydropower plants. The MoTC is competent for awarding the construction permit in case of HPPs with installed capacity above 1 MW (Law on Construction, Articles 57, 58). The country has recently streamlined issuance of the construction permit, although this procedure has not been so far used for construction of large HPPs. Nevertheless, there is opportunity to submit the application for construction permit electronically, accompanied by the following documents:

- Architecture-urban project design (revised and approved), if the HPP is already considered and recognised with relevant spatial planning documents, or as an "infrastructure project" containing EIA (approved) if not;
- Geodetic survey of the land parcel;
- Concept project design (optional);
- Proof of right to build (concession contract);
- Basic project design (revised and approved).

The MoTC, or the Municipality, as the case might be, is obliged to review and adopt a decision on awarding the construction permit in a period of 10 days after the submitted documentation is complete and correct. The construction permit may become null and void if the applicant does not start the construction within two (2) years, or finish it within ten (10) years (in case of HPPs of above 1 MW) from the date of issuing the permit⁶¹ (Law on Construction, Articles 59 - 68).

Use permit. A use permit is required for the official commissioning of the hydropower plant. Depending on the installed capacity of the HPP, the use permit is issued by the MoTC (for power plants with an installed capacity of 1 MW or more).

The MoTC issues the use permit based upon the basic project design (or project design of the completed facility if major changes occurred during the construction), technical commissioning report and an excerpt of the Cadastre proving the ownership or other use rights of the facility (Law on Construction, Article 87). In case of incomplete request for use permit, the MoTC shall order the applicant to submit full and proper documentation within seven days from the receipt of the request for use permit. A three-member commission composed of licensed supervising engineers, appointed by the Minister of Transport and Communications and relevant administration from responsible institutions that already issued permits have to carry out a site inspection upon the receipt of the

⁵⁹Law on Spatial and Urban Planning, Official Gazette of RM199/14.

⁶⁰ Article 52, Law on Spatial and Urban Planning, Official Gazette of RM199/14.

⁶¹ Law on Construction, Official Gazette of RM, 130/09.



request for use permit within 15 days from the receipt of the full and proper request for use permit. The commission verifies that:

- the facility has been built in accordance with the basic project design or, in case of modifications during the construction, with the project design of the finished facility, and in accordance with the construction permit;
- the facility is safe and may be used.

If the commission, established any shortcomings that affect the mechanical stability and resistance of the facility, it may request the HPP Developer to remedy those aspects within 30 days, or it may propose to refuse the issuance of the use permit (Law on Construction, Article 89-92).

In case of positive report of the commission, the MoTC shall issue the use permit within 15 days from the date of the site inspection. The costs for the site inspection and issuance of the use permit are borne by the HPP Developer.

The HPP Developer is also liable to provide and build the access infrastructure to the site including roads, support walls, bridges, tunnels, channels etc. pursuant to the requirement for construction of line infrastructure (Law on Construction, Article 52).

Often, the land suitable for construction of HPPs, or any part of the installation and/ or accumulation, is stateowned agricultural land (forests, pastures, arable land or similar). In such cases, the HPP Developer should request the initiation of two procedures:

- 1. Conversion of the agricultural into construction land, and
- 2. Buy-out, or long-term lease of land.

In the case the land parcel(s) where the HPP Developer intends to build the HPP is classified as agricultural land (forest, pasture, arable land or similar), the MoTC after having received the "infrastructure project" requests from the Ministry of Agriculture, Forestry and Water Economy(MAFWE) to permanently convert the relevant agricultural land into construction land (article 51a of the Law on Spatial and Urban Planning). The duration for this procedure depends on the complexity to prepare and review the project documentation. The costs for providing the project documentation are borne by the HPP Developer. Unless the land parcel(s) where the HPP Developer intends to build the HPP is privately-owned, the HPP Developer needs to purchase the land, sign a long-term lease contract with the Government for the land use (Law on Construction Land, articles 13 - 40). The procedures on the sale, long-term lease of state-owned construction land are based on competitive bidding, which brings a risk of not winning the bid for the specific land parcel, or direct long-term lease agreement with MoTC or Municipality for the infrastructure of public interest. If the land parcel is privately-owned, the HPP Developer and the owner of the land may mutually agree on the sale, long-term lease or usage rights of the land.

In the case where the land is privately-owned, the HPP Developer may submit the proposal for expropriation only after the public interest for expropriation has been determined in accordance with the law⁶². The proposal is submitted to the authority responsible for property issues –the unit of municipality on whose territory the concerned real estate is situated. The HPP Developer shall bear the costs of expropriation, whereas the expropriation will be made on behalf and in favour of the grantor (the former Yugoslav Republic of Macedonia). The HPP Developer will acquire the right to enter into possession of expropriated real estate on the day that expropriation decision becomes final and legally binding. The compensation for expropriated real estate is set based on market value at the time of establishing the property right.

Resolving property rights and obtaining valid status in this regard represents one of the major risks for HPP project development and could cause quite significant delays in the process.

3.3.6 Energy Permitting

Electricity generation in the former Yugoslav Republic of Macedonia can only be performed based on a license issued by Energy Regulatory Commission (ERC). It can be performed by domestic and foreign companies. However, to apply for electricity generation license, foreign companies must at least establish a subsidiary

⁶² The Law on Expropriation, Official Gazette of RM 55/00.



registered at the Trade Register maintained by the Central Register (Energy Law, Article 5). This prerequisite is cited in the bidding documentation for concession for water use for electricity generation.

A license for the energy-related activity may be issued for a period of three (3) to thirty-five (35) years depending on the type of energy, type and scope of the provision of public service obligation, the capital necessary for the carrying out of the energy related activity, duration of the right/concession to use the specific energy resource, as well as on the specific requirements of the operator. The typical duration of the license for electricity generation is thirty-five (35) years. A single legal entity may acquire several licenses for energy-related activities (Energy Law, Article 37).

The requirements for the award of a license for electricity generation from renewable sources are laid down in the Rulebook on the licenses for performance of energy activities (Official Gazette No. 141/2011, 78/2013 and 33/2015). The HPP Developer is obliged to publish the request for the award of license for generation of electricity from renewable sources on its expense in at least two daily newspapers. The announcement serves to notify the award of the license and to invite all interested stakeholders to comment and to present their case. Following the publication of the request, the ERC shall schedule a preparatory session that shall take place within 50 days from the date of submission of the request. If the ERC establishes at the preparatory session, that the requirements for the award of the license have been fulfilled, it shall schedule a regular session within 10 days to formally endorse the decision for the award of the license. The ERC shall publish the decision and the license for energy activities in the Official Gazette.

3.3.7 RES Incentive Scheme

The system of incentives for the production of electricity from RES is established by the Law on Energy, under which RES preferential producers are entitled to guaranteed purchase of electricity at currently valid feed-in tariffs (FiTs). FiTs are established for different technologies and are governed through the national quotas per technology and maximum allowed installed capacity of projects for each technology. SHPPs (HPPs with installed capacity of up to 10 MW) are subject to FiT calculated in blocks depending on the electricity generation. The bigger the generation, the smaller is the FiT for the concerned technology (120 EUR/MWh to 45 EUR/MWh). Even though there is no national or dynamic quota for SHPPs being subject of FiT, the SHPPs are eligible to receive higher FiT than micro HPPs (of less than 100 kW installed capacity). The country has in the past successfully conducted 7 tendering rounds offering over 100 potential SHPP sites (from 2006-2014), resulting in signed concessions agreements, developed and/or operating SHPPs, mostly in the range of 100 kW to 3 MW. Since 2010, 58 new SHPPs with a total capacity of 58 MW have been commissioned. The remaining non-tendered sites are questionable from the aspect of their water potential, bankability potential, or due to their small installed capacities, not exceeding 1 MW.

Having in mind that large HPPs are not eligible for incentives, we shall not cover permitting system for incentivising RES and the related guaranteed off-take. Hence, large HPPs (with installed capacity above 10 MW) only are in the position to sell generated electricity at the electricity spot market, or through bilateral power purchase agreements.

3.4 I.O.L.R. framework - Montenegro⁶³

Montenegro has a relatively high natural hydropower potential and accordingly a significant number of hydropower generation projects in the pipeline. Like in all other regional countries, an institutional-organisational framework exists, and it seems to be functional. However, when it comes to actual project development activities, there have been limited results. The state has quite limited potential / resources to develop projects on its own. The generation incumbent EPCG also does not have any plans⁶⁴ to develop new large HPPs. Should no concrete HPP Developer's offer be submitted in 2017, it is obvious that it will be necessary to undertake serious revision of the existing planned HPP projects and to create a new, more realistic picture of hydropower potential utilisation in the future. However, there are several HPP projects that are connected with unsolved transboundary issues (for

⁶³ This section was developed in larger part by using the following resource: <u>http://www.oie-res.me/index.php?page=procedure</u>

⁶⁴ Which may be a good indication that size and planned generation output for existing projects in the hydropower generation pipeline are not realistic.



detail, see BR-5) and which firstly require the resolution of the situation with the neighbouring countries (BiH, Croatia, Serbia).

Table 3.4: Main institutions/stakeholders and their roles/responsibilities in the hydro power sector i	n
Montenegro	

Stakeholder / Institution	Role / Responsibility
Parliament of Montenegro	The Parliament of Montenegro adopts Energy Law, RES Law, Environmental Law, Law on Construction and all other laws that have impact on the development of hydropower generation projects. This institution also adopts national Energy Strategy and decides on concessions and other strategic decisions related to development of large hydropower development projects, including the approvals of loan agreements for their development.
Government of Montenegro	The Government of Montenegro prepares and proposes all legislative acts (Laws and Strategies) that the Parliament adopts. GoM is responsible for development and implementation of action plan for implementation of Energy Strategy and National Renewable Energy Action Plan (NREAP). The GoM creates and implements policy in the electricity sector, adopts incentive measures for the development of RES generation and grants concessions for major hydropower generation projects. GoM decides on the development of dedicated Spatial Plans for major infrastructural projects
Ministry of Economy (MoE) – Directorate for Energy	According to the Law on Energy (2016) MoE is responsible for energy, in particular for Energy Policy and Strategy, as well as for the preparation of laws and key by-laws in the energy sector. MoE's Directorate on Energy is, among others, responsible for the overall energy policy, strategy, development and energy sector reforms, for electricity, district heating/cooling, renewable energies and energy in transport). In this Directorate exists separate unit dedicated to Renewables, which issues Energy Licenses for electricity generation from SHPPs.
Ministry of Sustainable Development and Tourism (MoSDT) – Environmental Department	MoSDT is responsible, among others, for spatial planning, construction, environment, climate change and EU integration in the areas of its jurisdiction. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into national legislation and their implementation are important part of the MoSDT and its Environmental Department portfolio. Due to its commitment to develop and maintain sustainable energy sources (energy efficiency and renewable energies in the context of preserving the environment and climate change), MoSDT is recognised as stakeholder of all major hydropower generation development projects. This Ministry issues Location Permits, Construction Permits, Environmental Consents on design documentation, namely all main documents (except grid connection) for a hydropower generation project.
Ministry of Agriculture and Rural Development (MoARD)	MoARD is responsible for agriculture and fishery, water economy, forestry and wood processing industry and regional development. The Water department of MoARD is responsible for transposition of the EU Water Framework Directive and EU Directive on floods into Montenegrin legislation, as well as their further implementation. This Ministry issues water permits which are the starting point in HPP project development. All hydrological studies, data and river basin coordination issues, including trans-boundary, are coordinated by this Ministry.
Energy Regulatory Agency of Montenegro (REGAGEN)	 REGAGEN was established in 2004 as autonomous, functionally independent non-profit organisation that carries out its public authorisations in the energy sector in accordance with Law on Energy (LoE), to regulate the energy sector in Montenegro. The new LoE (2016) has further strengthened the regulator's independent role in line with the Third EU Energy Package. REGAGEN approves secondary legislation documents such as Electricity Supply Rules, Transmission Grid Code, Distribution Grid Code and Market Rules. According to the LoE the REGAGEN is, among others, responsible for: Issuing licenses for energy activities, Issuing guarantees of origin for electricity generated from renewable energy sources, Granting status of privileged generator of electricity from renewable energy sources
PE Elektroprivreda Crne Gore (EPCG)	EPCG is the holder of three licenses for: (i) generation, (ii) distribution of electricity and distribution system operator (DSO) and (iii) supply of electricity. EPCG is a joint stock company (State – 57%, Italian A2A – 42% and Other – 1%). EPCG is the owner and

Stakeholder / Institution	Role / Responsibility	
	operator of both major HPPs (Piva and Peručica, 649 MW in total) and 5 SHPPs. Part of the EPCG is distribution division, functionally unbundled, which operates distribution network in the country and connects all SHPPs.	
Montenegrin TSO – Crnogorski Elektroprenosni Sistem (CGES)	CGES was unbundled from EPCG AD in 2009. CGES is a joint stock company owned by the state - 55%, TERNA (TSO of Italy) - 22.1%, EMS (TSO of Serbia) – 10% and the rest is owned by other legal and natural persons. CGES owns two licenses: for the power system operator (TSO) and transmission of electricity. CGES operates power system of Montenegro and dispatches, on behalf of CGES, all generation plants in the country, including two major HPPs.	
Montenegrin Electricity Market Operator - (COTEE)	COTEE was unbundled from CGES in December 2010 with the decision of the GoM. Since the completion of the foundation COTEE operates as 100% state-owned energy entity. COTEE is responsible for concluding PPAs with electricity producers that use RES. COTEE buys all the electricity produced by RES generators and sells this electricity to electricity suppliers in accordance with effective legislation.	
Municipalities	Municipalities in Montenegro have no role/authority in hydropower generation projects.	
Other stakeholders	Montenegrin Academy of Sciences and Arts NGOs	

3.4.1 Permitting Process - general

Numerous state and local level authorities are involved in licensing and administrative procedures for renewable energy. According to the Energy Community Secretariat report (2016), there is insufficient communication between these bodies, and the information on the process has not been summarised in guidelines or similar. In addition, there is no one-stop-shop planned to deal with all permits and authorisations for a renewable energy project.

Certain steps to simplify and streamline the process were taken in 2014-2015. The number of procedures for issuing the construction licenses and permits in the Ministry of Sustainable Development and Tourism⁶⁵ (MoSDT) were reduced from 36 to 2. REGAGEN confirms the fulfilment of privileged producer status and issues guarantees of origin, the TSO or DSO grant the grid connection and COTEE concludes the PPAs. There are simplified procedures for renewable energy plants with installed capacity of up to 20 kW where no authorisation is required except the approval of the connection to the electricity distribution grid.

REGAGEN is the single authority for regulating the energy sector of Montenegro, as required by the Third Energy Package. The Law on Energy empowers REGAGEN to approve the Ten-Year Network Development Plans (TYNDP) for the transmission system prepared by the transmission system operator (CGES) in accordance with the Action Plan for the implementation of Energy Development Strategy-2030⁶⁶ and the development plans of neighbouring transmission system operators. Similarly, the distribution system operator (EPCG) prepares a Ten-Year Development Plan for the distribution system. Both TYNDPs as "rolling plans" should be updated every three (3) years. CGES has the obligation to publish on its webpage the TYNDP and the annual investment plan approved by REGAGEN. Equally, DSO should regularly publish its TYNDP. Furthermore, the Law on Energy requires the network operators to take into consideration the plans for promotion of renewable energy sources when planning the development of the networks.

As mentioned above, REGAGEN was appointed to issue guarantees of origin for electricity generated from renewable energy sources and to maintain a register of issued guarantees. An initial online registry was established by REGAGEN and several certificates for guarantees of origin were issued. The Law on Energy provides that foreign guarantees of origin will be recognised in Montenegro under the condition of reciprocity and in accordance with international agreements.

⁶⁵MoSDT is responsible for spatial planning, construction, development of tourism and standards, management of touristic destinations, development of dwellings, waste management and communal development, environment, climate change and EU integration in the areas of its jurisdiction.

⁶⁶Action Plan for the Implementation of the EDS-2030 (2014) was adopted in 2016.



3.4.2 Concessions

There are potentially two procedures for developing electricity generation objects in Montenegro. The Law on Energy provides for the authorisation procedure and a public tendering procedure. Having in mind that the authorisation procedure is only possible for electricity generation facilities not exceeding 1 MW of installed capacity (in which case the MoE is responsible institution for issuance of the Energy Permit), this procedure will not be elaborated further in this report. On the other hand, Energy Permit is not required in the case of developing electricity generation facilities resulting from an organised public tender. Further, since the Law on Energy defines the electricity generation as an "activity of public (general) interest"⁶⁷ and allows for use of "public tender in case the authorisation procedure has not secured new generation capacities or dynamics of developing of new electricity capacities are not in accordance with the plan (as per the EDS)"⁶⁸, the Government, via the MoE has widely used the second (public call) option, notably for organising public tenders for development of SHPPs⁶⁹. This option is further in line with the provisions of the Law on Concessions as described below.

In terms of scope, the Law on Concessions⁷⁰ is very broad. In considering its potential scope of application to the electric generation sector, Article 2(2)("Concessions shall be awarded in order to . . . provide for the rational, cost-effective, proper and efficient usage of natural wealth"), Article 4(1) ("Concession shall mean the right. . . to use the state-owned natural wealth") and Article 6(1) (". . . a concession subject matter may be . . . usage of watercourses . . . [and] design, construction, maintain and using . . energy–related and other structures for generation . . . of electrical energy"), suggesting that concessions are either required or "may" be used to exploit "state-owned natural wealth" in the generation sector.⁷¹

In addition, the Law on Waters⁷² and Article 10 of the Law on State Property⁷³, suggest that exploitable watercourses (river streams), are state resources and are thus subject to the terms of the Law on Concessions.

The procedure for the granting of concessions is set out in the law. In brief, it includes the preparation of a "concession act" by the competent authority (the MoE in the case of electricity generation), followed by either a single-stage tendering process or a process involving an initial pre-qualification stage. (An "accelerated procedure" is also available, but appears to be applicable only to relatively short-term concessions; it also includes a competitive dialogue procedure). So far, the MoE has followed both single-stage and two-stage procedures during previous SHPP tenders.

As an exclusion, article 41 of the Law on Concessions provides that the tendering procedure can be initiated by the HPP Developer (unsolicited proposal), where it proposes the subject of the concession and bears the costs for preparatory activities and implementation of public bidding, which is organised by the contracting authority. The party originating the project proposal would normally be permitted to participate in that tender, under the same terms as other bidders. In the case that the interested HPP Developer initiating the proposal does not win the tender, the costs incurred for preparatory activities and implementation of public bidding are returned. One could conclude that the language of Article 41 on unsolicited proposals intends to discourage projects or concessions not undertaken according to the terms of the Law.

Another important departure from the usual tendering procedure is provided in article 20 of the Law on Concessions, stipulating that a concession may also be provided without organising a tendering procedure in cases of international agreement to which Montenegro is signatory party or in case of an agreement Montenegro has signed with one or more states, or international organisations for joint implementation of a concession project.

The duration of the concession (as per article 8 of the Concessions Law) is set to thirty (30) or sixty (60) years, reserving the longer duration only in cases when concession is granted by a Parliament decision, unlike the cases

72Articles 13, 62, and 133.

⁶⁷ Article 86 of the Law on Energy.

⁶⁸ Article 82 of the Law on Energy.

⁶⁹ Total of six public calls for development of SHPPs at pre-defined water streams have been organized from 2007 through 2016. The sixth public call offered water courses with total possible installed power of 12.42 MW, with estimated total annual generation of electricity of 56 GWh.

⁷⁰ Law on Concessions, Official Gazette of Montenegro 08/09.

⁷¹ Taken from "Public-private partnership (PPP) options for future power generation in Montenegro, developed by Cambridge Economic Policy Associates ltd. (World Bank 2010).

⁷³ Law on State Property, Official Gazette of Montenegro 21/09 and 40/11.

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when the concession is granted by the Government or a municipality. However, in either case the concession period may be extended by half of the original duration period.

Finally, the Law on Concessions, unlike concession legislation of the countries in the region, does not insist on the registration of the concessionaire under Montenegrin law. A concessionaire may be "domestic as well foreign legal or physical person"⁷⁴.

We shall briefly describe the process for granting concessions and all related permits as conducted with the latest public call for SHPP of the government (the Concession Act)⁷⁵, as it would (in its bigger part) potentially apply to large HPPs, should the government decide to organise a public call for large HPPs.

The objective of the public call was the selection of the most advantageous tenders for the construction of SHPPs in Montenegro for the exploitation of the energy potential of water courses. Concessions were awarded through public call under an open procedure, as prescribed by the Law on Concessions.

According to the Concession Act, the tenderers are obliged to submit a preliminary design for the use of water courses, and other documents specified by the public notice.

The government has previously selected the water courses based on hydrological measurements and surveys at particular micro locations of water courses, performed by the Institute of Hydrometeorology and Seismology of Montenegro. Part of the tendering documentation is also the pre-feasibility study for the water courses being tendered.

The concession fee was fixed and amounted to 6.5% of the achieved annual generation in the SHPPs provided that such amount was not less than 5% of planned generation capacity presented in the preliminary design of the bid submitted by the tenderer.

The duration of the concession for all the watercourses was fixed at thirty (30) years, calculated from the date of issuance of urban-technical conditions for the first of the planned SHPP.

Project/Technical Documentation: In accordance with the Law on Spatial Planning and Construction⁷⁶ technical documentation, depending on the structure and level of development, is made as follows:

- 1) Preliminary design;
- 2) Preliminary project;
- 3) Main project with details for the execution of works;
- 4) Project plans for maintenance.

Technical documentation must be made in such a way that the technical solutions of the designed facility are in accordance with:

- Law on Spatial Planning and Construction and the secondary legislation adopted based on the said Act;
- Special rules that directly or otherwise affect the basic requirements for facilities; and
- Professional rules.

The preliminary design must be prepared by an institution/subject which is licensed to develop technical documents. A license issued to an institution licensed to prepare technical documents abroad must be verified by a competent authority in Montenegro.

Concession Contract: Once the concession is awarded to the most successful bidder, the Concession Contract is signed and implemented in three phases:

- (i) Phase of preparation of technical documents
- (ii) Phase of construction of facilities of SHPP, and
- (iii) Phase of technical and economic exploitation of the potential of water courses for generation of electric energy. After the expiry of phase III of the implementation of the Concession Contract, all SHPPs, with all ancillary facilities, are handed over in working order to the state of Montenegro.

⁷⁴ Article 4 of the Law on Concessions.

⁷⁵ Concession act for awarding concessions for exploitation of water courses for construction of SHPPs plants in Montenegro, Government of Montenegro, 2016.

⁷⁶ Law on Spatial Planning and Construction, Official Gazette of Montenegro 51/08, 40/10, 34/11, 47/11, 35/13, 39/13, 33/14.



Phase I- phases of design, starts at the date of issuance of urban-technical conditions for the first object of the planned SHP plants, and ends by issuing of construction permit for the first object of the planned SHP; the duration of this phase is eighteen (18) months;

Phase II-phase of the construction of the SHPPs, starting at the date of issuance of construction permit for the first object of the planned SHP plants and ending with obtaining of the exploitation (use) permit for the last object of the planned SHP; the duration of this phase is set at two (2) years⁷⁷;

Phase III-phase of technical-economical use of hydropower potential for electricity generation in constructed SHPPs; starting at the date of obtaining the occupancy permit for the last object of the planned SHP plants, and ending with the expiry of the concession period.

The expiry of duration of the concession, as per the Concession Contract, is followed by transfer of ownership of the SHPP, along with ancillary structures, to the Government of Montenegro, being the contracting authority. Prior to the transfer of ownership, structures of SHPPs should be refurbished to a state prescribed by the Concession Contract. Also, the transfer of ownership of land, which was a function of the concession activity, is transferred back to the state as well.

3.4.3 Environmental Permitting

The Law on Environmental Impact Assessment⁷⁸ regulates the procedure of impact assessment for planned projects, which may have a significant environmental impact, the contents of the impact assessment study, participation of bodies, organisation and publicity of decision-making, procedure of assessment and issuance of approval for the impact assessment study, cross-border information, and other matters in this field.

Pursuant to Article 5 of the Law on Environmental Impact Assessment, the Decree on projects requiring environmental impact assessment (Official Gazette of the Republic of Montenegro, No. 20/07, 47/13 and 53/14) has been adopted. This Decree establishes two lists:

- List 1: projects subject to obligatory environmental impact assessment, and
- List 2: projects which may require environmental impact assessment.

In the case where the construction of SHPP forms a reservoir which accumulates a volume of water exceeding ten million cubic meters, as established by List 1, the concessionaire shall prepare an EIA for the construction of SHPP and obtain the approval of the competent authority for assessment. Pursuant to the Law on Environmental Impact Assessment, the concessionaire can refer to the competent authority for environmental protection with a request for determining volume and content of the EIA.

List 2, Item 3 – Energy generation and Item 12 – Infrastructure projects, establishes that "plants for generation of hydro energy above 1 MW" and the construction of "accumulation generating the volume of water not exceeding ten million cubic metres", which is used for the needs of SHPP, shall be subject to the environmental impact assessment procedure based on the decision of the competent authority. Given that SHPPs belong to these groups, the Concession Holder shall be obliged by the competent authority to implement the environmental impact assessment procedure and obtain approval of such authority for the environmental impact assessment study for the construction of SHPP, or obtain a decision that the development of the study is not required.

3.4.4 Water Permits

In order to acquire the right to use water by the new generation facility, a HPP Developer must go through different steps to acquire water-related administrative documents, which will gradually lead to the final stage of

⁷⁷As a pre-condition for start of the 2nd phase of the contract, the concessionaire provides the contracting authority with bank guarantee on the amount of 25%⁷⁷ of planned investment, in the way and form envisaged by the concession contract. The bank guarantee shall be activated in case the concessionaire fails to fulfil his obligation of constructing the facility within the period and in the way defined by the plan for the project implementation.

⁷⁸ Law on Environmental Impact Assessment, Official Gazette of the Republic of Montenegro, No. 80/05, 40/10, 73/10, 40/11 and 27/13.



obtaining a Water Permit. As the permitting procedure progresses, the competent authorities (the Ministry of Agriculture and Rural Development in case of HPPs) require more detailed information. The authorities make and issue administrative decisions - water acts - along with this process.

Water acts are administrative documents through which water use is defined. The issuance of these water acts is regulated by the Law on Waters⁷⁹. There are three types of water acts are required to be obtained for any use of water or disposal of water waste by certain commercial activities, including energy facilities, which extends the volume of a general (ordinary) use of water, regardless of its impact. Thus, along with the permitting procedure for the construction of a new generation facility, the HPP Developer needs to obtain the following three water acts: (i) Water Conditions; (ii) Water Consent; and (iii) Water Permit.

Water Conditions: The Water Conditions are issued for a period of one (1) year, although they may be issued for a longer period in accordance with the Concession Agreement. It defines the terms that need to be fulfilled by the HPP Developer's documentation for the construction of new electricity generation facilities. The issuance of a Water Conditions is mandatory for all energy facilities and is sought in the process of acquiring other licenses.

Water Approval: The Water Approval is the second step in acquiring a final water permit. The Water Approval verifies that the documentation submitted by the HPP Developer with the request for the issuance of Water Approval meets the terms and conditions defined by the Water Conditions.

A Water Approval needs to be obtained in the permitting process for the construction or reconstruction of all facilities for which the Water Conditions are required (HPPs as well) and issued in the previous stage. A Water Approval is valid during the period of validity of the Construction Permit.

Water Permit: The Water Permit defines the purpose, the method and conditions for the use of water, the terms and condition for disposal of water waste and solid and liquid waste, and other terms and conditions as necessary.

A Water Permit certifies that the terms defined by a Water Approval are met. A Water Permit is issued on a temporary basis, up to a maximum of ten (10) years. However, HPPs with reservoirs are granted Water Permit of thirty (30) years, to ensure alignment with concession agreement and other relevant licenses.

3.4.5 Spatial and Construction Permits

Pursuant to the Law on Spatial Planning and Construction of Structures, to start the construction of structures, i.e. making changes to the space, it is necessary to obtain urban planning requirements, issued by the MoSDT, based on a spatial planning document.

Typically, spatial documentation is developed by the competent authority prior to tendering out⁸⁰ of the water courses, still, in case appropriate spatial planning document does not exists at the time of approval of the concession, the MoSDT, or the respective municipality where the water course is located, shall prepare a national or local spatial planning document in accordance with accepted preliminary design presented in the bid of the first-ranked bidder.

The concessionaire is given the right to use the land owned by the state during the period of performance of concession activities. If the location is privately owned, the concessionaire shall provide for use of the land for construction of HPP, in accordance with the Law on Expropriation⁸¹ and in prescribed manner.

However, should there be privately-owned land within the borders of the SHPP project, the concessionaire is obliged to resolve land ownership relations for the land in question. Having in mind that electricity generation is defined as an activity of public interest, the Law on Concessions recognises a possibility of expropriation of land if it needs to be performed for implementation of the concession. Based on this, if the concessionaire is not able to resolve land ownership issues, for reasons beyond concessionaire's control, the Government may determine a public interest for expropriation of cadastre plots envisaged for the construction of SHPPs in accordance with the Law on Expropriation.

⁷⁹ Law on Waters, Official Gazette of Montenegro, 27/07, 32/11, 47/11.

⁸⁰Tendered water courses are recognised in current local planning documents of municipalities on whose territories they are located.

⁸¹ Law on Expropriation, Official Gazette of Republic of Montenegro 55/00, 12/02, 28/06 and 21/08.



The concessionaire is obliged to submit a request for obtaining urban-technical conditions in accordance with the Concession Agreement.

Pursuant to Article 62a of the Law on Spatial Planning and Construction of Structures the competent authority issues urban planning and technical requirements within 30 days from the day of reception of the application of the concessionaire.

For the issuance of urban planning and technical requirements, the concessionaire submits the following documents:

- 1. Application for issuance of urban planning and technical requirements;
- 2. Preliminary design, and
- 3. Concession Contract.

Based on the application submitted, the competent authority assumes the obligation to obtain all documents which are needed for issuing urban planning and technical requirements, hence it serves as "one-stop-shop" institution towards the concessionaire.

The competent authority shall provide the following documents: the decision about the type of environmental flow assessment in accordance with the Rulebook on the method of determining the environmental flow of surface waters (Official Gazette of Montenegro, 2/16), water requirements issued by the Directorate for Water; opinion on the need for environmental impact assessment issued by the Environment Protection Agency; electrical energy requirements issued by the Electrical Power Company of Montenegro; opinion issued by the Directorate for Protection of Cultural Heritage; water requirements issued by the Public Enterprise "Water and Sewerage"; transportation requirements issued by administration authority, or local self-government authority, and technical requirements issued by the Agency for Electronic Communications and Postal Services, and other necessary documents. The concessionaire, however, bears real costs of obtaining the above documents.

Issued urban planning and technical requirements are further used as the basis for preparing technical documents for the construction of SHPPs, which must be compliant with technical regulations, norms and standards for designing of this type of structures. Once technical documents are prepared and revised, the concessionaire applies to the competent authority for the issuance of construction permit.

Pursuant to Article 94 of the Law on Spatial Planning and Construction of Structures, the competent authority issues construction permit within 30 days from the day of reception of the application, if all legally defined requirements have been met. As an exception to this, construction permits for facilities that require preparation of an environmental impact assessment (EIA) are issued within 60 days from the date of application.

For the issuance of construction permit, the concessionaire submits the following documents:

- 1. Application for construction permit;
- 2. Preliminary or Main design with the report on performed revision, as well as an evidence of liability insurance of the HPP Developer and the business organisation, legal entity, or entrepreneur who developed or revised the preliminary or the main design; and
- 3. Concession Contract.

Again, based on the submitted application, the competent authority assumes the obligation to obtain all documents which are needed for issuing of construction permit.

The competent authority, *ex officio*, obtains the following documents: evidence of ownership right, or other right over the construction land (real estate folio with registered Concession Contract and a copy of the plan); water approval issued by the Directorate for Water; environmental approval issued by the Environment Protection Agency based on the strategic environmental impact assessment and, if assessed so by the Agency, developed EIAs; electric energy approval issued by the Electrical Power Company of Montenegro; approval for connection to electricity network and other approvals of competent authorities in accordance with special regulations, evidence of regulation of relations in terms of payments for communal equipping and evidence on payments of fees for construction of regional water supply system in territories of municipalities of the Montenegrin coast, and other necessary documents. Again, the Concessionaire bears the real costs of obtaining the above documents.

After completion of the construction of the structure, the SHPP shall undergo a trial run, followed by submission of application for issuance of exploitation permit. Along with the application, the concessionaire shall submit a



statement of the contractor, supervisory engineer and lead designer showing that the structure is constructed in accordance with revised main design and construction permit, and the revised preliminary design, if the construction permit was issued for the preliminary design.

At completion of construction of structures of SHPPs, the concessionaire obtains:

- Water use permit issued by the Directorate for Water;
- Contract with the Electric Power Company of Montenegro for using distribution system;
- License to produce electrical energy issued by the REGAGEN; and
- Exploitation permit issued by the ministry competent for issuance of construction permits.

3.4.6 Energy Permits

As described in Sub-section 3.4.2, an Energy Permit is not required in case of developing electricity generation facilities constructed as a result of organised public tender. Further, since the Law on Energy defines the electricity generation as defined as "activity of public (general) interest" and allows for use of "public tender in case the authorisation procedure has not yielded planned effects, the Government of Montenegro has widely used the public call option, notably for organising public tenders for development of SHPPs.

However, all companies performing electricity generation need to acquire Energy License, issued by REGAGEN under conditions set in accordance with Article 65 of the Law on Energy. The Energy License is issued for a period of ten (10) years, but in case of HPPs, may be prolonged for the lifetime of the granted concession.

3.4.7 RES Incentive Scheme

Energy generating companies, who produce energy from renewable sources, including SHPPs, are entitled to the status of a privileged producer. Pursuant to article 104 of the Law on Energy, the requirements that an energy company must meet to obtain the status of privileged producer includes:

- 1. to be connected to the transmission or distribution system;
- to belong to the group of plants generating electrical energy from renewable energy sources in accordance with the Rulebook on types and classification of plants for generation of energy from renewable sources and highly efficient co-generation (Official Gazette of Montenegro, No. 28/10);
- 3. to have its own⁸² commercial metering point; and
- 4. not to endanger the system's security.

Before acquiring status of a privileged producer, the energy company may acquire temporary status of a privileged producer, determined by decision of the REGAGEN, at the request of the energy entity. Temporary status is determined for a period of two (2) years, with possibility of extension for one (1) year, if the period of construction of the energy facility which confers status, has not been determined by contract or another act. It is important to underline that the company that has acquired the status of temporary privileged producer does not confer the right to conclude contracts for the purchase of electricity from privileged producers with the market operator. A producer of electricity shall be entitled to incentive measures that were effective on the date of application for obtaining the temporary status of a privileged producer. Actual receiving of these incentive measures will start from the date of acquiring the status of privileged producer under the Law on Energy.

The status of a privileged producer is obtained by the decision of REGAGEN. The privileged status gives the producer the right to:

 the special, i.e. privileged electricity off-take price in accordance with the Decree on Tariff System for establishing incentive prices of electrical energy from renewable energy sources and highly efficient cogeneration (Official Gazette of Montenegro, No. 52/11,28/14 and 79/15); and

⁸²Electricity generated by the RES electricity producer, injected into electrical networks, is paid in accordance with the FiT incentive scheme, i.e. by the prices which are significantly higher than electricity market prices and final consumer prices. Therefore, it needs to be clearly distinguished which quantities of electricity are actually produced and injected into the network (this is total electricity production by the RES minus own consumption of the plant at the times when it operates) by the by the RES producer.



2. priority of dispatch in the transmission or distribution system.

The method and the procedure for obtaining the status and practicing the right of a privileged producer are regulated in detail by the Decree on the method for obtaining the status and practicing rights of a privileged producer of electrical energy ('Official Gazette of Montenegro', No. 37/11 and 28/14).

As already stated, the privileged status gives energy producers from SHPPs the right to privileged electricity offtake price. Alternatively, they may decide not to apply for the privileged status and sell generated electricity at the electricity market.

Montenegro is committed to a binding 33% target share of energy from renewable sources in Gross Final Energy Consumption (GFEC) by 2020 (i.e. National Target for Renewable Energy Sources – NTRES) compared with 26.3% in 2009 (base year). The National Renewable Energy Action Plan (NREAP) was adopted and submitted to the Secretariat in December 2014. The Report on the Progress in Promotion of Renewable Energy 2012-2013 was also submitted in 2014.Government of Montenegro in its session on February 2nd, 2017 adopted the Report on achieving the national target for years2014 and 2015. According to the Report, the share of renewable energy sources in the total final energy consumption in Montenegro in 2014 amounted to 31.9%, and for 2015, 31.7%

Provisions related to electricity generated from renewable sources are included in the Law on Energy⁸³, as Montenegro do not have a dedicated law on renewables. The law transposes the Third Energy Package, notably, Directives 2009/72//EC, 2009/73/EC, and 2005/89/EC on security of electricity supply and infrastructure investment. In addition, it includes additional provisions related with Directive 2009/28/EC.

The EU legislation is further implemented through a set of governmental decrees, the majority of which were adopted already in 2011 based on the previous Law on Energy from 2010, namely for privileged producers, feed-in tariffs, and guarantees of origin. Compared to the previous Law on Energy, introduced changes include, *inter alia*, provisions related to access to and operation of the grids for electricity from renewable sources, administrative procedures, regulations and codes, the framework for the cooperation mechanisms and monitoring and reporting obligations.

In terms of promotion of electricity production from renewable energy, the Law on Energy tasks the Ministry of Economy⁸⁴(MoE) to set the Methodology for Feed-in-Tariffs in Montenegro. Governmental Decrees on feed-in tariffs for SHPPs, wind and biomass as well as for high efficiency co-generation and power plants that use solid waste, biogas and waste gases are in place for so-called "privileged producers" since 2011. The tariffs are revised annually based on the inflation index. Support in terms of guaranteed prices is given for twelve (12) years irrespective of technology and to a maximum capacity of 10 MW (except for wind technology). Hence, for hydro technology, the FiTs are only applicable to SHPPs, while large HPPs are omitted from the incentive scheme. Finally, based on the new Energy Law, Government of Montenegro adopted a new Rulebook on the types and classification of power plants for electricity generation from renewable energy sources and high efficient cogeneration plants ("Official Gazette of Montenegro ", No. 60/16) and a Decree on acquiring the status and accomplishing entitlements of the privileged producer of electricity ("Official Gazette of Montenegro ", No. 59/16)

The market operator (COTEE) has the function of a single buyer of electricity produced from privileged producers and taking the balancing responsibility for the entire portfolio of the privileged producers under a Power Purchase Agreement (PPA). COTEE concludes PPAs with electricity suppliers who are obliged to purchase a certain percentage of electricity from renewable sources, depending on their market share. The status of a privileged producer may be obtained only after the renewable energy plant is constructed and connected to the transmission or distribution system. COTEE has adopted a pre-PPA to lock-in the applicability of the FiTs at the time of signature of the PPA, and to ease financial closure of the RE power plant development. Further, all renewable energy supply contracts between COTEE and electricity suppliers are covered by bank guarantees to help ensure HPP Developer confidence.

The Law on Energy provides for priority access and dispatch for the privileged renewable energy producers. Transmission and distribution system operators are obliged to give priority to the privileged producers, within the

⁸³Law on Energy, Official Gazette 5/2016.

⁸⁴According to Law on Energy MoE is responsible for energy, in particular for energy policy and strategy, as well as for the preparation of laws and key by-laws in the energy sector. MoE tasks in the energy are performed through its Directorate on Energy (among others, responsible for the overall energy policy, strategy, development and energy sector reforms, for electricity, district heating/cooling, renewable energies and energy in transport), and the Unit for Renewables, within.



technical parameters of the respective network. The operators must undertake necessary measures in case of curtailment and report to Energy Regulatory Agency (REGAGEN) in the case that priority dispatch is not provided to the privileged renewable energy producers because the security limits imposed in the grids have been exceeded.

3.5 I.O.L.R. framework – Kosovo

In Kosovo, all formal conditions for hydro power generation development, including institutional framework and necessary legislation exist, but there are no mature projects in the pipeline. While on one side Kosovo has enormous potential in indigenous lignite-coal reserves, on the other side the hydropower potential is very low. The Institutional framework in electricity sector, as well as the relevant institutions that run electricity sector operations, is relatively well-advanced. They have been developed with the assistance of international community through various technical assistance projects, and they fulfil all the requirements of the typical European power sector institutional-organisational and legal-regulatory framework. Kosovo is the only WB6 country where an institution that coordinates all aspects of water use in the optimal and most efficient way exists – the Inter-Ministerial Water Council (IMWC).

Table 3.5: Main institutions/stakeholders and their roles/res	ponsibilitie	s in the h	nydro power sector in
Kosovo			

Stakeholder / Institution	Role / Responsibility	
Parliament of Kosovo	Parliament of Kosovo adopts Energy Law, RES Law, and all other laws that have impact on the development of hydropower generation projects. This institution adopts national Energy Strategy and decides on concessions for major hydropower development projects. Also, the Parliament decides on loan agreements that support development of hydropower generation projects.	
Government of Kosovo	Government of Kosovo prepares and proposes all acts and documents that National Parliament adopts. Also, Government adopts action plan for implementation of Energy Strategy and National Renewable Energy Action Plan (NREAP). The Government creates and implements policy in the electricity sector, adopts incentive measures for the development of RES generation and coordinates huge infrastructural multi-disciplinary generation projects.	
Ministry of Economic Development – Energy Department	 The MED is responsible for drafting and implementing policies that encourage economic growth and cooperation, business development and which ensure competitiveness and sustainable development of the energy and mining sector. Within the MED's organisational structure responsible department is the Department of Energy and Mining (DEM), more precisely the Energy Division. The main responsibilities of this division are: Proposing, drafting and enforcing the implementation of policy documents and strategies in the energy sector, incl. RES, energy efficiency and cogeneration. Proposing, drafting and enforcing the implementation of energy sector legislation. Monitoring and drafting reports on implementation of energy policy documents and strategies. Coordination and reporting on the process of implementation of obligations deriving from commitments under the Energy Community Treaty. 	
Ministry of Environment and Spatial Planning (MESP)	Activities of this Ministry are crucial for the development of hydropower generation project. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into national legislation and their implementation are important part of the MESP and its Environmental department portfolio. The Water department of MESP is responsible for transposition of the EU Water Framework Directive and EU Directive on floods into Kosovo legislation, as well as their further implementation. Department for Spatial Planning develops spatial plans and urban plans for major infrastructure projects, and develops policy for local communities which deal with the SHPP projects. They issue Location and Construction Permits for large HPP projects (above 20 MW). Department for environmental issues is in charge for issuing Environmental Conditions and Environmental Permit, Water Department of MESP, for major HPP development	



Stakeholder / Institution	Role / Responsibility	
	projects, issues water conditions, water compliance, water permit and water order, and carries procedure of granting concessions for water use.	
Kosovo Environmental Protection Agency (KEPA)	KEPA provides professional advice and proposals related to environmental issues to MESP and other Ministries. KEPA generates and offers scientific and professional support for environmental policies in the country. Finally, KEPA is raising public awareness on environmental protection by informing general public and experts networks about the environment and its consequences for their future.	
Energy Regulatory Office (ERO)	ERO was established upon the promulgation by the Kosovo Assembly of the Law 2004/9 "On the Energy Regulator", to set the regulatory framework for a transparent and non- discriminatory energy market based on transparency and competition. ERO regulates the Electricity, District Heating and Natural Gas sectors. To meet its responsibilities, ERO has the power to:	
	 grant, modify, suspend, transfer, supervise and withdraw licenses; 	
	 fix and approve tariffs and tariff methodologies for regulated energy services; 	
	 grant permits for the construction and operation of new generation capacities; 	
	 issue general acts, individual acts, and secondary legislation in accordance with the Law on Energy Regulator; 	
	 revise, approve and control compliance with all codes, including the grid and distribution code, the consumer protection code, the electrical equipment code, electricity standards code, the trade code and the metering code, as well as the network access rules; 	
	 determines the tariff system for electricity generation from RES; 	
	responsible for system of RES certificates of origin.	
Transmission System and Market Operator JSC (KOSTT)	KOSTT J.S.C is a public company established on 1 July 2006, KOSTT J.S.C. operates under two licenses issued by the Energy Regulatory Office (ERO). According to the licenses for Transmission System Operator and Electricity Market Operator, KOSTT is responsible for:	
	Ensures non-discriminatory access to the transmission network.	
	Sets tariffs and charges for connection to and use of its system,	
	 Planning, operation, maintenance and development of the transmission network of 400 kV, 220 kV and 110 kV, 	
	 Efficient, economic and coordinated operation of the power system, including cross-border flows and balancing of the power system 	
	Administration of a centralised electricity market in Kosovo, compliance with the Market Rules, and management of the final settlement processes.	
Distribution System Operator (KEDS JSC)	Kosovo Energy Distribution Services (KEDS) is the Distribution System Operator in Kosovo. KEDS J.S.C. was established in 2009, while its operational activities were initiated on 08 May 2013, when it finally separated from KEK J.S.C. KEDS J.S.C. is owned by the Turkish companies Çalik Holding and Limak. KEDS J.S.C. performs electricity distribution up to the end customers, manages and maintains network assets. KEDS operates medium voltage Lines 35 kV, 10 kV and 6 kV network and low voltage 0.4 kV facilities, serving over 485.000 customers. As public supplier, KEDS concludes Power Purchase Agreements (PPA) with RES electricity producers.	
Inter-Ministerial Water Council (IMWC)	 The IMWC is a committee of relevant Government Ministers chaired by the Deputy Prime Minister, which is responsible for improving the situation in the water sector through the development of sector policies and action plans based on good practices. The IMWC provides forum for collecting and evaluating the positive experiences in the water sector, but also the drawbacks in implementation, communication and cooperation. The IMWC develops and approves policies required to ensure the sustainability of the reforms and the investments in the water sector. The IMWC is composed of seven permanent members (five of which are voting members): Deputy Prime Minister (Chairperson); The Minister of Environment and Spatial Planning; 	

Stakeholder / Institution	Role / Responsibility	
	The Minister of Economic Development;	
	The Minister of Local Governance;	
	The Minister of Foreign Affairs (for transboundary issues);	
	The two nominated representatives of the donor community (non-voting)	
Municipalities	Municipalities are responsible for location conditions and Location Permits related to use of land for RES projects. They are also responsible for issuing Construction Permits for generators below 20 MW of installed capacity. Local municipalities also issue water permits pursuant to the sub-legal act on water permits and according to authorisation by the Ministry of Environment.	
Other stakeholders	Kosovo Academy of Sciences and Arts NGOs	

3.5.1 Permitting Process - general

A further important element of the legal and regulatory framework is the Rule on Authorisation Procedure for Construction of New Generation Capacities⁸⁵ (the Rule on Authorisation) adopted by ERO in 2014, which describes the procedure for authorisation of power generation projects. The authorisation is a right issued by ERO that enables applicants "to commence with construction of generation capacities within specified period of time".

Even though the Energy Regulatory Office is the ultimate authority, which grants authorisation for the construction of RE generators, the overall process involves different authorities responsible for the required permissions.

The authorisation procedure has two stages: The first stage – the preliminary authorisation, is considered as first filter for developing a project, providing "go or no go" decision. Typically, ERO asks for necessary documents as required by the Rule on Authorisation at this stage. The rejection of the application as incomplete may be announced by ERO only if the applicant could not provide relevant documents as requested by the Rule on Authorisation. Once the applicant gets the preliminary authorisation, the RE developer should turn to every institution to acquire other necessary permits and consents for the project. The second stage – the final authorisation stage - is the period when the developer performs additional studies and applies for permits at other institutions. When all required documents are presented, the final authorisation is issued by ERO, and the construction of the plant may start.

According to the Rule on Authorisation, in order to obtain authorisation for construction, the HPP Developer will need different permits from several institutions, such as: Kosovo Business Registration Agency (business registration), Ministry of Environment and Spatial Planning (environmental consent, environmental permit, water use permit (for HPPs), construction permit (for plants above 20 MW installed capacity), Ministry of Infrastructure (for permit for connection to existing road infrastructure), Kosovo Forestry Agency (for permits for use of land in forests) or Ministry of Culture, Youth and Sport (permits for construction if the site is in special interest/ archaeological zones), Municipalities (for construction permit below 10 MW of installed capacity or for the contract for using the land), Kosovo Electricity Transmission, System and Market Operator (KOSTT) (for connection to the transmission system), Kosovo Electricity Supply Company J.S.C. (KEDS) (for authorisation for connection to distribution system), Kosovo Electricity Supply Company J.S.C. (KESCO) (PPA in the case of feed-in tariffs) and other institutions. At the end, the HPP Developer will apply to ERO for final authorisation.

According to the Rule on Authorisation, there are 24 requirements for RES developer to prepare and submit. These requirements are presented in Figure 3.3 below. They are divided into: (i) General requirements; (ii) Technical and organisational requirements; and (iii) Financial requirements.

However, the Rule on Authorisation does not define which documents are obligatory for the preliminary authorisation. The very long list for authorisation in general and the lack of a list of obligatory documents necessary to gain preliminary authorisation, increases the complexity of the regulatory framework and the permitting process, adding to legal uncertainty of the process. The HPP Developers will find it unclear to get a good understanding of the documents required for preliminary and documents required for final authorisation.

⁸⁵Article 3 of the Rule on Authorization for Construction of new Generation Capacities.


Based on source: Regulatory Support for Kosovo RE Regulatory Framework and Grid Integration, Fichtner Management Consulting AG.

Figure 3.3: Process Flow of Authorisation of Renewable Energy Projects

A further aspect to be considered is the lack of linkage between the final authorisation and the generation license. The Law on Electricity requires that any generating unit exceeding a capacity of 5 MW holds a generating license issued by ERO. Article 18 of the Rule on Authorisation highlights the necessity of a holder of a final authorisation to apply for the generation license, prior to finalisation of construction. On the other hand, the Rule on Authorisation and the Rule on Licensing require RE developers to submit almost the same documents to ERO for issuing the authorisation and generation licensing.

Moreover, the Rule on Authorisation does not differentiate between different RE technologies and different sizes of RE plants. Requirements for authorisation should reflect different sizes and technologies of the RE power plants to ease applications for smaller projects following international standards. In Kosovo, there is no particular regime foreseen for small generators, as per the categories set forth in Administrative Instruction 2/2013 issued by MED and the requirements of Directive 2009/28/EC. The Law on Energy Regulator 05/L-084 (Article 43), as mentioned, requires ERO to establish specific procedures for the authorisation of construction of small distributed generation, which shall consider their limited size and potential impact.

In short, the legal and regulatory framework in the energy sector in Kosovo is well prepared and advanced and thus constitutes a decent framework for developers in the renewable energy sector that does not deter potential HPP Developers. Still, partially because of the inconsistencies in the legislation and its application authorisation process (both pre-authorisation and final authorisation), instead of the proclaimed three (3) months under the legislation, deadlines may prolong to over two (2) years in practice.

Achieving the Land Use Right is complex issue for HPP Developers, since it involves several entities such as the Ministry of Agriculture, Forestry and Rural Development (MAFRD), municipalities and private land owners. If the project company is a new company, the procedure starts with registration of the company in the Kosovo Business Registry. After preliminary authorisation by ERO an appropriate zoning for a site shall be obtained, determining if the exact location is suitable for SHPP. To obtain a zoning permit, a developer must submit several statements of approval from different authorities, bodies and public utilities, such as telecommunication and energy suppliers. Once the application is complete, the authority decides within one month on issuance of zoning permit. In



particularly complicated cases, the decision should be made within two (2) months. HPPs would typically face delays due to site zoning.

After the land is successfully zoned, the HPP Developer contacts the land owner for acquiring the land. Acquiring land use rights for RE plants is an essential step of the authorisation process, as land use rights are interdependent with the preparation of a feasibility study for the project, preparing the environmental impact assessment study, grid connection study and other necessary studies and documents. Site selection and the right to use the land are crucial in deciding on the environmental consent and a construction permit.

Often, property rights are not registered or updated in the land registry, which additionally may cause delays in the land acquisition process.

Land in Kosovo can be owned privately or by different public entities, resulting in different ways of acquiring land use rights for RE plants, such as: acquiring municipal immovable property, purchasing or renting land from private owners, renting land from the Agency of Forestry, and in some specific cases by expropriation of immovable property. Each form of acquiring such right to use the land has its own challenges.

For example, under "on expropriation of immovable property (Law No.03/L –139)", the expropriating authority can expropriate immovable property or grant servitude rights for any legitimate public purpose regarding activities for the generation, supply, transmission or distribution of energy. The object of an expropriation may be private ownership or other private rights to immovable property. The Ministry of Finance determines fair compensation value for the immovable property that is subject to an expropriation procedure. In the case where an HPP Developer applies for expropriation, as per Article 8 of the law, the HPP Developer shall present documents regarding the location and number of each and every concerned parcel of immovable property as well as a detailed description of the public purpose for which the expropriation is being requested. The private developer needs to argue that the realisation of the project may be achieved only through expropriation and the choice for the property to be expropriated has not been made in any discriminatory way.

In the case of publicly-owned land, the site can be acquired through a competitive public tendering process at the Agency of Forestry, Forestry and Rural Development for land exceeding the area of 5 ha. As this is possible only for a maximum period of five (5) years, it represents substantial risk for developing an HPP, since the short period prescribed by MAFRD administrative instruction, has influenced private owners' practice of also leasing the land in consecutive5-year terms, thus driving the lease price higher.

Environmental consent

After receiving the preliminary authorisation from ERO and having the site zoned, HPP Developers apply for the environmental consent, while other RE developers may obtain environmental consent already before applying for the authorisation. The environmental consent is the basic consent for acquiring other permits, such as the construction permit or the water permit, implying that this document is crucial for successful completion of the authorisation procedure.

According to the Law on Environmental Protection MESP is responsible for issuing the environmental permit for all HPPs.

The environmental consent is a document issued by the MESP after evaluation of the environmental impact assessment study (the EIA), being obligatory for all power plants exceeding 100 kW installed capacity. The Law on EIA requires the applicant to bear all costs related to the EIA.

However, it should be noted that issuance of yet another environmental act, the environmental permit (issued by MESP based on the Law on Environmental Protection, No.03/L-025) is issued for a period of five (5) years for projects for which the Environmental Consent is issued. This term is substantially shorter than the project lifetime, FiT tariff and the term of the PPA, thus presenting a risk to HPP developers.

Construction permit

The construction permit is the final permit to be issued for RE projects and the preliminary authorisation by ERO should be acquired before application for the construction permit is made. The construction permit procedure cannot be started without submitting an evidence of a land ownership. According to the Law on Construction⁸⁶, MESP is responsible for permitting high-risk projects (Category III-above 10 MW).

⁸⁶Law on Construction, No.04/L-110.



Construction terms are defined by MESP or the respective Municipality upon an official request submitted by the HPP Developer to the concerned authority. Such terms, which are specific for each project, define criteria of construction that each developer should fulfil to be eligible for the construction permit. Kosovo law requires the project to be defined on the first day of application, and the execution should be done in compliance with the approved project. Article 20 of the Law on Construction requires that an applicant for the construction permit shall submit construction documents at the time of application. Such documents are defined in Article 3 of the law as written and graphical documents "prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a construction permit."

Despite usual perception of longevity of the process of acquiring construction permit, this process takes no more than two (2) months.

Water acts

All HPPs require a water use permit. MESP issues water use permits, but it can delegate the power for issuance of such permits to other institutions, although it has not explored this opportunity in practice (i.e. transferring the issuance to municipalities). According to the Law on Waters⁸⁷, the water use permit for energy can be issued for a period up to forty (40) years. The permit, is however reviewed at least every five (5) years, which still, at least theoretically, brings certain uncertainties as to whether it will be revoked.

RES Electricity

The Government of Kosovo has prepared and adopted several energy policy documents over the past years focused specifically to renewable energy. The Energy Strategy of the Republic of Kosovo 2009 – 2018, enacted in April 2010, foresees that one of the strategic objectives of the Government of Kosovo in relation to the energy sector is to promote foreign investments in the energy sector, including in RE.

A mandatory target for RES is set at 25% of Gross Final Energy Consumption in year 2020. New Energy Strategy of the Republic of Kosovo 2013 – 2022 is in draft phase and pending its adoption. The NREAP, adopted in 2013 supports Kosovo RES targets established with the policy documents.

To further support implementation of RES policy and to promote RE, the Government has introduced a feed-in tariff for RES, set targets for RE and has undertaken a series of legal amendments in past years. These include: the Law on Energy⁸⁸, the Law on Electricity⁸⁹, the Law on Energy Regulator⁹⁰ as well as the Rulebook on Authorisation Procedure for Construction of New Generation Capacities. These laws and other legal instruments are discussed in greater detail in below sections.

Kosovo established a FiT incentive system that applies to certain technologies only. Namely, the FiT system is supportive of wind, PV, biomass and SHPP technologies. Concerning the length of the period for payment of the feed-in tariff (the guaranteed off-take), Kosovo adopted that the Power Purchase Agreement (PPA) between power generators and the public power supplier of Kosovo is limited to ten (10) to twelve (12) years depending on RE type (12 years only for PVs). SHPPs PPA term is limited to 10 years, fixed to 6.33 €cents/kWh and subject to yearly inflation adjustments. HPPs with larger installed capacity of 10 MW, are not eligible of FiT. Moreover, in April 2016 ERO published a Consultation Paper on the Methodology on calculation of FiTs for Energy from Wind and SHPPs for public consultation. This consultation paper states supports increase of FiT for SHPPs to 6.747 €cents/kWh.

Law on Energy stipulates breakthrough provisions intended to ease investments in the RE sector, in line with Energy Community Treaty requirements. Namely, article 16.2 envisages that the Government shall ensure coordinated and defined responsibilities of bodies assigned with authorisation, administrative procedures, regulations and codes for RE. This disposition is fully compliant with directive 2009/28/EC on the promotion of the use of energy from renewable sources, as adopted by Ministerial Council Decision Nr.2012/04/MC-EnC of 18 October 2012. Article 16.5 of the same law requires that simplified and less burdensome authorisation procedures are established for smaller projects and for decentralised devices for producing energy from RE. According to Article 17.6, the Ministry responsible for the energy sector shall establish a one-stop-shop through a special bylaw

⁸⁷Law on Waters, No. 04/L-147.

⁸⁸Law on Energy No. 05/L-081

⁸⁹The Law on Electricity No. 05/L-085.

⁹⁰Law on the Energy Regulator No. 05/L-084.

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in order to facilitate investment in renewable energies. In the meantime, an inter-institutional working group has been established for this purpose.

Under the Law on Electricity adopted in 2016, electricity produced via RES is entitled to priority dispatch under the terms stated in the Grid Code and Market Rules. The TSO and DSO are obliged to provide priority to electricity generated from RE and co-generation power plants.

The process for construction of new generation capacities in Kosovo is implemented by the ERO (article 43 of the Law on Energy Regulator) in accordance with the authorisation procedure. However, according to article 44 of the same law, tendering procedure for construction of new capacity can be authorised by the Government, if ERO issues a written decision that the authorisation procedure has not resulted successfully in building of sufficient generation capacities to ensure security of supply or accomplishment of objectives related to the use of RE. In accordance with this Article 44 (paragraph 3) a tendering procedure would then be conducted by the Public Private Partnerships Inter-Ministerial Steering Committee, as per the Law on Public Private Partnerships⁹¹ (Law on PPPs). This represents an exclusion, or safe heaven option, to be triggered in case the FiT and RES policy do not lead to the targeted deployment of RE in Kosovo providing ERO with an additional instrument to guide RE development. Should this procedure be triggered, an open tender shall follow (single-stage or two-stage procedure), involving pre-qualification and evaluation, as per the Law on PPPs. In the case that the Law on PPPs is utilised, preparation of the Feasibility Study for a project is done by the Contracting Authority/Conceding Party.

We shall stick to the authorisation procedure as being the preferred procedure to be employed for developing of new generation plants, especially noting that the tendering procedure has not been used so far. But before starting the application process, the HPP Developer needs to have registered local company, developed Feasibility Study, business plan, land use rights, water terms, application for support scheme (FiT) and grid connection terms. These elements represent precondition for application submission.

3.6 I.O.L.R. framework - Serbia

Hydro power potential in Serbia, at least hydropower potential that can be exploited by large HPPs, has been substantially developed. The most effective and most efficient hydropower generation projects have been executed and these plants are operational giving valuable support to the electricity generation mix in Serbia. The remaining potential for development of major HPPs is limited to certain joint ventures with ERS from BiH at Drina river, as well as some cascades of SHPPs in central Serbia. These projects are slightly more complex to execute compared to the already developed ones. Taking into account that the last large HPP in Serbia was commissioned in 1990, that preparations for another large HPP construction are not under development, and having in mind that HPP development takes more than ten (10) years, it is obvious that the existing plans are not realistic.

In the SHPP development sector, the potential is significant, a lot of efforts have been employed by the Ministry of Mining and Energy to promote SHPP development, and some strong support measures (FiT) have been introduced by the Government, but the results have been minimal from these efforts. The framework for RES development in the energy/electricity sector has been successfully completed in 2015 and 2016, as well as detailed revision of the institutional-organisational and legal-regulatory framework in all other related areas (concessions, spatial planning, environmental, construction, etc.)

Stakeholder / Institution	Role / Responsibility
Parliament of Serbia	Parliament of Serbia (PoS) adopts all main laws and regulations that regulate energy sector, such as Energy Law, Environmental Law, Law on Construction, Law on Concessions and Private-Public Partnership, etc. Parliament ratifies international agreements such as Energy Community Treaty, and passes decisions on major infrastructural projects that either require high level support or contain significant transboundary impact. PoS ratifies loan agreements made by the GoS for financing major energy infrastructure development projects, in cases when project sponsors are state-

Table3.6: Main institutions/stakeholders and their roles/responsibilities in the hydro power sector in Serbia

⁹¹Law on Public Private Partnerships, No. 04/L-045.



Stakeholder / Institution	Role / Responsibility			
	owned public enterprises. PoS also approves loans from IFIs.			
Government of Serbia	Government of Serbia (GoS) prepares all main legislative acts (Laws and Strategies) and submits them to the Parliament for adoption. GoS is responsible for development and implementation of action plan for implementation of Energy Strategy (NEAP) and National Renewable Energy Action Plan (NREAP). The GoS creates and implements policy in the electricity sector and grants concessions for major hydropower generation projects. GoS decides on feed-in-tariff for RES generation and other incentives for RES development.			
Ministry of Mining and Energy (MME)	On behalf of and under the guidance of GoS, MME prepares drafts of all energy related laws and by-laws for GoS and PoS and implements decisions of the GoS in energy sector. MME issues Energy Permits for all hydropower generation projects above 1 MW. MME creates the framework for development of electricity generation from RES and coordinates the entire process. MME awards producer status and keeps a registry of privileged producer.			
Ministry of Agriculture and Environmental Protection (MAEP) ⁹²	The environmental sector of MAEP is responsible for environmental aspects of all infrastructural projects. Transposition of EU Directives on environmental issues (SEA, EIA, Birds, Habitats,) into national legislation and their implementation are important part of the MAEP and its environmental sector portfolio. They decide if EIA Study is necessary for the concerned project, issue environmental conditions for the study and issue consent to design documentation for successfully completed EIA tasks. The Water department of MAEP is responsible for transposition of the EU Water Framework Directive and EU Directive on floods into Serbian legislation, as well as their further implementation. It plays important role at different stages of HPP project development, issues water conditions, water approvals, water permits and water orders. These documents are subject to consent of the responsible Public Enterprise (PE) for Water Management and Republic Hydro Meteorological Institute.			
Ministry of Construction, Transportation and Infrastructure (MCTI)	This Ministry performs all preparation activities and issues Location Permits and Construction Permits for HPP development projects above certain size. Upon successful completion of the project, and connection to the network, MCTI issues an Operation Permit. For the territory of Vojvodina province, these activities are done by the regional Secretariat for Spatial Planning and Construction.			
Energy Agency of the Republic of Serbia (AERS)	 AERS is the independent Regulatory Authority for energy sector in Serbia. AERS approves secondary legislation documents such as Electricity Supply Rules, Transmission Grid Code, Distribution Grid Code and Market Rules. AERS is, among others, responsible for: Issuing licenses for energy activities, Issuing licenses for electricity generation from RES, Issuing guarantees of origin for electricity generated from renewable energy sources, Granting status of privileged generator of electricity from renewable energy sources. 			
PE Elektroprivreda Srbije (EPS)	Public Enterprise Elektroprivreda Srbije is the state-owned company for generation, distribution and supply of electricity. EPS owns, maintains and operates more than 98% of the electricity generation facilities in Serbia, including all hydro power plants with an installed capacity of 3,120 MW. EPS has its own dispatch centre which optimises generation of electricity and, based on a contract with EMS, coordinates provision of ancillary services for the power system of Serbia. Currently, EPS is in the process of DSO unbundling, due to be completed before the end of 2016. EPS signs PPA with power producers that use RES and buys all the electricity they produce at feed-in-tariff price.			
PE Elektromreža Srbije (EMS)	Public Enterprise Elektromreža Srbije and Serbian TSMO – the transmission system and market operator. EMS owns, maintains and operates the transmission network in Serbia, and acts as the power system operator. At the same time, EMS is co-owner and operator of the Serbian Electricity Power Exchange (SERPEX). EMS is responsible for the power system balancing, stability, electricity transfers with neighbouring power systems, and			

⁹² From August 2017, based on the new Law on Government, this Ministry was split and separate Ministry of Environment established. New Ministry of Environment took over all activities and responsibilities of the former Directorate for Environment within MAEP, including transposition and implementation of EU Directives in the environmental area.

Stakeholder / Institution	Role / Responsibility				
	provision of system services. EMS is responsible for connection of new generation facilities to the transmission network.				
	Former PE Srbija Vode, which has been in charge for management of all water flows in the country has been split into three PEs: Srbija Vode (in charge for central Serbia, Beograd Vode (in charge for the region of Belgrade) and Vode Vojvodine (in charge for the areas in the north of the country). All these PEs perform, among others, the following important public roles:				
	Integrated water management;				
	Construction, maintenance and control of the multi-functional public hydro-systems;				
Public Enterprises for Water Management	• Construction, maintenance and control of the public objects for use, protection and monitoring of waters;				
	 Engineering design and consultancy services in hydro-engineering and water management areas; 				
	 Scientific research, development and preparation of the planning documents and technical documentation in hydro sector; 				
	 Establishment and management of the water information system; 				
	Investment activities and project management in the hydro sector.				
Serbian Environmental Protection Agency (SEPA)	SEPA, as a body within the Ministry of Agriculture and Environmental Protection, as a legal entity, which performs professional tasks related to:				
	 Development, coordination and management of the national information system for environmental protection; 				
	 Implementation of state monitoring air and water quality, including the implementation of prescribed and harmonised programs for the control of air quality, surface water and ground water aquifer and precipitation. 				
Republic Hydrometeorological Service of Serbia (RHMZ)	Serbian RHMZ operates network of meteorological and hydrological stations in the country, delivering services to numerous public enterprises from electricity and water sector. Concerning water sector, RHMZ performs following activities:				
	Permanent monitoring and analysis of flow regime and ice conditions on rivers;				
	Real time data collection from the national network of reporting hydrological stations and from the Danube river basin countries;				
	 Primary processing and transmission of data in accordance with international standards and obligations concerned with exchange of hydrological data; 				
	 Secondary processing and in-depth analysis of hydrological data, runoff and river flow conditions, meteorological data and forecasts, hydrological forecasts and warnings; 				
	 Issuing of hydrological forecasts and warnings of hazardous events on the national rivers (floods, low flow conditions and ice occurrence); 				
	 Modernisation and maintenance of the national real-time hydrological information and forecasting system. 				
Jaroslav Černi Institute for the Development of Water Resources (JCI)	The JCI for the Development of Water Resources (JCI) is the leading research organisation in Serbia's water sector. In addition to research, JCI's core activities include: planning and design of water and hydropower infrastructures; engineering oversight of hydraulic projects; consulting services related to the management of water resources, facilities, and systems; development of strategic planning documents; and assistance in the drafting of national legislation, standards, methodologies, and guidelines.				
Municipalities	Municipalities play an important role in development of HPP projects. They also issue location conditions, Location Permit and Construction Permit for HPP projects up to 10 MW. According to the law, all the issues in the HPP development projects that have impact on local community (e.g. environmental study) should be subjected to public consultations.				
Other stakeholders	Serbian Academy of Science and Arts NGOs				



3.6.1 Permitting Process - general

Pursuant to the Energy Law, the generation of electricity, including RES-Electricity, no longer qualifies as an activity of general (public) interest.

To engage in energy activities, including energy generation, an operator must obtain the relevant Energy License. An Energy License may only be issued to a Serbian registered legal entity or entrepreneur except for the energy activity of wholesale trade with electricity, for which an Energy License can be issued to a foreign legal entity. The authority in charge of issuing Energy Licenses is the Ministry of Mining and Energy (MoME). An Energy License is issued within thirty (30) days of the date on which it was requested (subject to fulfilment of all legal and technical requirements) and its duration (if granted for electricity generation) is set at thirty (30) years and it may be extended upon the request of the license holder. An Energy License is not required for electricity plants or heating plants with a capacity of up to 1 MW nor for electricity generation for personal needs.

However, a critical step for development of the RES power plant/HPP is the issuance of the Energy Permit, in effect an authorisation, which is obligatory for the construction of energy generation facilities more than 1 MW of installed capacity⁹³.

The MoME is the competent authority for issuance of the Energy Permit, which is issued within thirty (30) days of the date on which it was requested (subject to fulfilment of all legal and technical requirements) and its duration is limited to three (3) years, with a possibility of extension for additional year. The Energy Permit is also a precondition and one of the documents submitted when applying for the construction permit for the power plant. Hence, because of its limited duration, it is critical that the HPP Developers obtain the construction permit within the period of its validity and commence the construction of the power plant.

Article 37 of the Law on Energy established the legal ground for introducing a public tendering procedure in case the authorisation procedure has not secured new generation capacities or the security of electricity supply. In such a case, the tendering procedure will be organised by the MoME on behalf of the Government, based on transparent and non-discriminatory criteria. Still, the Energy Law is silent on the procedure to be used should such a potential situation occur, and does not reference the Law on PPPs and concessions for utilisation of the public tender procedures, as described in that law. The Energy Law is further contributing to the confusion in this case, stating that the Energy Permit is not required (actually, its issuance is assumed), for the power plants built in accordance with the Law on PPPs and Concessions⁹⁴.

Concessions

...

The Law on PPPs and Concessions⁹⁵, in its article 11 stipulates that: "A concession may be granted for the purpose of commercial use of publicly owned natural assets, or goods in general use which are publicly owned, or for the purpose of performing an activity of general interest, especially:

3) in the area of energy;

providing the link between the Energy Law and development/construction of power plants through the mechanism of the PPPs/concessions.

The procedure for the selection of the private partner shall be either the public procurement procedure prescribed by the law regulating public procurement or the concession granting procedure regulated by this law. A PPP contract, therefore, is signed as a public procurement contract or a concession granting contract (public contract). However, if the implementation of a PPP project implies the granting of a concession, or the provision of services with the right to exploit the specific service and the right to collect payment, the procedure for the selection of the private partner shall be implemented according to the provisions of this law. The procedure may be initiated by:

(i) the Government;

⁹³ Article 30 of the Energy Law.

⁹⁴ Article 30 of the Energy Law.

⁹⁵ Law on Public Private Partnerships and Concessions, Official Gazette of the Republic of Serbia, No. 88/2011.



- (ii) an autonomous province or a municipality, if the subject of the concession is located within the territory of an autonomous province or a municipality;
- (iii) a public enterprise, if so allowed under a special law; or
- (iv) an unsolicited proposal of an interested private entity.

The initiator or the process is responsible for developing of the Feasibility Study for the project in question.

Hence, concluding from the relevant EU and regional legislation, and the analysis performed on the Law on PPPs and Concessions, one could confirm that, should the Government decide to pursue the organisation of a public tender for new generation facilities, the Law on PPPs and Concessions, and the procedure described within shall be used.

Securing land

Often, the land suitable for construction of HPPs, or any part of the installation and/or accumulation, is stateowned agricultural land (forests, pastures, arable land or similar). In this case, the HPP Developer should request the initiation of two procedures:

- 1. Conversion of the forest into construction land and approval from the Ministry of Agriculture in case of agricultural land, and
- 2. Buy-out, long-term lease of land.

Unless the land parcel(s) where the HPP Developer intends to build the HPP is privately-owned, the HPP Developer needs to purchase the land, or sign a long-term lease contract with the Government for the land use. The procedures on the sale or long-term lease of state-owned construction land are based on competitive bidding, which implies a risk of not winning the bid for the specific land parcel. If the land parcel is privately-owned, the HPP Developer and the owner of the land may mutually agree on the sale, long-term lease or use rights of the land.

In the case where the land is privately owned, the HPP Developer may submit a proposal for expropriation only after the public interest for expropriation has been determined in accordance with the law⁹⁶.

Resolving of property rights and obtaining the valid status in this regard represents one of the major risks for HPP project development and could cause quite significant delays in the process.

Environmental Permitting

The "Analysis of Possible Effects on the Environment and Means for Environmental Protection", which is required for the issuance of both the energy permit and the location conditions, is conducted during the production of the Environmental Impact Assessment Study (EIA). Whether the EIA is required depends on whether the project meets certain minimum technical thresholds:

- i. EIA is mandatory to be carried out (and approved) prior to the construction of an electrical energy or heat energy plant exceeding 50 MW;
- ii. For power plant between 1 MW and 50 MW, the competent authority may request EIA. In case of an HPP, the lower limit is 2 MW; and
- iii. For power plant below 1 MW, no EIA is requested, regardless of the source of energy.

If Decision on Necessity (requirement) of EIA has been passed, determining that such an assessment is necessary, and if, within the said decision, the competent authority has not determined the scope and the content of the study, then the HPP Developer should also request and obtain a decision on the scope and content of the EIA study. This decision is valid for one (1) year, during which period the HPP Developer is obliged to perform the EIA study. At this stage, the HPP Developer must submit location conditions and the technical/project documentation developed at the level of Preliminary Design. Once the EIA is approved, the HPP Developer should commence the construction within two (2) years from the date of approval of the EIA study.

Water Permitting

⁹⁶ The Law on Expropriation, Official Gazette of Republic of Serbia53/1995.



In case of development of HPPs, since its construction involves the use of water from rivers, lakes, underground rivers or the release of water or other material into them, the construction permit will be issued only after Water Conditions and Water Approval has been granted, while the use permit will be issued only after a Water Permit has been granted.

Hence there are three licenses which an HPP Developer needs to obtain:

- i. Water Conditions, before application for the Location Conditions (Opinion of the Hydro-Meteorological Office had to be sought, as well);
- ii. Water approval, before application for the construction permit; and
- iii. Water Permit, before application for the use permit of the power plant.

All these licenses are granted by the Ministry of Agriculture, Forestry and Water Economy, in a procedure which lasts up to two (2) months. It is interesting that the Water Permit is issued for a period of maximum fifteen (15) years, with possibility of extension. Despite the possibility of extension, issuance of this Water Permit is causing legal uncertainty having in mind that lifetime of HPPs and their commercial exploration is much longer.

Water Conditions and Water Approval are concerned with the construction and/or reconstruction of an energy plant, while a Water Permit determines the terms and conditions for the use and disposal of water and other material.

Project/Technical documentation

The deeper the HPP Developer gets into the permitting procedure, the more detailed Project Documentation is required. The types and stages of the development of Project Documentation in the permitting procedure in relation to the Location Conditions and the Construction Permit are intrinsically linked to the process of getting locations conditions/construction permit, but also are a requirement for applying for different environmental and water permits.

Furthermore, project documentation may differ, depending of the power plants being constructed. We have here elaborated all project documentation which may be obligatory during construction of large-scale facilities (e.g. HPPs). Some of the project documentation may not be required to be developed should SHPPs be constructed. However, having in mind the definition of the SHPP in Serbian legislation (up to 30 MW of installed capacity), and complexity of construction of the HPPs, it is very likely that all the different levels of project documentation described below will be requested at some stage.

The following are the types of Project Documentation whose development is required at different stages of project development:

i. Basic Project accompanied by Pre-feasibility study (optional).

In case of construction of large-scale facilities, for which the Location Conditions may be issued based on the planning document, development of Basic Project and the Pre-feasibility study are not compulsory.

ii. Concept Design, accompanied by hydrological study and other needed studies and elaborates.

The Concept Design is pre-condition for issuance of the Location Conditions.

- iii. *Preliminary Project Design* accompanied with the <u>Feasibility Study</u>, is obligatory for large-scale facilities and is subject to revision.
- iv. *Main Project Design,* developed in accordance to the Location Conditions and consistent with the Preliminary Project Design and must be developed for large-scale facilities. The Construction Permit is issued based on the Main Project Design, which is subject to technical inspection.
- v. Detailed Project Design

The Detailed Project Design is a further-developed type of Project Documentation, which is required only if detailed drawings and textual explanation could not be provided under the Main Project Design, given the type of facility and other specific circumstances related to the construction. The Detailed Design elaborates technical solutions in detail and must be developed in line with the Location Conditions, Construction Permit and Main Project Design.



vi. As-Built Design

The As-Built Design is an addition to the Main Project Design, which includes all changes and adjustments that occurred during the process of construction. The modifications should be in line with the Construction Permit. As-Built Design is not the subject of technical inspection of the facility.

Construction Permit

According to the Law on Planning and Construction (the Construction Law)⁹⁷, a construction permit, may be issued by three different levels of government:

- i. The local municipality for energy plants below 10 MW capacity;
- ii. The Ministry of Construction, Transportation and Infrastructure for energy plants of 10 MW capacity or more; or
- iii. The Autonomous Province of Vojvodina for energy plants of 10 MW or more, located entirely in the territory of the Autonomous Province.

As mentioned above, the umbrella law for the construction of power plants which use RES is the Law on Construction, whose amendments were adopted in December 2014, bringing in a number of specific obligations for administrative bodies and accelerated procedures for the construction of energy facilities. To enable such efficiency in the issuance of the construction permits, in March 2015 the Government introduced the so-called "one-stop-shop" system, and as of 1 January 2016, construction related permits are issued electronically.

RES - Electricity

In December 2015, the National Assembly of the Republic of Serbia adopted the Energy Development Strategy of Republic of Serbia until 2025 with projections to 2030.

The Energy Law⁹⁸, which was adopted in December 2014, transposed the Directive 2009/28/EC on the promotion of the use of RES and opted for support schemes to encourage greater Utilisation of RES. Potential support schemes under the Directive include investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including "feed-in tariffs" and premium payments. Serbia (in line with the suggestion from Article 2 of the Directive which promotes the possibility for each state to freely choose a support scheme which it considers the most suitable) decided to continue with applying the model of feed-in tariffs (FiTs) because of two reasons: (i) due to the lack of a rapid development of projects and progress in this field, and in order to more easily implement the policy in the field of RES through the incentive mechanism whose effects it was possible to analyse and forecast, since it already had a successful record of four (4) years.

Since 2009, when FiTs were first established in Serbia, until the end of 2016, some 80 MW of new RES generation was installed, SHPPs being the bulk of it. Sixty-one (61) SHPPs with total installed capacity of around 41 MW (including two old, reconstructed power plants: Ovčar Banja and Medjuvršje) were constructed/reconstructed.⁹⁹

The Energy Law regulates acquiring of rights to engage in electricity and/or heat energy production.

According to the Energy Law, HPP Developers developing RES generation facilities enjoy the following benefits:

- 1) all producers using RES may acquire a temporary status and thereby increase the bankability of their projects;
- in addition to the temporary status and the privileged electricity producer status, the RES producer status is also being introduced, creating a precondition for all electricity producers using RES, to obtain guarantees of origin;

⁹⁷Law on Planning and Construction, Official Gazette of the Republic of Serbia Nos.72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014 and 145/2014.

⁹⁸Energy Law, Official Gazette of the Republic of Serbia, No. 145/2014.

⁹⁹Source: Register of Privileged Electricity Producers http://www.mre.gov.rs/doc/registar.html.



- 3) instead of the former 3 agreements, one model agreement on the purchase of electricity under a suspensive condition has been introduced. The HPP Developer intending to use RES for electricity generation will have, prior to construction commencement, all requirements and incentive measures specified in the trial operation phase, however, after the acquiring of the privileged producer status;
- the privileged producer status, the temporary privileged producer status, and the renewable source producer status may also be acquired by a natural person generating electricity from RES only for one power plant with the installed capacity of up to 30 kW;
- 5) at the request of the electricity producer, the DSO must issue an authorisation allowing the producer to construct the connection to the system at its own expense on behalf of the system operator. In such a case, the producer shall bear the costs of connecting to the system, reduced in line with the methodology for determining costs of connecting to the transmission and distribution system;
- 6) the HPP Developers constructing power plants from RES with the installed capacity of up to 100 kW are no longer obliged to obtain the financial security instrument while acquiring the temporary status.

A package of by-laws governing the system of incentives in the sector of producing electricity from RES was adopted in June 2016. The package includes three (3) regulations¹⁰⁰, including a model agreement for purchasing electricity from privileged producers (the PPA). Since the introduction of feed-in tariffs system in 2009, this had been the third update of the system of incentives, which introduced significant improvements in comparison to the previous regulation, but still in effect causing uncertainty due to frequent changes of the regulation.

The Energy Law distinguishes between regular producers of energy, producers from renewable energy sources (RES producers), producers with the temporary status of a privileged producer and the so-called Privileged Producers of Energy (Privileged Producers). It states that the RES producers, producers with temporary status of a privileged producer¹⁰¹ and Privileged Producers shall have additional rights and benefits compared to regular producers¹⁰².

According to the Energy Law, an electricity producer (legal entity, entrepreneur, as well as natural persons but for the latter only for one power plant with an installed capacity up to 30 KW) can obtain the so-called "temporary status of a Privileged Producer" if: (i) it has obtained a construction permit; (ii) it has obtained a financial security instrument for power plants with an installed capacity greater than 100 KW; and (iii) based on the technical documentation, it is clear that the temporary status of a Privileged Producer can be granted for the respective power plant. According to the Energy Law, the temporary status of a Privileged Producer can be granted for a maximum period of three (3) years and for a maximum period of one (1) year to those producers that use solar power.

If the electricity producer who obtained the temporary status of a Privileged Producer does not obtain the Privileged Producer status within the period for which it has been granted the temporary status of Privileged Producer, the temporary status can be extended for a maximum period of one (1) year under the condition that proof that the power plant has been built is submitted.

The status of the Privileged Producer is granted by the MoME upon application by the interested party containing all the required documents and under Energy Law and respective regulation conditions. Under the Energy Law, a producer who obtains the status of Privileged Producer is obliged to sell the electricity exclusively to the guaranteed supplier.

¹⁰⁰ Regulation on Conditions and Procedure for Acquiring the Status of the Privileged Electricity Producer, Temporary Privileged Producer of electricity from RES, No. 56/16; Regulation on Incentive Measures for production of electricity from RES and from highly-efficient heat and power production, No. 56/16; Regulation on the Agreement on purchasing electricity, No. 56/16).

¹⁰¹Status of Temporary Privileged Producer of electricity is typical for development of RES where total installed capacity supported by FiT is limited. Granting this status means that the Developer, if completes the construction and commissioning within the pre-defined period, shall receive FiT for electricity produced from its facility in accordance with the law and the decree on RES.

¹⁰²The RES Producers do not enjoy incentives as the Privileged Producers, but do have right to guarantees of origin in accordance with the Energy Law for the energy produced from RES. On the other hand, producer who acquired the status of temporary privileged producer and afterwards obtained the Privileged Producer status, is entitled to incentive measures that were in force on the day when the producer applied to obtain the status of temporary privileged producer.



Serbia has a somewhat peculiar legal regime when it comes to definition of the Privileged Producers when compared to other Western Balkan countries. Namely, HPPs with installed power up to 30 MW are considered as SHPPs and thus eligible for incentives. Also, HPPs on existing infrastructure with installed power up to 30 MW acquire the status of Privileged Producer. However, Privileged Producer status cannot be granted for a pumped storage hydropower plant. Below are the FiTs related to the SHPPs, in addition to which the Privileged Producers enjoy the following:

- i. twelve (12) year off-take period under the FiTs;
- ii. the right of an energy producer who has previously acquired the status of temporary privileged producer to sell the total amount of produced energy to public suppliers, during the incentivised period, at the feed-in tariff that was valid at the time when that producer acquired the status of temporary privileged producer;
- iii. the amount of energy produced during the incentivised period at the feed-in tariff that was valid at the moment when the status of the temporary privileged producers was acquired;
- iv. assumption of balancing responsibility and balancing charges by the public supplier during the incentivised period;
- v. the right of the Privileged Producer to conclude the PPA with the public supplier, after the expiry of the incentivised period, for the sale of the total amount of produced energy under market conditions on the electricity market in Serbia.

4 Comparison and benchmarking of the licensing procedures

4.1 Comparative analysis of I.O.L.R. licensing procedure in WB6

In general terms and overall logic, all (7) I.O.L.R. licensing procedures in 6 countries¹⁰³are similar. All of them, except the Albanian one, have their roots in the same legal and regulatory environment of the former Yugoslavia.

For easier organisation and interpretation, the entire licencing procedure has been divided into 4 major phases (see also Section 2.2):

- (i) <u>Prefeasibility phase</u> Location selection, investigation and additional preparatory works are done like geological survey, preliminary environmental impact assessment and hydro studies. The phase ends with defining the project; including a conceptual design and prefeasibility study;
- (ii) <u>Project development & Design</u> Includes the procedure of issuing concessions, issuing of environmental, construction and other permits, water related acts and grid connection terms;
- (iii) <u>Construction</u> Includes the construction of HPP with all related procedures;
- (iv) <u>Trial & Operation</u> Includes the issuing of operational permits and documents before putting plant to work.

Simplified comparative I.O.L.R. diagram for the licensing procedures in WB6 is shown in Figure 4.1.



Figure 4.1: Simplified Comparative I.O.L.R. Diagram for the Licensing Procedures in WB6

More detailed I.O.L.R. diagrams can be found in Annexes1-2.

Comparison of the key aspects of the I.O.L.R. licensing procedure in WB6 is shown also in Table 4.1.

¹⁰³ Note: BiH has separate diagrams for the two entities; FBiH and RS.

Table 4.1: Comparison of key aspects of the IOLR licensing procedure in WB6

	Albania	Serbia	Kosovo	Montenegro	The former Yugoslav	mer Yugoslav Bosnia and Herzegovina	
					Republic of Macedonia	FBIH	RS
Developed planning docs (spatial, energy, water usage); Established locations for large HPPs	-	+	-	-	+	-	+
Procedure for issuing concessions for water resources	+	-	+	+	+	+	+
Tender for concession	+	-	0	0	0	0	0
Included with concession contract	-	-	-	Energy permit	Water permit	Water permit -	
Body issuing the concession	Ministry of Energy and Industry	-	Ministry of Environment and Spatial Planning	Ministry of Economy	Ministry of Environment and Physical Planning	Ministry of Energy, Mining and Industry	Ministry of Energy, Mining and Industry
Water acts	Water permit	Water conditions Water approval Water permit	Water conditions Water approval Water permit Water order	Water conditions Water approval Water permit	Water permit	Preliminary water consent Water consent Water permit	Water guidelines Water consent Water permit
Body issuing water acts	National Water Council	Ministry of Agriculture and Environmental Protection	Ministry of Environment and Spatial Planning	Directorate for waters	Ministry of Environment and Physical Planning	River Basin Water Management Agency	Water Management Agency
Body issuing environ. permit	Ministry of Environment	Ministry of Agriculture and Environmental Protection	Ministry of Environment and Spatial Planning	Environmental Protection Agency, Ministry of Tourism and Sustainable Development	Ministry of Environment and Physical Planning	Ministry of Environment and Tourism	Ministry of Spatial Planning, Civil Engineering and Ecology
Location conditions before/after environmental permit, name of the permit	After Development permit	Before Location conditions	Before Zoning permit	Before Urban-technical conditions	_ After _ Urban conditions		Before Location conditions
Construction permit issuing body	National Territory Council	Ministry of Construction, Transportation and Infrastructure	Ministry of Environment and Spatial planning	Environmental Protection Agency, Ministry of Tourism and Sustainable Development	Ministry of Transport and Communications	Ministry of Spatial Planning	Ministry of Spatial Planning, Civil Engineering and Ecology
Grid connection documents							
Energy permit	-	Ministry of Mining and Energy	3 step authorisation procedure by Energy Regulatory Office	Energy Regulatory Agency (with concession)	(included with concession)	Ministry of Energy	Energy Regulatory Commission
Energy generation license	Energy Regulatory Entity	Energy Agency	See above	Energy Regulatory Agency	Energy Regulatory Commission	Regulatory Commission	Energy Regulatory Commission

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In the following sections, the above aspects of the licensing procedure are explained in more detail.

4.1.1 Strategic planning documents

Adequate spatial planning documentation preceded with Strategic Environmental Assessment is recognised as best practice and a key primary step in sustainable development of infrastructure, including hydropower. A SEA should be done for all national strategies that are relevant to hydropower development. Failure to conduct the SEA procedures at the time of development of the strategic planning documents and the adoption thereof is one of the key problems in the implementation of these projects. However, such strategic planning documents are implemented adequately only in Serbia, former Yugoslav Republic of Macedonia and the Republika Srpska entity of Bosnia and Herzegovina. In Montenegro, the new Law on Spatial Planning and Construction is currently in the public hearing procedure, which foresees numerous aspects of environmental considerations being addressed during the development of the national spatial plan. Although it is not clearly stated that a SEA should be developed to this purpose, the complexity of the described procedures ensures that, once the law is adopted, adequate assessment of various environmental aspects, as well as social, historical, etc., will be undertaken.

4.1.2 Prefeasibility phase

In this phase, a HPP project is being defined; its location, overall technical solution, plant sizing, estimation of the possible generation. Depending on the level of the establishment of the hydro cadastre, overall hydro planning documents, energy strategy, spatial planning documents, HPP projects might already be defined in these general documents or a developer might be able to propose a new project. Overall planning documentation, defining possible sites for new HPPs (particularly large) are well-developed in the former Yugoslav Republic of Macedonia, Serbia and Republic of Srpska entity of BiH. On the other hand, FBiH (entity of BiH), Montenegro, Kosovo and Albania do not have satisfactorily developed planning documentation relevant for HPP development.

4.1.3 Concession issuing

Concession obtaining for the usage of water resources, as one of the first steps after the definition of the project, is the required step in all WB6 countries except in Serbia. Concessions are issued generally through the tender procedures or through direct agreement, usually if public interest is recognized. The tender can be issued based on unsolicited proposal from the developer or at the initiative of the relevant government body itself; the Ministry in charge of energy. In first case, if the HPP Developer is the one who takes initiative, he is obliged to prepare all the necessary supporting documentation (location selection, conceptual design, prefeasibility study etc.).

In WB6 countries, all previously explained procedures and steps are similar with certain variations:

- (i) ALB: There is no option of direct agreement in the procedure for issuing concessions;
- RS (BIH): Direct agreement is mostly made with public companies while there is a possibility for private person to obtain it under special conditions. By signing concession contract, water guidelines are automatically obtained;
- (iii) FBIH (BIH): To request concession issuing, the HPP Developer needs to acquire a preliminary water consent;
- (iv) MNE: Within concession contract, energy permit is automatically obtained;
- (v) MKD: Unlike in RS, direct agreement cannot be made with private person. Only public companies have that privilege. By signing concession contract, water permit is automatically obtained;
- (vi) KOS: It is not clear in which circumstances the concession would be issued through the tender. In practice, concessions are issued through direct agreement;
- (vii) SER: There is no concession procedure. The rights and obligations regarding the usage of water are solved throughout the I.O.L.R. licensing procedure through the water related acts: water conditions, water approval and water permit. Law in Serbia recognizes concessions only in case when relevant Ministry issues the concession for construction of additional generation capacity (in case the plans of existing subjects are not sufficient to meet the national energy strategy goals). In that case the concession contract would entail the water related acts, the location conditions, and other relevant permits.



4.1.4 Water related acts

Apart from the conditions prescribed in the concession contract, water acts are generally issued in several consecutive steps throughout the I.O.L.R. licensing procedure. Generally, these can be divided into:

- (i) Water Conditions to define the overall conditions for the usage of water serves as an input to the preliminary design;
- (ii) Water Approval to confirm the water conditions have been respected in the main design of the project;
- (iii) Water Permit issued after the construction of the plant; to confirm the construction has been performed in accordance with the main design and water approval. These also prescribe the rights and obligations to be respected throughout the operation of the plant.

Some procedures are quite different from country to country and described below:

- (i) ALB: Only relevant water acts are the concession contract and the water permit which is obtained after construction of HPP;
- RS (BIH): As mentioned in the previous section, water guidelines are automatically obtained with concession contract. They are later needed for acquiring water consent which should be obtained before energy and construction permit. After construction water permit is issued which concludes water acts;
- (iii) FBIH (BIH): In comparison to RS, a preliminary water consent (which is almost equivalent to water guidelines in RS) must be acquired before the procedure for issuing concessions since it is needed document for even qualifying to compete for concession. Other acts, water consent and water permit, are similar to RS (procedure position);
- (iv) MNE: Water conditions and water approval are obtained by the Ministry of Tourism and Sustainable Development as the "one-stop-shop" body for issuing urban-technical conditions and construction permit. Only water act which should be requested and acquired by the HPP Developer as stand-alone document is water permit (issued after construction);
- (v) MKD: In comparison to other countries, there is only one water act, water permit. It is obtained automatically with concession contract;
- (vi) KOS: 4 water related acts recognized in the I.O.L.R. licencing procedure:
 - a. Water conditions and water approval before construction permit,
 - b. Water permit and water order before HPP construction;
- (vii) SER: Water conditions are obtained by the Ministry of Construction, Transportation and Infrastructure as a "one-stop-shop" for issuing construction related permits. Water approval and water permit are to be obtained by the HPP Developer directly from the Ministry of Agriculture and Environmental Protection.

4.1.5 Location conditions

This document is issued in all WB6 countries except in ALB and MKD. However, its name varies in each WB6 country. Its purpose is to provide input for the HPP Developer on the location limitations and to be used as an input for development of project documentation (preliminary design).

4.1.6 Environmental permitting

The Environmental permit is one of the key steps in the development of the HPP projects. The procedure leading to the environmental permit can result in the cancellation of the project or its significant alteration. In most countries, an environmental impact assessment (EIA) should be done to examine all the expected impacts of the projects on the environment. EIA's are subject to public scrutiny. Finally, the relevant Ministry decides if environmental permit should be granted, and under what conditions.

Environmental permit is the prerequisite for the issuing of the location permit/urban-technical conditions.

The differences among WB6 countries in terms of environmental permitting are described below:

(i) ALB: Preliminary EIA is needed which, when examined, can lead to acquiring environmental permit. If Ministry decides it's not sufficient, a detailed EIA is made which then can lead to environmental permit;



- (ii) RS (BIH): Similar to ALB, a preliminary EIA should be made which then leads to decision if detailed EIA is needed or present state of document is sufficient for acquiring the environmental permit;
- (iii) FBIH (BIH): Detailed EIA is needed from the start, which leads to an environmental permit;
- (iv) MNE: Similar to FBIH, a detailed EIA is needed. The Environmental Protection Agency is the body that issues the environmental permit;
- (v) MKD: Procedure is similar to MNE;
- (vi) KOS: With accepted EIA, an environmental consent is granted which then leads to environmental permit;
- (vii) SER: A request should be made if, for a certain project, EIA is needed. If "yes", then the procedure of EIA and public hearing follows and the final decision by the Ministry.

4.1.7 Land use issues

Subject to obtaining the environmental permitting, as a significant milestone in HPP development the developer has to resolve the land use rights. The resolution of these issues is a prerequisite for obtaining the construction permit. Depending on the owner of the land, land use rights can be obtained through:

- a) Acquisition of the land; in case of the private owner and agreement between the parties;
- b) Land use rights; usually in case of the state-owned land and/or public goods: These are limited in duration (usually 30-99 years);
- c) Expropriation; in case of privately owned land and lack of agreement between the parties. For expropriation, a public interest must be determined.

This procedure is similar in all WB6 countries.

4.1.8 Construction permitting

Key prerequisites for the construction permit are usually: solved land use rights, environmental permit and main design.

Even though the procedure and key steps (documents and permits) are similar, some countries have additional conditions which should be met for obtaining construction permit:

- (i) ALB: Concession contracts are one of the needed documents for obtaining construction permit;
- (ii) RS (BIH): Energy permit and concession contract are also needed;
- (iii) FBIH (BIH): Like RS, the same additional documents are needed with some minor changes;
- (iv) MNE: The HPP Developer doesn't prepare main design for construction permit, Preliminary design is sufficient. Main designs are prepared sequentially for each of the project elements and submitted to the relevant Ministry to obtain the construction works approval;
- (v) MKD: Like BIH and ALB;
- KOS: Preliminary application decision is needed from ERO as one of the key documents for obtaining the construction permit;
- (vii) SER: Like BIH, ALB and MKD.

4.1.9 Grid connection issues

Grid connection issues are described in detail in BR-6.

4.1.10 Energy permitting

Energy permits are granted either by the ministry in charge for energy or by the respective energy agency.

Energy permits are not recognised in ALB and in MKD.



4.1.11 Operational permitting

Operational Permits or in some cases Use Permits are issued after the construction of the HPP. Usually these permits are issued by the Ministry in charge for the construction.

In addition to Operational/Use Permit, also the Energy Generation license is issued by the relevant national electricity/energy regulatory authority.

4.2 Conclusions

This section provides conclusions by elaborating key barriers faced by hydropower developers in WB6 countries. It further describes recommendations and proposals for remedial action critical for overcoming these barriers by amending the policies and legal and regulatory frameworks, where applicable.

4.2.1 Conclusions

The main conclusions arising from the assessment presented above in this topic are split into conclusions which are typical for all or most of the regional countries, and additional conclusions which are specific for each individual country. The conclusions which are indicated as "regional" can also be applied to each individual country. The conclusions of this Background Report are the following:

Regional Level

- 1. The Institutional-organisational-legal-regulatory (I.O.L.R.) framework for large hydropower generation development in all WB6 countries exists, it is reasonably well-developed and operational, but due to certain gaps and inconsistencies it is not as efficient as it could and should be.
- 2. Important steps have been successfully undertaken in all WB6 countries towards harmonisation of the I.O.L.R. framework in the electricity/energy sector with the EU 3rd Energy package, due to the intensive activities of all WB6 countries, their relevant authorities, and huge support from the Energy Community Secretariat. Except in BiH, where activities are on-going, in all WB6 countries new Electricity/Energy Laws have been adopted recently and harmonised with EU Directives and Regulations.
- Roles and responsibilities of individual stakeholders in the I.O.L.R. framework for large hydropower generation development have been defined by the recent amendments of the national Electricity/Energy Acts. Due to the lack of recent investments in large HPPs, these I.O.L.R. role determinations could not be checked in practice¹⁰⁴.
- 4. Like the electricity/energy legislation, a significant improvement in the WB6 region has been recognised in the environmental legislation and practice. These improvements are mainly driven by the process of accession to the EU. Unfortunately, in other areas of interest for hydropower projects development, such as concessions, private-public partnership, construction, etc. the legislation is either out of the date or legislative changes are very frequent, which creates uncertainty and has had a negative impact on investments.
- 5. There are number of cases in different WB6 countries where primary legislation exists, but secondary legislation (including so called "tertiary legislation" which includes various rulebooks, instructions, procedures, etc.) is not sufficiently developed which consequently makes the legal framework incomplete and requirements from primary legislation are practically impossible to implement. Strategic planning is an issue in the WB6 region in general. Energy strategies are either delayed in development, or are not regularly updated. (development of fully updated and sustainable action plans, as foreseen by the legislation.)
- 6. The quality of the transposition and implementation of the SEA/EIA, water and nature protection (WFD, Floods, Birds and Habitats) EU Directives is not at the levels expected. The quality of the SEA and EIA

¹⁰⁴In addition, large HPP projects often have many specific aspects and the licensing procedure may include other, non-typical, steps which have not been considered in the presented I.O.L.R. diagrams (for example, procedures in case of need for cultural heritage protection).



as well as Appropriate Assessments documentation is often low as they do not contain all the relevant information and in-depth, documented and complete analysis of the environmental impacts. Furthermore, the public consultation aspect of the environmental impact assessment process needs to be strengthened.

- 7. In most of the WB6 countries, it has not been fully established and implemented practice to perform SEA during the development of the strategic planning documents relevant for hydropower development and for all national plans and strategies which are relevant for hydropower development (such as Energy Strategy, Water Strategy etc.) at the time of development of the strategic planning documents and the adoption thereof. There are no permanent institutional forms of cooperation and coordination among the regional countries at the river basin level. Random meetings are usually focused on isolated projects only, in most of the cases bilateral, and accordingly the effects of these actions on the improvement of the hydropower generation development framework are minimal.
- 8. In all WB6 countries basic legal framework has been transposed and takes into account most of relevant provisions of EU Directives on EIA, SEA, WFD and Floods, Birds and Habitats Directive. However, there is a problem with implementation, enforcement and the lack of application of standard procedures on the part of competent authorities and investors. A major problem is their unwillingness to consider alternatives and an appropriate justification for the proposed solution, to propose adequate protection measures to avoid negative impact, to enable public participation or to notify another country in case of transboundary impact.
- 9. In each WB6 country, it is well known who oversees water management, who takes care about electricity supply, who coordinates agriculture, irrigation, fishery, who is responsible for transport, but there is no solution for the integrated coordination of all these aspects of water use, except in Kosovo, where the Inter-Ministerial Water Council (IMWC) undertakes this role.
- 10. It is unclear from the strategic documents who is responsible, at the country level, for the overall coordination of multiple aspects (flooding, irrigation, fishery, tourism, etc.) of the hydropower generation development planning, since it is difficult to identify all the prospective benefits of hydropower generation projects through energy assessments only.
- 11. The Institutional-organisational framework for HPP development in WB6 countries has been significantly improved during the last decade. It is formally present and functional in all WB6 countries, but in some cases with numerous gaps and inconsistencies. Implementation of the I.O.L.R. framework for HPP also differs significantly from one WB6 country to another, resulting in various problems and obstacles.
- 12. The capacity of local municipalities is not sufficient to facilitate the growing demand for development of HPPs projects and RES projects in general.
- 13. Most of the existing SHPP cadastres (registers) are out of date in WB6 countries, although there are ongoing developments on the revisions of SHPP cadastres in Serbia and in Montenegro.
- 14. In all WB6 countries the term "one stop shop" is heavily used, as the best model for improving the framework for investments in any kind of projects, including hydropower developments. A similar heavily used term is "private public partnership PPP". Unfortunately, in practice, none of these are operational, even if formally introduced in certain countries.
- 15. In all WB6 countries there is a law or another regulation on legal proceedings, specifying procedures for application and issuing of various permits, approvals, consents by the relevant state, regional or local administration. In practice, the public institutions do not stick to the terms specified in the legislation, which significantly delays the execution of projects, increases costs and raises uncertainty among investors. Also, unlike in many European countries, there is no regulation on the "silence of administration" which stipulates that, if an administration does not respond within specified period, the approval/permit/consent is considered as being granted.

Albania

Albania has had a good approach in developing its I.O.L.R. framework, but is still experiencing
insufficient capacity to cope with the high demand for hydropower generation investments caused by the
extremely high natural potential. It is recommended that immediate assistance is provided to the



Albanian authorities (Government, relevant ministries and government agencies) in building their internal capacities and operational procedures to support various investments, including hydropower generation projects.

- Albania has, in the previous decade, seen an increase in HPP deployment, both of SHPPs and HPPs. However, the process was mostly driven through unsolicited proposals for the granting of the concessions of DBOT type. Unsolicited proposals, although recognised by the effective legislation, were not foreseen as the main solution for granting concessions (due to the fact that they are often not fully competitive and transparent), but rather as a complementary option to the tender procedures executed by the responsible public authorities.
- The initial granting of numerous concessions for SHPP development was not transparent and has evolved into series of legal proceedings.
- Non-predictability of the permitting process and longevity of the procedures were also hindering the HPP development process, in addition to the unreliability of the FiT system, shaped in such a manner so as to cause yearly changes in the incentive price.

Bosnia and Herzegovina

- The set of energy laws at the BiH level is from 2004. BiH is the only country in the region which did not adopt a new Energy Law and, consequently, is currently exposed to sanctions from the Energy Community Secretariat (these sanctions, among others, include restrictions in loans and grants which are very important for investment projects). A new draft Energy Law for BiH has been prepared, but is still not approved by the BiH entities (FBiH and RS), which is a prerequisite for its adoption in the BiH Parliament.
- Development of HPPs in BIH was characterised by non-transparent process in both entities (FBiH and RS) when granting concessions on water streams through unsolicited proposals of the interested HPP Developers. In many cases, state-owned electricity generation companies are driving out the competition from private developers by enjoying a more favoured position for the development of certain projects.
- As a consequence of the complex institutional structure of BiH, there are numerous inconsistencies between legislation at different levels, including gaps/overlaps of jurisdictions.
- The level of cooperation between the competent institutions within the same government levels (state, entities, cantons and municipalities) responsible for the permitting procedure for the construction of HPPs projects is in most cases insufficient.
- The adoption of certain very important laws is significantly delayed (e.g. Law on Concessions¹⁰⁵, Law on construction, etc.) in the FBiH Parliament. These delays further increase inefficiency and inconsistencies between different legislative acts at the same institutional level, as well as between the same legislative acts at different institutional levels.

The former Yugoslav Republic of Macedonia

- Established transparent framework for large HPPs
- Strong progress in the development of SHPPs over the last decade. There is a well-structured and established process for tendering small HPP locations, standard contract and PPAs, and Guidelines for development of small HPPs available in Macedonian and English providing detailed information on the process and various requirements.
- Frequent legislative changes are causing legal uncertainty (e.g. Law on Construction amended over 10 times during last 5 years) in the project development process.

Montenegro

¹⁰⁵Existing Law on Concessions is from 2002.



• The administrative procedures for permitting, construction and licensing remain lengthy, unreliable and burdensome.

Kosovo.

- Existing authorisation procedures and requirements for new SHPP projects are still rather complex and confusing, mainly due to the lack of experience of local authorities in RES-specific procedures;
- On the one hand, Kosovo has a highly-coordinated water use process, and on the other, there is a lack of coordination among different government level institutions for enforcing the authorisation process.

Serbia

- In 2014, streamlined, simplified and coordinated procedures for authorization and licensing were introduced. In the following years, the actual framework was further improved. However, there is a discrepancy between legislation and practice, especially concerning the efficiency of the administration responsible for issuing various planning documents, permits and approvals.
- During 2016 the contractual framework for the development of RES generation was significantly
 improved, by introducing numerous government decrees regulating this area, including the adoption of a
 standard PPA and a standard direct agreement for financing RES projects.

5 Proposals for action

The conclusions presented above are results of the assessments done in the previous sections of this task. The recommendations for actions listed below are developed based on these conclusions and represent the backbone of the regional Action Plan as a proposed follow-up of the Study.

Recommendations for improvement arising from the conclusions above are presented below as proposals for actions at both the regional level (Table 5.1) as well as the WB6-country specific level (Table 5.2).

5.1 Regional level

Table 5.1: Proposed actions at the regional level

SN	Brief description of proposed Action	Assumed implementing agent	Anticipated timeframe
1	In general, the Western Balkans countries need to further harmonize the entire I.O.L.R. framework with the <i>acquis communautaire</i> in order to align their energy markets with European standards and norms, but also to provide support for integration of their markets into the regional and European electricity transmission grids. However, it is critical to ensure that this alignment, not only happens, but that it happens simultaneously and in close coordination among the countries.	Line Ministries	ASAP
2	In each WB6 country, the establishment of the institution for coordination of water use at the country level must be initiated, bringing together all decision makers from interested institutions. Since water sectors in each country are different, proposals should be customised for each WB6 country (except for Kosovo where this entity already exists), followed by the brief/indicative terms of references for their future activities.	Governments	ASAP
3	A pilot project should be launched on the establishment of the institution (council) for coordination of planning, development and utilisation of the river basin commonly selected by WB6 partners. This pilot project should develop all organisational documents for such river basin coordination centre, by undertaking an inventory of available resources vs. scope of work, objectives and available facilities. The final development study should be submitted to WB6 Ministers for further decision making and action proposals on implementation.	WB6 Governments, line Ministries, DG NEAR, ECS, IFIs	2018
4	Undertake analysis and propose a framework model for the coordinated hydropower generation development planning. Introduce a clear determination of roles and responsibilities of individual institutions in this process into the strategic documents of energy sector as well as in other sectors (waters, agriculture, environment, tourism, international cooperation, etc.)	WB6 Governments and line Ministries	ASAP
5	Additional assessment of the capacities of local municipalities to actively and efficiently participate in the existing I.O.L.R. framework for HPP development should be undertaken in each of the WB6 countries separately. Initiate various capacity building and strengthening projects to train administrative staff in assisting investors for various hydropower development projects.	WBIF IFIs	ASAP
6	Development of integrated planning documentation (including spatial planning and hydrological resources usage planning) in countries where it is not sufficiently developed: MNE, SER, ALB, KOS, partially FBiH. Consider the integration of the procedure for issuing various permits, especially in cases when the same Ministry is issuing these permits, e.g. certain water acts and environmental permit or water acts and concession.	Governments and line Ministries	ASAP
7	Strategic documents (Energy Strategies, Action Plans for implementation of energy strategies and NREAPs) must go through an SEA procedure and must be regularly	Line Ministries	Permanent action item



SN	Brief description of proposed Action	Assumed implementing agent	Anticipated timeframe
	updated using realistic data on feasible hydropower potential and sustainable hydropower generation development projects. Where a trans-boundary impact exists for new HPP projects, neighbouring countries should be consulted and inputs harmonised in the planning process.		
8	It is essential to introduce at earliest stage the practice of conducting a high-quality SEA during the development of all strategic planning documents (not only on spatial planning but also energy) and adoption thereof. Similar requirements/oractice at earliest stage should be introduced for EIAs for all	Line Ministries, Governments	ASAP
	projects, including Appropriate Assessment (Precondition: Proclamation of Natura 2000 or inventarisation of target species and habitats according to Birds and Habitats directives).		
	It is essential to improve existing practices concerning public participation and public consultation processes for SEAs and EIAs.		
9	Improve current practice in the implementation of the EIA Directive concerning the willingness to consider alternatives and appropriate justification for the proposed solution in individual projects, to propose adequate protection measures to avoid negative impact or to notify another country in case of transboundary impact.	Governments and line Ministries	ASAP
10	Introduce a "Silence of administration" rule in WB6 countries for the permitting process.	Governments	ASAP
11	Introduce a "one stop shop" for the development of HPP projects – investors apply and the responsible administration which issues spatial planning and construction documents and permits takes care of all necessary consents and approvals. Undertake necessary preparations, training, institutional and individual capacity building.	Governments, line Ministries, ECS, DG NEAR, IFIs	2018
12	All WB6 countries should employ maximum efforts to improve their current practice towards sustainable, mature and sound project planning procedure.	Governments	ASAP

5.2 Country level

Table 5.2: Proposed actions at the WB6 country level

SN	Brief description of proposed Action	Assumed implementing agent	Anticipated timeframe		
	(1) Albania				
1.1	Streamline the process and limit the duration of the permitting procedure. Provide support for capacity building and strengthening of institutions.	Government and MEI, IFIs	ASAP		
1.2	Abandon the concept of granting concessions through unsolicited proposals, by making it more predictable and transparent. Use a competitive process (tendering) for new generation facilities, including HPPs instead.	MEI and AKBN	Permanent activity		
1.3	Bearing in mind the complexity of SHPP/HPP permitting procedures in Albania, defining a reference permitting process would represent a strong starting point for potential developers. In other words, Albania should create a generic procedure outlining the major milestones and minimum contents of procedures.	MEI	ASAP		
1.4	Integrate spatial planning into the permitting procedure.	Line Ministry	ASAP		
	(2) Bosnia and Herzegovina				
2.1	Adopt new versions of the outdated or pending legislative acts, streamline the process, update legislation and limit the duration of the permitting procedure.	Governments	ASAP		
2.2	Ensure consistency over the application of the regulation and permitting procedures across different levels of government in each entity (particularly in	FBiH Government	ASAP		

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SN	Brief description of proposed Action	Assumed implementing agent	Anticipated timeframe	
	FBIH).			
2.3	Improve standard contracts and legislation enabling project financing (step-in rights related provisions in respective laws on concessions, e.g.).	FBIH and RS Government	ASAP	
2.4	Simplify the HPP development process by reconsidering some of the requirements arising out of the applicable legislation (in particular Article 78 of FBIH's Electricity Law and extension of expropriation beneficiary concept to private investors in Law on Expropriation in FBIH).	FBiH Government	ASAP	
	(3) The former Yugoslav Republic of Macedonia			
3.1	Streamline the process and limit the duration of the permitting procedure, especially in relation to the long-term land lease of the state-owned land.	Government	ASAP	
3.2	Diligently develop and apply the PPP process and any other alternative approaches	MoE, MoEPP	ASAP	
	(4) Montenegro	1	I	
4.1	Streamline the process, fill in the gaps in the legislative framework, update necessary legislation and limit the duration of the permitting procedure.	Government	ASAP	
4.2	Improve standard contracts and legislation enabling project financing (e.g. step-in rights related provisions in respective laws on concessions).	MoE	ASAP	
4.3	Diligently develop and apply the PPP process and any other alternative approaches	Government, MoE	When applicable	
(5) Kosovo				
5.1	Provide assistance in capacity building of the MoE, ERE and local administrations due to their central role in HPP development	Government, IFIs, MoE	ASAP	
5.2	Consider granting access to land together with the permit to ensure that project developer may start construction as soon as the permit is enforceable.	Line Ministry	When applicable	
	(6) Serbia			
6.1	Adopt and/or update strategic documents: Energy Strategy, Action Plan for implementation of Energy Strategy and NREAP.	Government, MRE	ASAP	
6.2	Diligently develop and apply the PPP process and any other alternative approaches	Government, MRE	When applicable	
6.3	Ensure an equal level playing ground for private sector investors and incumbent companies (EPS)	MRE	Permanent activity	

Annex 1: I.O.L.R. flow-chart diagrams (PDF)

Due to their size, the (7) I.O.L.R. flow-chart diagrams are presented in separate files enclosed as Annex 1 of this report.



Annex 2: I.O.L.R. flow-chart diagrams (Visio)

Due to their size, the (7) I.O.L.R. flow-chart diagrams are presented in separate files enclosed as Annex 2 of this report.