Energy Community

Permit-Granting and Planning of Energy Projects in the Energy Community

Enviroment

EIHP

June 2024

www.energy-community.org

This report was financed by the Energy Community.

Client	Energy Community Am Hof 4, Level 5, 1010 Vienna, Austria
Contract Manager	Aleksandra Bujaroska
Contract No.	PN 26-2022

Permit-Granting and Planning of Energy Projects in the Energy Community: Overview, Recommendations and Best Practices

Task 3

Task leader	Karmen Stupin
Authors	Matea Kalčićek Iris Čurić Hrvoje Dorotić Sanja Živković Mara Szuts Krešić Marina Salopek Kasunić Karmen Stupin Minea Skok
Team leader	Marin Miletić
Director	Dražen Jakšić
Ref. No.	STU-2024-220175-1/1

EIHP
ENERGY INSTITUTE
HRVOJE POŽAR

Liability disclaimer

The findings, recommendations and best practices presented in this report solely reflect the opinions and analysis of the authors of the document. They do not necessarily represent the recommendations, policies, or endorsements of the Energy Community Secretariat.

Content

Tables

Figures

Abbreviations and acronyms

AL – Albania

BIH - Bosnia and Herzegovina

CP – Contracting Party

CPs-Contracting Parties

DER – Distributed Energy Resource

DSO – Distribution System Operator

ECS – Energy Community Secretariat

EIA – Environmental Impact Assessment

EIA Directive – Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment with amendments introduced by Directive 2014/52/EU

Energy Community Treaty - Treaty establishing Energy Community signed in October 2005 in Athens, Greece, in force since July 2006

EC – European Commission

EU – European Union

FMD – First Mover Disadvantage

GE – Georgia

HPP-hydropower projects

INSPIRE Directive - Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community

MD – Moldova

ME – Montenegro

MK – North Macedonia

MS – Member States

NECP- National energy and climate plan

NSP – National Spatial Plan

PV – Photovoltaic

QM – Queue Management

RE – Renewable Energy

RED - Renewable Energy Directive

RED II - Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)

RED III - Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023

amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652

RES – Renewable Energy Source

RS – Serbia

SEA – Strategic Environmental Assessment

SEA Directive – Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

SP – Spatial Planning

TSO – Transmission System Operator

UA - Ukraine

XK* – Kosovo*[1]

[1] *Throughout this document the symbol * refers to the following statement: This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Advisory Opinion on the Kosovo* declaration of independence.*

Scope and Methodology

Desktop assessment integrated with the answers to the questionnaire provided by the relevant stakeholder groups of each CP has been used as input data.

An analysis of the national legislation of each of the CP on compliance with the EIA Directive was made, and information from different sources (public databases in CP countries, information already in possession to the Consultant, EU databases etc.) related to EIA, spatial planning and grid connections of energy projects (especially based on RE) was gathered. To create a comprehensive assessment, EU experiences were used.

A questionnaire was sent to relevant stakeholder groups selected representatives encompassing government, business, civil society and grid operators from each CP:

The questionnaire encompassed options and questions tailored to each mentioned stakeholder group, covering the following aspects:

1) EIA and permit-related procedures, gathering information:
a) on the number of projects made subject to an EIA per energy project categories set out in Annexes I and II of the EIA Directive (excluding nuclear energy), focusing on renewable energy;
b) on the number of energy projects made subject to a determination under Article 4(2) as refers to energy projects listed in Annex II of the EIA Directive (excluding nuclear energy) and focusing on renewable energy;
c) on the average duration of the EIA process (each phase of the process, including competent authority's decision) and the factors that cause the most significant delays including assessment of the complexity of administrative authorisations;
d) identification of gaps in legal implementation that delay or halt the proper EIA permit-related procedures (e.g., lack of bylaws);
e) on average direct costs of EIA (an average cost to the project developer including a percentage of the total cost of the project);
f) on the competent authorities (staffing and skilling of permitting authorities and financial support);
g) on practices for streamlining the EIA permit-related procedures with other environmental assessment procedures and permits.

2) Permit-granting processes regarding renewable energy including repowering projects and renewable energy self-consumption projects, gathering information:
a) on legislative, regulatory and other obstacles in all permit-granting processes;
b) on the average duration of issuance of each permit and the factors that cause the most significant delays;
c) identification of gaps in legal implementation that delay or halt the permit-related procedures (e.g., lack of secondary legislation);
d) on average direct costs of issuance of certain permits;
e) on the competent authorities (staffing and skilling of permitting authorities and

financial support).

3) Planning and programming of spatial zones on a national level (in each CP) as regards renewable energy projects, gathering information:
a) on processes (criteria and methodology) and their average duration for site selection and planning of land/sea space use for specific renewable energy projects;
b) on the strategic environmental assessment conducted and the average duration of the procedure;
c) on the legislative and implementation gaps that delay or halt the development of zone layering for specific renewable energy projects;
d) on potential obstacles in the adoption/execution of land/sea zone layering space use for specific renewable energy projects.
4) Grid connections procedures (in each CP) as regards renewable energy projects, gathering information:

a) on processes (criteria and methodology) and their average duration for specific renewable energy projects;

b) on the legislative and implementation gaps that delay or halt the grid connection for specific renewable energy projects;

c) on potential obstacles in the grid connection for specific renewable energy projects.

Stakeholder questionnaire-derived inputs were the critical source of data for identifying obstacles and good practices in permitting procedures, but these were informed and contextualized by preceding desktop research.

The present recommendations are based on the assessments and findings provided in the reports for each Contracting Party, information obtained via questionnaires submitted by different stakeholders, desktop research of the regulatory frameworks of the CPs and relevant evaluation country reports for certain topics covered by a document such as the EC's analytical report on alignment with the EU environmental acquis, the 2020 Policy Guidelines on small hydropower projects in the Energy Community, the Energy Community Secretariat Annual Implementation Reports, EC's EIA Guidance Documents as well as the recommendations and requirements in terms of simplifying and speeding up the permitting-granting procedure for renewable energy projects (RES Simplify) and the Consultant knowledge and previous experiences.

1 Environmental impact assessment

1.1 CPs Legal framework and implementation

Environmental impact assessment legislation, including EIA laws, environmental protection laws, and secondary legislation, is incorporated in the legal frameworks of all CPs. In some CPs, the full transposition of Directive 2014/52/EU has not yet been finalized.

The Ministerial Council of the Energy Community adopted decisions for the failure to transpose the Directive 2014/52/EU, for Kosovo*[2], Moldova[3], North Macedonia[4] and Serbia[5]. The breaches identified by the Ministerial Council in 2021 and 2021 continue to persist.

For **North Macedonia,** the Energy Community Secretariat provided assistance in preparing draft amendments to the Law on Environment in order to fully transpose Directive 2014/52/EU. However, the draft has not yet been submitted to the legislative procedure**.** The nature impact assessment mandated by the Nature Protection Law and the EIA outlined in the Law on Environment are not integrated into a streamlined or coordinated process. This lack of integration constitutes one of the primary obstacles hindering the adoption of the law. Furthermore, there is no improvements in secondary legislation in particularly concerning the screening processes for small hydropower projects with an installed capacity of less than 2 MW.

Serbia also developed draft legislation for transposing Directive 2014/52/EU, however, the draft should be further improved to address critical deficiencies of current procedures, overcoming the issuance of construction permits before an EIA procedure. The proposal for the new EIA Law also refers to the need for amendments to Law on the Nature Protection and the Law on Planning and Construction, which also form part of the national legal framework for the EIA procedure.[6]

Moldova amended the Law on Environmental Impact Assessment in 2022 to incorporate the amendments of Directive 2014/52/EU, however, the implementation of the new EIA legislation is still pending due to the yet-to-be-implemented provisions of the amendments to the Law.

---

[2] *https://www.energy-community.org/dam/jcr:19fc4e06-0953-4f66-a796-b2192a50abaf/Decision102022_KOCaseECS-5_22_15-12-2022.pdf*

[3] *https://www.energy-community.org/dam/jcr:315e639e-2b6e-4122-8642-806e940596c5/Decision2021-10-MC-EnC_CaseECS%20-24-21_ML.pdf*

[4] *https://www.energy-community.org/dam/jcr:2458b24e-e210-42a0-a01e-ebba744a7fbc/Decision2021-08-MC-EnC_CaseECS%2022-21_NM.pdf*

[5] *https://www.energy-community.org/dam/jcr:9e35cda9-0854-4695-800e-a31c7eabbfb5/Decision_2021-09-MC-EnC_CaseECS-23-21_Serbia.pdf*

[6] *https://www.paragraf.rs/dnevne-vesti/101023/101023-vest14.html*

Kosovo* adopted the EIA Law in 2022 however, it falls short of full transposition of the Directive 2014/52/EU. The incorporation of the Directive's provisions on public participation and EIA expert examination into secondary legislation is still missing.

Albania, **Bosnia and Herzegovina, Georgia** and **Ukraine** should refine their EIA legislation for proper implementation of the EIA Directive.

The **Albanian** EIA Law must clearly stipulate the requirement for Environmental Decisions to include the EIA reasoned conclusion, environmental conditions, associated measures, and monitoring protocols.[7] For proper implementation it is necessary to adopt missing secondary legislation on certification of EIA experts and EIA screening criteria.

In **Bosnia and Herzegovina**, the EIA screening processes against the criteria set in Annex III of the EIA Directive must be systematically applied particularly for hydropower projects. The EIA legislation should be amended to provide in detail the steps in transboundary consultations.[8]

Georgia must restrict the application of the EIA Code's transitional provisions on unauthorized projects to exempt them from undergoing an EIA.[9]

In **Ukraine**, the implementation and enforcement of EIA legislation for all restoration projects of power plants and transmission lines is not being applied due to martial activities. The existing EIA legislation does not provide for exemptions on a case-by-case basis, which is an obligation of Article 1(3)[10] of the EIA Directive for projects having defence as their sole purpose.

In **Montenegro**, the national legal framework is in line with the EIA Directive. However, the planned projects for which Environmental consents have not been issued must be terminated and sent for termination of concession and completion of related procedures (like HPP Komarnica)[11], considering obligation of Article 8 (a) of EIA Directive for competent authority to up-to-date environmental decision at the time granting development consent.

The assessment of the permit-granting procedure for energy projects in the CPs shows that deficiency in EIA legislation and/or lack of full transposition and implementation generates: i) unclear tasks of the state and local institutions involved in the EIA process; ii) insufficient public involvement in decision-making process and iii) delays in preparing EIA reports (delays of up to 3 months are common, the average time taken to compile all required documentation is 4-6 months, an average EIA review process last 4-6 months). Lack of complete transposition,

---

[7] Legislative requirements for the information to be incorporated in the Development Consent, and the Monitoring Measures

[8] Annual Implementation Report Energy Community Secretariat 1 November 2022

[9] Annual Implementation Report Energy Community Secretariat 1 November 2022

[10] Contracting Parties may decide, on a case-by-case basis if so, provided under national law, not to apply this Directive to projects, or parts of projects, having defence as their sole purpose, or to projects having the response to civil emergencies as their sole purpose, if they deem that such application would have an adverse effect on those purposes

[11] Shadow Report for Chapter 27: "Progress on Hold, "available at: https://www.eeas.europa.eu/sites/default/files/documents/2023/Izvjestaj-iz-sjenke_MNE.pdf

proper implementation and deficiency of institutional capacity and inter institutional cooperation can result in a shortage of sustainable projects and jeopardize investments. Consequently, the CPs must intensify their efforts to achieve full alignment and effective implementation of EIA Directive.

1.2 Project definition overview

"Project" means: the execution of construction works or of other installations or schemes, other interventions in the natural surroundings and landscape including those involving the extraction of mineral resource."[12]

In all CPs, the definition of "Project" in the EIA legislation is aligned with EIA Directive, although in AL, XK* and MD the definition of "Project" is the same as the definition of "Project" in the EIA Directive while in the other CPs the definitions differ. For instance, the EIA Law of **Georgia** defines a "Project" as construction, production, and installation works, and any other activities, including the extraction/processing of mineral resources, which affect the environment, the EIA Law of **Montenegro** defines the "Project" as the construction, reconstruction, installation, removal and dismantling of buildings, plants or systems, rehabilitation, other activities in nature and the natural environment and exploitation of mineral resources. In **North Macedonia,** a "Project" is defined as a development document that analyses and defines the final solutions for using natural and created values, including exploitation of mineral resources and the construction of buildings and installations, as well as implementation of other activities with an impact on the environment and people's health. In **Serbia,** EIA Law defines a "Project" as the execution of construction works, installation of installations, plants and equipment, their reconstruction, removal and/or change of technology, work process technology, raw materials, raw materials, energy products and waste as well as other interventions in nature and natural environment, including works involving the exploitation of mineral resources.

Basically, when determining the definition and therefore the scope of individual project categories, it has to be taken in consideration the overall objective of the EIA Directive, which is to ensure protection of the environment and the quality of life. Therefore, it is recommended to apply a wider definition to the term "Project" in the national EIA legislation accordingly to the wording of the EIA Directive which indicates that it has a wide scope and broad purpose[13]

This approach is consistent with the jurisprudence of the Court of Justice (the only source of definitive interpretation of European Union law) which provides a broad interpretation of the concept of "project".

[12] *Article 1 (2) (a) of EIA Directive*

[13] *EU (2015) Interpretation of definitions of project categories of annex I and II of the EIA Directive. https:///C:/Users/mmiletic/Downloads/interpretation%20of%20definitions%20of%20project%20categories-KH0215353ENN%20(1).pdf*

1.3 Specifics for projects listed in Annex I and Annex II

"For projects listed in Annex I of EIA Directive EIA assessment is mandatory. For projects listed in Annex II, Contracting Parties determine whether the project shall be made subject to EIA. Contracting Parties shall make that determination through i) a case-by-case examination or ii) thresholds or criteria set by the Contracting Parties"[14].

"Where a case-by-case examination is carried out or thresholds or criteria are set for the purpose of paragraph 2, the relevant selection criteria set out in Annex III shall be taken into account. Contracting Parties may set thresholds or criteria to determine when projects need not undergo either the determination under paragraphs 4 and 5 or an environmental impact assessment, and/or thresholds or criteria to determine when projects shall in any case be made subject to an environmental impact assessment without undergoing a determination set out under paragraphs 4 and 5."[15]

All CPs included annexes (Annex I and Annex II) with listed projects in the EIA secondary legislation. According to the EIA legislation of CPs, EIA is obligatory for energy projects listed in Annex I. For the projects listed in Annex II, the procedure to determine if the project shall be made subject to EIA (screening) must be applied. The determination of whether an EIA is required for a particular project may be carried out through a case-by-case examination or by setting thresholds and/or criteria. CPs are applied both approaches.

In **North Macedonia,** project for solar and wind (except for photovoltaic placed on roof), with power up to 200 MW and HPPs up to 10 MW are subject to the screening procedure. If the project is not subject to EIA, the investor needs to prepare an Elaborate for Environmental Protection, subject to approval by ministry responsible for environmental protection.

For solar PV projects, the thresholds (in MW) are established in **Georgia** (2 MW) and **Moldova** (5 MW)). Projects above the set threshold are subject to screening. In this way, the CPs have fulfilled their obligation under Article 4(3) of the EIA Directive. In **Kosovo*,** the installation of photovoltaic solar panels on the roof, for electricity generation for self-consumption with an installed capacity of up to 7 kW is not subject to screening. In **Moldova** also the small projects, mostly photovoltaics, with a certain kW limit are not subject to EIA procedure including screening. In most CPs (AL, XK*, ME, MD, UA) there are no set thresholds for determining if wind power plants should be subject to EIA, i.e. meaning that wind power plants are subject to case-by- case determination for the need for an EIA. In **Georgia** (2 MW) and **Serbia** (10 MW), the screening approach based on thresholds and/or criteria is applied. Projects below the listed threshold are not subject to screening.

In **Albania and Kosovo*,** all HPPs are subject to screening. In **Bosnia and Herzegovina**, in the entity Federation of Bosnia and Herzegovina, all HPPs are subject to EIA. In in the entity Republika Srpska, HPPs with a capacity of more than 5 MW undergo a mandatory EIA. All other HPPs are subject to case-by-case assessment. In **Georgia**, HPPs from 2 MW to 5 MW are exempted from a mandatory EIA and are subject to screening. In **Montenegro**, HPPs with a capacity of more than 1 MW capacity are subject to screening. In **Serbia**, HPPs with more

[14] *Article 4 (2) of EIA Directive*

[15] *Article 3 (4) of EIA Directive*

than 2 MW are subject to screening. However, there is a lack of EIA screening of small HPPs (less than 2 MW) located outside the protected area. As the only criterion defined by EIA legislation, the size of HPP results in problems in EIA implementation in **Serbia** and **North Macedonia**. In **Ukraine**, all hydropower projects are subject to mandatory EIA.

Thresholds established by the CPs relating to the renewable energy projects concern only the size of the project. However, the planned electricity generation capacity of the project does not suffice to decide whether an EIA would be needed. While establishing the legislative thresholds concerning renewable energy projects developments, CPs must consider the characteristics and location of the Project and the types and nature of Project's potential impact (the main categories of selection criteria listed in Annex III to the EIA Directive).[16]

CPs cannot consider projects falling below any "small" hydropower threshold as having a blanket exemption from the obligation to carry out EIA or to screen the potential impacts as a minimum. No matter what threshold they applied, the obligation to screen the potential impact of hydropower projects cannot be circumvented. Projects must be screened against all the relevant criteria listed under Annex III of the EIA Directive, regardless of the plant's capacity. When it comes to capacity, it is also highly important that planned projects on the same river and/or water basin are not assessed in isolation but their capacities as well as their environmental impacts shall be scrutinized in a cumulative manner.[17]

1.3.1 Repowering

"Repowering" is *renewing power plants that produce renewable energy, including the full or partial replacement of installations or operation systems and equipment for the purposes of replacing capacity or increasing the efficiency or capacity of the installation. Contracting Parties shall facilitate the repowering of existing renewable energy plants by ensuring a simplified and swift permit-granting process. The length of that process shall not exceed one year*.[18]

The EIA legislation of the majority of CPs, does not provide for repowering definition and simplification of repowering procedures. **Bosnia and Herzegovina** and **Georgia** are the exemption, where the repowering project is defined and is the subject to the screening procedure. In **Bosnia and Herzegovina**, in the entity Republika Srpska the project repowering is defined as projects whose production growth, energy use, water use, space use, emissions or waste production exceeds the 25% threshold in the past 10 years of the originally established values in determining whether the project is subject to EIA procedure. In accordance with EIA Code of **Georgia**, replacing the production technology provided for by an environmental decision with a different technology, and/or modifying the operational conditions, including the increase in production capacity, shall be considered an activity

[16] *POLICY GUIDELINES by the Energy Community Secretariat on small hydropower projects in the Energy Community PG 02/2020 / 17 September 2020*

[17] *POLICY GUIDELINES by the Energy Community Secretariat on small hydropower projects in the Energy Community PG 02/2020 / 17 September 2020*

[18] *DIRECTIVE (EU) 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources*

subject to a screening procedure.

The repowering can be further elaborated in EIA legislation of the CPs under Annex II 13 (a) of the EIA Directive on changes or extensions to existing projects with specific thresholds and are therefore subject or not to the screening procedure. Thereby, must be considered that EIAs for the repowering of renewable energy projects already subjected to EIA, should be limited to the potential impact resulting from the change or extension compared to the original project and requirement to accelerate the environmental impact assessment procedure for repowering.[19]

In the European Union, certain Member States have already introduced legislative or procedural changes which simplify the framework for repowering including restriction requirements for repowering projects. A good example is Portugal, Spain and Germany. In Portugal, a new Decree-Law no. 11/2023 (Simplex Ambiental)[20], in specified characteristics of repowering eliminates in advance the need for mandatory EIA for wind farms. In Germany, legislation specifies that for the repowering of wind installations, only changes compared to the status quo have to be assessed. Public hearings are only required if the project developer requests it.[21] The Spanish legislation sets significant restrictions on the ability of repowered plants to benefit from streamlined administrative process: it excludes hybridisation and the use of storage systems (for which only the update of access and connection permits is simplified) and increases in capacity more than 5%.[22] This example can be recommended also to CPs both for project developers and for public concern. A capacity threshold of 5% as shown in the good practice Spanish example could be followed.

Good practice for wind farms and repowering in Portugal
The need for mandatory EIA for new wind farms and wind farms repowering has been eliminated (maintaining the possibility of case by case examination) by Decree-Law no. 11/2023 when: i) the wind farms have less than 20 towers or the distance to other similar farms is greater than 2 km, provided that the total number of towers is less than 20 and ii) repowering of pre-existing wind farms, provided that certain conditions are met (final result of existing project involves total of 20 or more towers or the distance from another similar wind farm is less than 2 kilometres, when, as a whole, they have 20 towers; repowering of existing wind farms outside the area of the farm, when the final result of the existing project, alone or together with previous repowering, involves a total of 30 towers.)

[19] *Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652*

[20] *https://diariodarepublica.pt/dr/en/detail/decree-law/11-2023-207272800*

[21] *European Commission, Directorate-General for Energy, Tallat-Kelpšaitė, J., Brückmann, R., Banasiak, J. et al., Technical support for RES policy development and implementation – simplification of permission and administrative procedures for RES installations (RES Simplify) – Final report, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2833/894296*

[22] *https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2023/03/repowering-renewable-energy-assets-in-spain.pdf*

Good practice for wind farms and repowering in Germany
In Germany, June 2021, the Federal Parliament has passed legislation that for permitting procedures for repowering of wind only changes compared to the status quo should be assessed rather than the effects of an assumed green-field installation, as was the case so far. Also, for an environmental assessment e.g. with a view to the protection of species the responsible authorities must take prior restrictions of the old installation into account as baseline. Thus, if a repowering project leads to improvements compared to the status quo this must be acknowledged. Furthermore, compensation measures for negative effects on landscape have to take into account compensation measures which already have been provided for the previous installation. Besides this, the new legislation only requires a public hearing in case the project developer requests this (Solarthemen, 2021). However, it should be stated that such activities for stakeholder involvement are considered beneficial to increase public acceptance.

1.3.1 Project splitting

"Contracting Parties shall adopt all measures necessary to ensure that, before development consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects on the environment."[23]

The purpose of the EIA Directive cannot be circumvented by the splitting of projects. Where several projects, taken together, may have significant effects on the environment within the meaning of Article 2(1) of the EIA Directive, their environmental impact should be assessed.[24]

In EU, the most widely used term is "salami-slicing" defined the practice of dividing projects into two or more separate entities so that each element does not require an EIA and the project as a whole is not assessed. In its case law, the Court of Justice of the European Union (CJEU) advocates a broad interpretation of the EIA Directive and has stressed that the Directive seeks "an overall assessment of the environmental impact of projects or of their modification"[25].

For example, in terms of length, the Court found that a long-distance project cannot be split up into successive shorter sections in order to exclude both the project as a whole and the sections resulting from that division from the requirements of the Directive. If that were possible, the effectiveness of the Directive could be seriously compromised since the authorities concerned would need only to split up a long-distance project into successive shorter sections in order to exclude it from the requirements of the Directive[26].

The Court has also stressed that, with a view to deciding whether an environmental

[23] *Article 2(1) of EIA Directive*

[24] *European Commission, Directorate-General for Environment, Interpretation of definitions of project categories of annex I and II of the EIA Directive, Publications Office, 2015, https://data.europa.eu/doi/10.2779/5854181*

[25] *Case C-2/07, Abraham and Others – Liège airport, paragraph 42.*

[26] *Case C-227/01, Commission v Spain, paragraph 53*

assessment must be carried out, it can be necessary to take into account of the cumulative effect of projects in order to avoid a circumvention of the objective of the European Union legislation by the splitting of projects which, taken together, are likely to have significant effects on the environment. It is for the national authorities to examine, in the light of that case law, whether and to what extent the effects on the environment of the projects at stake and of the projects carried out earlier[27].

In EU Member States, good practices to avoid project splitting are not unique, different solutions are implemented from considering all the associated developments as part of the project (the Netherlands), the consideration of projects together if they are connected technologically (Poland, Denmark), to assessment of the scope of the project in the screening phase (Sweden)[28]. Case-law indicates that the associated/ancillary activities can be included into project description either because they fall under the scope of the Directive (Annex I or II) or because they can be considered as an integral part of the main infrastructure works using the "centre of gravity test". This test checks whether associated works are central or peripheral to main project.[29]

The screening and the EIA should consider the impact of the whole project, during the construction, operational and, where relevant, demolition phases. CPs should adopt measures to ensure that renewable energy projects likely to have significant effects on the environment are subject to an assessment. Case-by-case consultation proved to be more effective in preventing project splitting than threshold, a scoping phase is useful to detect splitting[30]. The CP's national EIA regulations should include a prohibition on project splitting and could introduce additional criteria are recommended such as considering the access to the site and to transmission lines (i.e. a wind farm is independent if it has its own access and power line) [31], assess the scope of the project in the screening phase, consider projects together if they are connected with common facilities and/or technologically (serve for a comparable purpose).

1.4 Screening

„For projects listed in Annex II, Contracting Parties shall determine whether the project shall be made subject to EIA. Contracting Parties shall make that determination through: (a) a case-by-case examination; or (b) thresholds or criteria set by the Contracting Party. Contracting Parties may decide

---

[27] Case C-244/12, Salzburger Flughafen, paragraph 37. In this case, the projects at stake were related to the construction of ancillary buildings for an airport (i.e. warehouses, extension of vehicle parking areas and aircraft standing areas) that had to be considered with other projects approved earlier (i.e. construction of an additional terminal)

[28] Álvaro Enríquez-de-Salamanca (2016) Project splitting in environmental impact assessment, Impact Assessment and Project Appraisal, 34:2, 152-159, DOI: 10.1080/14615517.2016.1159425 To link to this article: https://doi.org/10.1080/14615517.2016.1159425

[29] Guidance on associated and ancillary works has been published by the European Commission in an Interpretation Line available at: http://ec.europa.eu/environment/eia/pdf/Note%20-%20Interpretation%20of%20Directive%2085-337-EEC.pdf)

[30] Álvaro Enríquez-de-Salamanca (2016) Project splitting in environmental impact assessment, Impact. Assessment and Project Appraisal, 34:2, 152-159, DOI: 10.1080/14615517.2016.1159425

[31] Judgment of the Spanish National Audience of 12 January 2005. Case 780/2001.

to apply both procedures referred to in points (a) and (b)." [32]

"Contracting Parties shall ensure that the competent authority makes its determination as soon as possible and within a period of time not exceeding 90 days from the date on which the developer has submitted all the information required. In exceptional cases, for instance relating to the nature, complexity, location or size of the project, the competent authority may extend that deadline to make its determination; in that event, the competent authority shall inform the developer in writing of the reasons justifying the extension and of the date when its determination is expected."[33]

CPs implement the thresholds approach (BiH, GE, ME, RS, UA) or a combination of thresholds and case-by-case evaluation (AL, XK*, MD). **North Macedonia** uses both.

In **Albania,** the screening criteria remain unaligned with Annex III to the EIA Directive. The risk of a major accident/disaster due to climate change, the risks to human health, the cumulation of impacts with the impacts of other existing and/or authorised projects, and the possibility of effectively reducing the impacts is missing as screening criteria.

In **Bosnia and Herzegovina**, in the entity Federation of Bosnia and Herzegovina, the revised criteria for energy installations, which introduce a threshold of 10 MW for all energy projects and 4 units for wind power projects, is not compliant with the EIA Directive. The criteria do not adequately address the fundamental obligation to assess significant effects, which consider not only the size but also the nature and location of the projects.

In **Moldova,** small wind power projects are not screened against all relevant selection criteria with regard to the characteristics of the project, the location of the project, and the type and characteristics of the potential impacts, as determined in Annex III of the EIA Directive.[34]

To apply for Screening, the project developer usually submits to the competent authority the application and information on the proposed project, its proposed location, and an account of potential effects on the environment. Based on the information provided by the project developer, the competent authority decides on whether EIA is required or not (makes Screening decision).

Following the application, the EIA legislation of all CPs except Georgia foresees that competent authority consults with other authorities and public concerned, though this is not mandatory under the EIA Directive. The value of wide participation in the screening process, in avoiding later dispute and delay in the decision-making process, is recognised by CPs. Furthermore, the EIA legislation of CPs defines timeframe in days for receiving opinions for consulted authorities (AL 10 working days, BiH 30 calendar days, XK* not shorter than 20 working days, MD 50 working days, ME 5 working days, MK 30 calendar days, RS 15 calendar days). The consultations with the public concerned in the screening procedures is also envisaged by EIA legislation in the CPs, including the definition of time limit for submitting public comments prior to making the screening decision (AL 20 calendar days, BiH calendar 15 days, GE 7 days, XK* working 30 days, MD working 10 days, ME working 5 days, MK calendar

[32] *Article 4 (2) of EIA Directive*

[33] *Article 4(6) of EIA Directive*

[34] *Annual Implementation Report Energy Community Secretariat 1 November 2022*

30 days, RS calendar 20 days).

While deciding whether EIA is needed or not, the competent authorities consider opinions submitted by authorities and public concerned within legally defined period (5-30 days depending on CPs EIA legislation), except in **Ukraine** where a deadline is not defined by EIA legislation.

The Screening decision, whether positive or negative, should be taken within 90 days (extensions are possible) which is in line with EIA Directive. For example, in **Albania** the maximum timeframe for the screening procedure is 45 calendar days from the date of giving the complete application. The competent authority may extend the timeframe for the issuing Screening Decision in special cases, cases related to the nature, complexity of the project, and location or size of the project by up to 1 month and inform the developer of the reasons for the extension of the timeframe. In **Bosnia and Herzegovina**, in the entity Federation of Bosna and Herzegovina, deadline for the Screening Decision is 60 days from the submission of the application. In **Bosnia and Herzegovina**, in the entity Republika Srpska the Screening Decision should be provided within 60 days of receiving a complete request. In **Georgia**, not earlier than 10 days and not later than 15 days after a Screening Application has been registered, the competent authority decides whether the planned project is subject to an EIA. In **Kosovo*** the deadline for the Screening Decision cannot be longer than 60 days from the receipt of the full application. If the Project is particularly complex or located in a difficult area, the Competent Authority may extend this deadline. and provide the Developer with written explanation. Regardless of any extensions, the deadline for the Screening decision cannot be longer than 90 days from the receipt of the full application. The given timeline for determination, including extension, does not exceed 90 days. In **Montenegro**, the competent authority is obliged to, within 4 working days from the date of expiry of the deadline for submitting the opinion, decide on the need for an EIA of the project, considering received opinions from the interested authorities, organizations, and the public concerned. In **Moldova**, the Screening decision is issued within 20 days starting from the expiry date prescribed for receiving the opinions of the local public administration and the public concerned. concerned. In exceptional cases, such as the ones related to the nature, complexity, location and size of the planned activity, the competent authority may extend the term provided for the decision, informing the project developer in writing about the reasons for the extension and the expected date for issuing the decision regarding the preliminary assessment. In **North Macedonia**, the competent authority makes Screening decision within 30 days of submission of the notification. In **Serbia**, the Screening decision should be provided within 30 days of receiving a complete request.

Finally, it is common rule included in the EIA legislations of CPs that Screening decision, along with the main reasons and elements on which it is based is made available to public, mostly through publishing on the official website of competent authorities or environmental portal, a necessary precondition to ensure transparency in the EIA and access to justice.

As introduced earlier, an EIA is always required for projects included in Annex I, whereas projects listed in Annex II (including installations for hydroelectric energy production, windfarms and construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km), shall be made subject to an assessment where the CP

determines, trough thresholds and/or criteria, a case-by-case examination or by a combination, that project is likely to have significant effects on the environment.

Within this framework, with purpose to ensure the accelerate screening procedure with focus on renewable energy projects it is recommend to : i) limit duration of procedure to a maximum of 45 days; ii), enable the electronic communication automatic system of providing opinion, access to relevant opinions data and documents in consultations process with the authorities concerned, in order to streamline the gathering of the opinions; iii) prepare specific screening template for energy project (Annex II) which will include for example the overlay of spatial biodiversity data with the project site and its area of influence; v) establish checkup system through checkup lists to support the EIA participants to apply criteria in case-by case screening or CPs legislator when setting thresholds/criteria in national legislation and vi) built expertise in competent authorities of CPs (e.g. by hiring of 1-2 experts in the field of renewable technology and environmental legislation).

The additional recommendations related to the improvement of the consultation process within screening procedure is provided in Chapter „Access to information and consultation in EIA" with recommendations for consultation with authorities and public concerned during the EIA.

1.5 Scoping

„Where requested by the developer, the competent authority, taking into account the information provided by the developer in particular on the specific characteristics of the project, including its location and technical capacity, and its likely impact on the environment, shall issue an opinion on the scope and level of detail of the information to be included by the developer in the environmental impact assessment report. The competent authority shall consult the authorities before it gives its opinion. Contracting Parties may also require the competent authorities to give an opinion as referred to in the first subparagraph, irrespective of whether the developer so requests."[35]

Determining the scope of the EIA report is mandatory in **Albania, Bosnia and Herzegovina, Georgia, Kosovo*,** in **North Macedonia** and **Ukraine** for projects for which the EIA report is being prepared, and in **Moldova** for projects from Annex I and Annex II**.** In **Montenegro** and **Serbia,** for projects included in Annex I, the obligation depends on the project.

From the perceptive of acceleration of renewable energy projects development, scoping improves the quality of the environmental impact assessment process. Detailed and transparent criteria for environmental assessments communicated to the project developer at the start of the process shortness and accelerates procedures avoiding the additional communication between the competent authorities and project developer as well as supplementary studies or monitoring reports (including seasonal reports) at later stage of procedure. Carrying out of scoping by default is recommended for RES projects where EIA is required.

Additionally, it is recommended to define a comprehensive and precise scoping opinion

[35] *Article 5(2) of EIA Directive*

established early on EIA procedure. Such scoping opinion empowers the developer to assemble the competent expert team for crafting the report effectively identifying the environmental factors on which the project is likely to have a significant impact, to estimate, already pending consultations with public and authorities, the costs of preparation of EIA report and assessment and plan accordingly.

Consultations with authorities concerned during scoping ensure that stakeholders address their considerations in the early phase of the procedure. For instance, in **Kosovo*,** the EIA Commission consults the institutions that may be affected by the project and may also ask the host institutions for their opinion. The opinion given by the institutions that may be influenced by the project is an integral part of the EIA Report. In **Albania**, during the scoping process, the competent authorities consult ministries, and other institutions responsible for permission, authorization, licensing of projects, or for handling natural and civil emergencies, depending on the type of project. Received opinions are considered while deciding on the scope of the EIA Report. Institutional interaction since March 1, 2020, is exclusively conducted through the electronic system for EIA, which enables direct opinion retrieval and direct coordination with other public institutions, within clear deadlines and without delay. In **Bosnia and Herzegovina,** the competent authority must inform authorities and organizations concerned by means of sending the request with all supplements in written form and thereafter consider all opinions obtained from interested authorities and organizations when deciding on scoping. For cases of constructing energy facilities, concessions will be granted at the level of Bosnia and Herzegovina in situations where the concession asset is located at the interstate border, as well as when the concession asset extends across the territory of the Federation of Bosnia and Herzegovina and the Republic of Srpska. Upon request from the project proponent, the competent authority issues an opinion on the scope and detail of the EIA Report that the project proponent will prepare. All relevant authorities and the public, who will be affected by the decision, are consulted, and the EIA Report is made available to them. Public consultations last for a minimum of 30 days. The public and all relevant authorities are promptly informed, and the decision is made publicly available.

In **Moldova,** preliminary the competent authority sends a copy of the application through a one-stop-shop, to the interested central and local public administration authorities for consideration and submission of comments and suggestions on the planned activity and, if necessary, on the information to be included in the environmental impact assessment program (scoping). A summary of the information obtained in consulting the interested central and local public administration authorities is included in the decision. In **North Macedonia,** the competent authority consults the project developer and the municipality in whose territory the project should be implemented, as well as with other relevant bodies of the state administration and institutions.

It is recommended that CPs enable the institutional consultations within single electronic system, ensuring electronic exchange of documentation, requests and opinions, access to various environmental and geographical data needed for proper opinion as well as other relevant opinions, restrictions, prohibitions issued by authorities and expert institutions.

Good practice how scoping accelerates renewables project in EU[36]
In a number of EU Member States, scoping is mandatory (Bulgaria, Czech Republic, Denmark, Estonia, Finland, Luxembourg, Romania). Practical experience shows that clarifying the scope and level of detail of the environmental information at an early stage avoids multiple exchanges and new requests between the developer and the competent authorities at a later stage and speeds up the project approval. CP should cap the length of scoping procedure (the issuance of a scoping opinion by the competent authority, for e.g. not more than one month).

1.6 EIA Report

1.6.1 Content of the EIA Report

"Where an environmental impact assessment is required, the developer shall prepare and submit an environmental impact assessment report. The information to be provided by developer shall include at least: (a) a description of the project comprising information on the site, design, size and other relevant features of the project; (b) a description of the likely significant effects of the project on the environment; (c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment; (d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment; (e) a non-technical summary of the information referred to in points (a) to (d); and (f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected."[37]

"In order to ensure the completeness and quality of the environmental impact assessment report.....(c) where necessary, the competent authority shall seek from the developer supplementary information, in accordance with Annex IV, which is directly relevant to reaching the reasoned conclusion on the significant effects of the project on the environment."[38]

"Contracting Parties shall, if necessary, ensure that any authorities holding relevant information, with particular reference to Article 3, make this information available to the developer."[39]

The project developer, or the experts on his behalf, prepares the EIA Report. In certain CPs (AL, BiH, GE, XK*, MD, ME,), the mandatory content of the EIA Report is aligned with the EIA Directive. This is not the case in **North Macedonia, Serbia** and in **Ukraine** due to Martial Law exemptions, where the mandatory content of the EIA Report does not reflect the amendments of Directive 2014/52/EU.
The competent authority, in all CPs, is entitled to seek supplementary information from the

[36] *COMMISSION RECOMMENDATION. of 18.5.2022. on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements*

[37] *Article 5 (1) of EIA Directive*

[38] *Article 5 (3) of EIA Directive*

[39] *Article 5 (4) of EIA Directive*

Developer to reach a reasoned conclusion on the project's significant environmental effects. However, in many cases the procedure is not clearly defined and could take an unforeseeable delay in the process. The amendments to EIA legislation, related to the procedure and timeline for supplementary information, are needed to the EIA laws of **Bosnia and Herzegovina**, **Georgia, Moldova, Serbia, and Ukraine**. It is recommended to legally define maximum deadline for submission of supplementary information instead of leaving the discretionary right to the competent authority. The procedure and timeline for providing additional data (for example sessional monitoring data etc.) must be defined in advance in the scoping phase.

Furthermore, to strengthen the availability of data necessary for the EIA report, authorities holding relevant information must make it available to the project developer. This means that the developer should be able to easily obtain relevant information from the different relevant authorities and to obtain guidance to that effect from the competent authority.[40] Some typical sources of information used for collecting baseline data are national/regional databases of previous EIA, EU and international databases, local level/community experts and data collected under other EU legislation (especially the SEA Directive and the INSPIRE Directive). The SEA Directive concerns the SEA, which is carried out on certain plans and programmes. In many cases, an SEA of a relevant plan or programme underpinning a proposed project will have been carried out prior to the EIA. Opportunities for synergy the SEA and EIA are similar procedures and while the scope of the two assessments usually differs, very often much of the work carried out under the SEA can be built upon for the EIA. Alternatives identified during the SEA may be relevant for the EIA, some of the data gathered under the SEA may be used to form the baseline of the EIA. It is recommended while carrying out the EIA to also consult the SEA report done for any relevant plans or programmes and reflect the measure already defined, with a view of avoiding the duplication of work.

With a view to avoiding duplication of assessments, the project developers must take into account the available results of other relevant assessments under relevant EU Directives (Birds Directive[41] and Habitats Directive[42], Water Framework Directive[43], Waste Framework Directive[44], Industrial Emissions Directive,[45] Seveso Directive[46], or national legislation (like laws govern nature protection, water management etc.)

Additionally, it is recommended that the developers consider the SEA report prepared for the area where the project is located to anticipate the activities to be included in the assessment.

---

[40] Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)

[41] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

[42] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna

[43] Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy

[44] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives

[45] Directive 2010/75/EU of the European Parliament and the Council on industrial emissions

[46] Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances

The anticipated activities, which might have the potential influence in the environment, should be well know and understood by the decision-makers, who also should have comprehensive and accurate information on possible risks, imposed on the environment and human health by any such activity.

1.6.2 Quality of the EIA report

"In order to ensure the completeness and quality of the environmental impact assessment report: (a) the developer shall ensure that the environmental impact assessment report is prepared by competent experts..."[47]

In all CPs, experts involved in the preparation of EIA reports must possess relevant knowledge and expertise to be qualified in accordance with national legislation. EIA certification of experts is requirement in **Albania, Bosna and Herzegovina, Kosovo*** and **North Macedonia.** The rules, procedures, criteria for providing and the validity of the expert's certificate for EIA are established in the secondary legislation.

In **Albania,** to become a certified expert, person must have a university degree in environmental or agri-environmental fields from the Polytechnic University of Tirana, the Agricultural University of Tirana, or non-public higher education institutions accredited for these fields. Alternatively, one can have a degree from foreign higher education institutions offering these courses or in engineering biology, chemistry, geology, hydrology, economics, or geography. Natural persons who wish to become certified experts must take examinations at the Polytechnic University of Tirana or the Agricultural University of Tirana. The ministry responsible for environment issues the certificate. The certificate for natural persons is declared invalid by the order of the minister when it is proven that the expert has manipulated the information presented in the documents relating to EIA. The order of declaring the certificate invalid is published on the ministry's website, as well as the list of certified experts (natural persons). There is no information available on the duration of the certificate's validity. Currently, there are 590 certified experts on the list.

In **Bosnia and Herzegovina**, in the entity Federation of Bosnia and Herzegovina, the EIA Report must be prepared by certified professionals who form a mandatory group of qualified experts based on the project requirements. The certificates are awarded once a year, based on a public call published by the Federal Ministry of Environment and Tourism, the Official Gazette and certain newspapers. Applicants must meet special and general conditions, which briefly refer to the seat of activity, registration of activities according to. In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina activity classification, and meeting the work experience criteria for at least one employed expert of 5 years. The selection and awarding of certificates are carried out by an expert committee that checks all the required conditions, and which is appointed by the Federal Ministry of Environment and Tourism for a period of 5 years. The certificate is awarded for a period of five years, but it can be further extended by an additional five years at request. In Bosnia and Herzegovina, in the entity Republika Srpska, EIA can be carried out by a certified expert (natural person) or

[47] *Article 5 (3) (a) of EIA Directive*

certified company that is appointed by the competent ministry for environmental protection. The ministry publishes certification conditions on its website, where the exam must be prior passed to obtaining the certificate. A legal entity submits a request to Ministry of Spatial Planning, Construction and Ecology to issue a decision on fulfilment of the conditions prescribed by the respective regulation, which include a passed exam, educational requirements, and a sufficient working experience of at least 3 years in the field. Request for a certificate, with attached documents proving the conditions fulfilled, is considered by the commission appointed by the minister. Based on commission's proposal, the minister issues a certificate. The issued certificates are recorded in the competent ministry and published in the Official Gazette of the Republika Srpska.

In **Kosovo***, a natural entity can apply for a license provided they have a university degree in technical or natural science, professional and research experience in environmental protection, and at least three years of experience working independently or in collaboration with others on drafting EIA Reports or conducting studies related to environmental assessments in compliance with environmental legislation. To obtain a license, a legal entity must fulfil certain criteria. They must be a registered enterprise or institution authorized by the competent authority to carry out business activities. Additionally, they should have an interdisciplinary team of at least three licensed professionals who will be responsible for drafting the EIA Report. To apply for the license, the legal entity will need to provide a certificate of registration of business activity and evidence of at least 3 licensed individuals for drafting the EIA Report. The minister may revoke the license based on the recommendation of the commission if the licensed person has provided inaccurate information and documents in the EIA report, the EIA report does not meet the legal requirements and in it not aligned with methodology for EIA reports and the legal person has received three written warnings.

In **North Macedonia**, in preparing the EIA Report, the project developer is obliged to engage at least one person from the list of recognized EIA experts, who signs off on the EIA Report and confirms its quality. Following the legal provisions, the EIA Report can only be prepared by certified experts who have been incorporated into the list of recognized EIA experts. Under the responsibility of the ministry responsible for environmental protection, a committee that certifies the experts is installed. An expert is a natural person who passes the professional exam. A professional exam can be taken by a person who is a citizen of the Republic of North Macedonia with higher education in a relevant field and has at least five years of work experience. The professional exam consists of two parts: theoretical knowledge and practical examples. The expert can lose the certificate in the case of two negative evaluations of the EIA Report, the serious law violations during the implementation of an EIA procedure and in case when court decision confirms incorrect presentation of data. The minister decides to exclude the expert from the list of experts. There are no options for license renewal or training programmes.

The qualification requirements are determined in EIA legislation of **Albania**, **Georgia** (for experts preparing EIA Reports), **Kosovo*, Montenegro and Moldova.** In addition, in **Albania, Moldova** and Ukraine**,** experts producing incorrect or false EIA reports face criminal liability according to the EIA Law, a in **Kosovo*** they will be fined for minor offence sanctions.

It is recommended for all CPs to introduce i) training programs or courses for certified experts

to update and verify their knowledge (e.g., periodic passing of the exam) and ii) safeguard mechanisms such as revocation of license in case of false or incorrect data information.

The obligation for the expert to sign the EIA Report also contributes to its quality. The reports must be signed by the experts that have participated in its preparation in **Albania, Bosnia and Herzegovina, Georgia, Moldova, North Macedonia, Serbia,** and **Ukraine**.

It is recommended that all CPs establish an online publicly available EIA experts register to include qualifications, biographies, and reasons for experts' engagement in the final EIA Report so the public and authorities concerned can check and examine their competence and independence.

1.6.3 EIA Report review

"In order to ensure the completeness and quality of the environmental impact assessment report: (a) the developer shall ensure that the environmental impact assessment report is prepared by competent experts; (b) the competent authority shall ensure that it has, or has access as necessary to, sufficient expertise to examine the environmental impact assessment report; and (c) where necessary, the competent authority shall seek from the developer supplementary information, in accordance with Annex IV, which is directly relevant to reaching the reasoned conclusion on the significant effects of the project on the environment."[48]

"Contracting Parties shall, if necessary, ensure that any authorities holding relevant information, make this information available to the developer."[49]

Competent authorities must ensure expertise to assess EIA Report. Where expertise is not available in-house, research institutes and professional bodies may be asked to undertake reviews (external expertise).

Obligation for engagement of expert commission capable to review the EIA Report exists in **Bosnia and Herzegovina** in the entity Federation of Bosnia and Herzegovina, external; in Bosnia and Herzegovina in the entity Republika Srpska, independent auditors appointed by Ministry of Spatial Planning, Construction and Ecology), **Georgia** (in-house and external), **Kosovo*** (in-house and external), **Moldova** (external), **Serbia** (external). In **North Macedonia**, the competent ministry can prepare a review report on the EIA Report or appoint the certified experts. In **Albania,** EIA legislation does not provide establishment or participation of the EIA Review Commission.

A good example of the examination system for the EIA Report is **Montenegro** where the competent authority establishes the EIA Report Review Commission. This commission is formed among its employees and other experts who have completed the VII-1 level of the national qualification framework and at least 4 years of work experience in the profession for specific segments of the environment. The decision on the establishment of the Review Commission determines its composition.

In **Kosovo*, Georgia, Moldova and North Macedonia** the EIA legislation allows the competent authority to engage external experts for EIA review. The external experts must

[48] *Article of 5 (3) (b) and (c)*

[49] *Article of 5 (4)*

have proven expertise in EIA and cannot be involved in drafting an EIA Report under their review. Furthermore, in **Kosovo*,** representatives of civil society may participate in the Commission's meetings as an observer. In **North Macedonia** the EIA Law provides for external expert's assessment (appointed by competent ministry) to enhance the quality of EIA reports. However, the procedure for this appointment is not determined (e.g. for which projects, terms of reference, etc.).

The recommendation for CPs is to hire an expert(s) with extensive experience and knowledge that covers various aspects and topics including the renewable energy sources and other areas like biodiversity, hydrology and agricultural. In addition, to ensure the quality, impartiality and transparency in the reviewing of EIA Report the clear procedures for engaging external experts must be developed. The procedure for this appointment may be determined by secondary legislation defining for instance, the type of projects where experts may be engaged, template for terms of reference for expert's assignment etc. In addition, it is important to provide for limitation to the appointment due to conflict of interest, meaning the same experts that were involved in EIA Report drafting cannot be engaged. Furthermore, the recommendation is to ensure discretion on the part of the experts. It is also recommended to sign an agreement on partnership and cooperation with scientific institutions that could provide the necessary expertise.

Several options related to establishment and composition of EIA review commission standardized in EU practice are available. One is establishing a review commission within the competent authority. In this case, organizing external technical support (available funds etc.) through training and knowledge transfer is recommended. Where in-house expertise is unavailable, research institutes and professional bodies may be asked to undertake reviews. Another option is to set up a dedicated independent review body, always available to provide insight into evaluating EIA Reports, established under environmental agency or other operative bodies.

Good practice of establishing review body in France: General Council of Environment and Sustainable Development (CGEDD) acting as Environmental Authority[50]
The review body is made up of nine evaluation specialists, stemming from the Ministry of the Environment directly and 6 external qualified experts. CGEDD oversees the EIA process: responsible for EIA Scoping and issues an opinion on the quality of the EIA Report.

Good practice of establishing review body in Netherlands: Netherlands Commission for Environmental Assessment (NCEA)[51]

[50] *EC, Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report*

[51] *EC, Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report*

The Commission is appointed by the minister whose exclusive role is to maintain a pool of approximately 300 experts who are then responsible for providing opinions on EIAs. During or after preparation of the EIA Report NCEA is responsible for Scoping of the EIA, interim recommendation can be submitted if requested and checks whether the EIA contains all the necessary information once drafted.

1.6.4 Authority preparedness

The competence for carrying out the procedure is divided between the ministries responsible for the environment (BiH, XK*, MK, RS, UA) or environmental agencies under supervision of ministry (AL, GE, ME MD), on the state level and local administration bodies. In **North Macedonia** energy projects are under competence of national authorities only.

The assessment of the permit-granting procedure for energy projects for each CP shows that none of the CPs have training programmes for staff related to matter. In additions, all CPs share the problems of i) low administrative and technical capacities both at state and local level; ii) lack of sufficient funding and iii) deficient inter-institutional cooperation.

In **Albania,** the institutional capacity to facilitate a streamlined process for EIA and other environmental assessments (e.g. biodiversity assessment) has to be strengthened through education training related to the complex procedures of environment and biodiversity assessment**.** The financial capacity (state budget for environment and staff salaries) must be sufficient to prevent the frequent staff turnover and recruitment of personnel without the necessary experience. In **Bosnia and Herzegovina**, the systematic training of administration staff on environmental issues in both entities and on central and local level is recommended. In **Kosovo***, the number of staff in competent authorities for EIA on the state and local level as well as environmental inspectors must be increased. To facilitate and streamline the EIA processes increasing the institutional, and professional capacities of the public authorities is needed. The inter-institutional cooperation and assistance regarding data required in the EIA procedure has to be improved. **Montenegro** must increase administrative capacities in terms of number and expertise. For instance, it is necessary to provide experts for biodiversity assessment. In **Moldova** the number of staff members dealing with EIA in the Environment Agency must be significantly increased since 8 eight staff members were working on issuing environmental permits. The continuous institutional building through workshops facilitated by experts and consultants is recommended. In **North Macedonia**, the number of staff in the EIA department within responsible ministry dealing with EIA must be increased since the EIA department currently has 8 servants, and several aspects of the EIA are not covered by experts like biodiversity assessment. In **Serbia,** 11 staff members, higher educated, partly in natural science and partly in law, are dealing with the EIA procedures. It is recommended to increase capacity both in terms of number and specific expertise. In Ukraine, 6 officials work in the EIA department. The recommendation is the additional employment of staff with the necessary knowledge and experience to perform the demanding tasks of department.

Data on the staff number and qualifications on state administration for EIA are publicly available for **Georgia** and **Moldova**. In **Georgia,** 20 staff member were working on EIA

procedures (EIA and Screening) in the Environmental Assessment Department (within competent authority, NEA), of which 5 had technical backgrounds, 10 had a background in natural sciences, and 4 in law, economics, and social sciences. In **Moldova**, 8 staff members were working on issuing environmental permits (including the Screening process). Most have a background in natural sciences (6 staff members), while 2 staff members have an experience in law, economics, and social sciences. This number of staff for all permits could be much higher, even considering the electronic one-stop shop for applications.

In all CPs, the EIA for RES project require multidisciplinary approaches and establishing a robust team within the competent authority to cover all specific areas (e.g. hydropower projects and water management, PV solar project and agricultural land, etc.). The departments should be equipped with at least one competent expert who will deal with RES projects only, considering that employment of highly specialized staff is closely related to the salary of civil servants with the training.

It is recommended to carry out a more detailed analysis of competent authorities' independence, structure, responsibilities and needs to ensure tailoring capacity building (workshops, expert missions, study visits) for each CP.

The technical and funding support can be focused on i) improving the organizational structure of competent authorities (e.g., the establishment of a multidisciplinary team within EIA departments prepared to cover all specific areas and at least one expert for RES, the establishment of advising council body for issues requested specialized knowledge); ii) developing staff skills and competencies related to specific topics (regular training programme and curriculum); iii) providing access to external capacity and access to knowledge hubs and v) improving policy and legal framework (ensure complete harmonization with EIA directive and effective implementation of EIA instruments). To enhance the quality of EIA report, it is recommended to ensure access to additional experts and established procedure of their engagement. The draft of the new **Serbian EIA Law** provides additional option to engage an external expert assessment. The EIA laws of **Georgia**, **Kosovo*** and **North Macedonia** have similar provisions but the procedure for the engagement of experts must be further developed.

1.6.5 Data information

Although the environmental information is published on the websites of ministries, statistical offices and environmental protection agencies, the central data register and interactive and user-friendly desktop portals allowing easy access to environmental information and documents, are having to be yet established in all the CPs, except for Georgia.

In **Georgia,** an electronic platform to enhance participation became operational in 2023 but its efficiency and effectiveness is yet to be assessed.

It is recommended to establish central electronic platform on regulations, environmental information, procedures and guidelines in all CPs. The platform should enable the use of data collected from other EIAs, similar environmental assessments, monitoring results, national and

local protected area, water protected area, and environmental factors. The data and geographic information must be accessible in real time to the public administrations, researchers, experts and all the citizens. The integrated approach must be applied to ensure easy and free of charge access to individual data such as air and water quality, hydrology etc. The platform should also include information from scoping which may speed up the preparation of the EIA Report. Sharing of scoping information ensures the environmental information at an early stage of the process and avoids multiple exchanges between the developer and the competent authorities.

Good practice of databases availability (Italy)[52]
Several environmental and territorial databases are available for public access via a website dedicated to the SEA/EIA procedures. The Ministry of Environment provides a catalogue of environmental data at the national and regional levels which is updated regularly. Sources include databases, web resources, documents, spatial datasets (webGIS service, Google Earth, WMS and WFS). Specific criteria are used to ensure the reliability and quality in accordance with national and EU provisions.

Good practice EIA information database (Bulgaria)[53]
The Ministry of Environment and Water and the Regional Inspectorates for Environment and Water (for SEAs/EIAs carried out in their region) have well-developed and updated information on EIA procedures on their websites. The information published covers notifications for investment proposals (planned projects), information to assess the need of an EIA/SEA, information for forthcoming public consultations on EIA/SEA reports (and the EIA report itself) or EIA/SEA consultations, EIA/SEA decisions (or refusals)), transboundary EIA/SEA procedures and public registers on EIA/SEA.

Good practice in Slovenia: Environmental Atlas Website[54]
The Slovenian Environmental Agency established the Environmental Atlas as a map-interface of Slovenia that presents data of various environmental indicators, such as water quality, flooding risk areas; climate, for instance temperatures, sunshine, and wind; land and soil usage, or seismological risk areas. The map allows users to monitor environmental and meteorological indicators in one complete overview. In addition to the current numbers, users also have access to statistics useful for analytical purposes such as means, maximum values and historical data points. The data that the Atlas displays is obtained through the spatial data distribution of the European Commission's INSPIRE Directive.

[52] *EC, Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report*

[53] *Bulgaria: Database on EIA information*

[54] *http://gis.arso.gov.si/atlasokolja/*

1.6.6 Access to information and participation

"Contracting Parties shall take the measures necessary to ensure that the authorities likely to be concerned by the project by reason of their specific environmental responsibilities or local and regional competences are given an opportunity to express their opinion on the information supplied by the developer and on the request for development consent. To that end, Contracting Parties shall designate the authorities to be consulted, either in general terms or on a case-by-case basis "[55]

"In order to ensure the effective participation of the public concerned in the decision-making procedures, the public shall be informed electronically and by public notices or by other appropriate means."[56]

"Reasonable timeframes for the different phases shall be provided for, allowing sufficient time for: (a) informing the authorities and the public; and (b) the authorities and the public concerned to prepare and participate effectively in the environmental decision-making."[57]

"The timeframes for consulting the public concerned on the environmental impact assessment report shall not be shorter than 30 days."[58]

EIA legislation of CPs envisages that the competent authority informs the public on its decision and information related to EIA procedure. Information takes place by means off publication on the official websites of competent authorities, in newspapers, public notice bulletins and trough electronic media. However, in **Albania,** informing about the EIA project and EIA Report is a cooperation between the project developer and competent authorities including local government bodies, trough publishing document of the website and displaying printed version of non-technical summary and EIA Report. In **Georgia**, information is published on Environmental Information Portal. In **Moldova** and **Montenegro**, agency responsible for environment as competent authority publishes relevant information about all stages of the EIA procedure on its website. In addition, in **Moldova,** the project developer, under the direction of the competent authority, informs the public concerned of the opinion on the quality of the EIA report by publishing announcements in national and local newspapers, putting up posters in the project area, posting the relevant information electronically, on its official website or placing the decision in its office. Information is published on ministry competent authority as well as in the printed media. In **Ukraine,** information is published on the official Register website and in print form (public places in the affected area, or in local print media).

1.6.6.1 Consultation with authorities concerned

EIA legislation of CPs provides for those authorities likely to be concerned by the Project, due to specific environmental responsibilities or local competencies to have an opportunity to express their opinion on the information supplied by the Developer, and on the Development

[55] *Article 6 (1) of EIA Directive*

[56] *Article 6 (2) of EIA Directive*

[57] *Article 6 (6) of EIA Directive*

[58] *Article 6 (7) of EIA Directive*

Consent within defined time frame (5-50 days; AL 10 working days, BiH calendar 15 days, XK* not shorter than work 20 days, MD 50 working days, ME 5 working days, NM 30 calendar days, RS calendar 15 days). It is recommended to define 15 days as appropriate timeframe.

Authorities are identified either in general terms or on a case-by-case basis (AL, XK*). In **Bosnia and Herzegovina**, this process is time-consuming due to the complexity of authorities and institutions, therefore it usually prolongs up to five to six months. Additionally, as the communication is not performed digitally but only in paper-form, the process cannot be as efficient as it would be with the application of digital tools. In **Georgia,** the timeframes and consultation methods are not defined.

For all CPs, it is recommended to improve the consultation process with authorities by ensuring the minimum standards for effective consultation: i) identifying and informing the authorities likely to be concerned by the project, including those on the local/regional level, preferably through a unique electronic platform that enables electronic communication, ii) giving authorities likely to be concerned by the project, including those on the local/regional level, sufficient but regulated period (e.g. 15 days) to prepare and participate effectively and iii) enable fast and electronic access to relevant information by establishing central electronic system.

A good example of consultation system is established is **Albania** where, from March 1, 2020, institutional interaction is exclusively conducted through the EIA electronic system, which enables direct opinion retrieval and direct coordination with other public institutions, within clear deadlines and without delay.[59]

1.6.6.2 Consultation with the public concerned

The EIA legislation of CPs requires the public participation in decision making on the EIA Report and provides what information should be available to the public concerned, including the EIA Report itself. The time frame for consulting the public concerned on the environmental impact assessment report is not shorter than 30 days, except in **Albania** and **Serbia** (20 days). The public hearing constitutes an integral component of the public consultation in all CPs. Public hearing gives the opportunity for the public concerned to submit, in writing or orally, the comments, information, analyses or opinions that they consider relevant to the proposed project.

However, the various monitoring reports for CPs indicate barriers and difficulties in conducting the public consultation process including public hearings.

For improvement of consultation process with public concerned in the each of these aspects, the CPs must ensure that the public concerned is informed, by public notice or individually as appropriate, early in an environmental decision-making procedure and in an **adequate, timely and effective manner**. Options for public notification might include publication in a

[59] *e-Albania acts as a single point for the provision of public services of government institutions, thus serving as a single-entry point for citizens 24/7 and is connected to the Government Interaction Platform which is the basic architecture that allows interaction between 60 electronic systems of public institutions." - https://e-albania.al/Pages/eAlbania.aspx*

newspaper, newsletter or other generally available printed media, dissemination through mass media (TV, radio), through electronic means or posting of notices in areas with heavy traffic or places frequented by the local population (e.g., bus stations, churches, shops, etc). For example, EIA Directive mentions the info posting within a certain radius, publication in local newspapers and the organization of exhibitions with plans, drawings, tables, graphs and models as valid means of notification. To ensure the effective notification, the publication on the Internet websites must be considered by CPs as powerful tool in reaching the public concerned rather than small announcement in a newspaper among hundreds of advertisements. Development of the environmental information offices, an on-line portal and identification of individual points of contact are recommended to facilitate access to environmental information.[60]

The notification must also include sufficient information for the public concerned to understand where and when the **public hearing** will take place. The requirement for timely notice must allow enough time between the notice and the date of the hearing (e.g. 30 days) for the public to prepare effectively. It is recommended that public hearings should be held a sufficient period after the date of notification in order to allow the public to study the materials and other information relevant to the proposed project, and to prepare opinions, suggestions, comments, alternatives or questions. Experts and other authorities shall be involved in the hearing.[61]

In organisations of public hearing, an adequate place to host the participants must be provided, an agenda of the hearing publicly available in advance. The outcomes of public hearing sessions must be documented in a report (minutes of proceedings) detailing the participants, questions, comments, and suggestions received. For this purpose, record of the hearing is recommended as well as record signature by its participants to prove that the facts and views expressed have been recorded correctly. Hybrid mode of participation to the hearing should be foreseen to allow the participation on-line or in presence.

In order for the competent authorities to fulfil their obligation to inform the public concerned of the final decision with reasons it suggested for CPs to establish clear procedures and appropriate implementation guidelines for access to information and participation in EIA.

Good practice of Public Consultation in the Netherlands

[60] *The Aarhus Convention: An Implementation Guide (second edition), 2014, available at: https://unece.org/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf*

[61] *The Aarhus Convention: An Implementation Guide (second edition), 2014, available at: https://unece.org/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf*

Extensive information and electronic tools are available in the Netherlands to facilitate public participation in EIA procedure. A Dutch government webpage collects all official notifications and publications regarding initiation of plans and projects to which EIA procedures apply. In addition, the Ministry of Infrastructure and Water Management provides an online participation platform and quick scan facility for citizens and developers to determine whether an EIA procedure applies. Furthermore, public participation in EIA procedures is embedded in national environmental law including information obligations, obligatory public consultation, and a duty to explain to what extent public feedback was considered.

1.6.6.3 Transboundary consultations

"Where a Contracting Party is aware that a project is likely to have significant effects on the environment in another Contracting Party or where a Contracting Party likely to be significantly affected so requests, the Contracting Party in whose territory the project is intended to be carried out shall send to the affected Contracting Party as soon as possible and no later than when informing its own public, inter alia: (a) a description of the project, together with any available information on its possible transboundary impact; (b) information on the nature of the decision which may be taken."[62]

"The results of consultations and the information gathered shall be duly taken into account in the development consent procedure."[63]

Transboundary consultation EIA procedure related to communication bodies, time frame and document translation is in line with the EIA Directive in most of the CPs. More significant adjustments are required in **Bosnia and Herzegovina** in the entity Republika Srpska**,** where the provisions on the language of the procedure and the method of sending the notification must be included in EIA legislation. In **Georgia**, transboundary cooperation still needs to be further developed and effectively implemented, given that Georgia is not a party to the Espoo Convention. In **Kosovo*,** the chapter in the EIA legislation dedicated to transboundary consultation must be clarified regarding certain specifics, such as language. When **Kosovo*** is the affected party, the legislation must be amended with provisions governing how the competent body ensures that information is made available to authorities, bodies, and the public concerned or how these stakeholders are informed about the Environmental consent.

In addition, it is recommended that CPs consider the Guidance on the practical application of the Espoo Convention[64] on Environmental Impact Assessment in a Transboundary Context for application of transboundary consultation.

National focal points for the ESPOO Convention, are accessible via the UNECE[65] website. These contacts can serve as a starting point for communication with the neighbouring CPs. Additionally, other contact options utilized by CPs include the Ministry of Foreign Affairs or

[62] *Article 7(1) of EIA Directive*

[63] *Article 8 of EIA Directive*

[64] *https://unece.org/DAM/env/eia/documents/practical_guide/practical_guide.pdf*

[65] *https://unece.org/*

Embassy representatives.[66]

Before the start of the transboundary consultation procedure, it is recommended to address and define the following specifics: i) documents to be submitted to the affected Contract Party, the regional/local level in the affected Contracting Party, the public in the affected Party; ii) language requirements related to documents and response; iii) responsibility for the translations and the quality of given and received information and vi) costs of translations. Although the Espoo Convention does not specify issues of language, it is important that information is provided in a language understood by those participating. The CPs are recommended to plan and decide upon responsibilities concerning translations in the initiation phase. Also, the target group needs to be well defined before planning the translation is taking place. Translating into English instead of the language of the affected Contracting Party may be considered as option. However, it's important to note that certain sections of the EIA report, such as those detailing transboundary impacts, should be translated into the language of the affected Party. Agreements can also set requirements on time allocated to translations and the timing of translations. In agreements CPs can also state who is responsible for the interpretation at hearings. It also should be clarified who is responsible for informing the public of the affected Contracting Party and the way how comments of the public shall be transferred. Documents like the notification and the EIA documentation will always be passed between the authorities of the respective CPs.

With regards to informing the public concerned and gathering comments CPs can use several options:

i) the responsibility for gathering is with an authority of the affected Contracting Party (Point of Contact or other authority). The public of the affected Contracting Party sends comments either directly to the competent authority of the CP of origin or through the Point of Contact or competent authority in the affected CP;

ii) the responsibility for informing the public of the affected Contracting Party is with the authority in the Contracting Party of origin (Competent Authority) or the proponent (Developer). The public of the affected Contracting Party sends comments directly to the competent authority of the Contracting Party of origin; or even directly to the developer and sends copies of the comments to the competent authority of the affected Contracting Party and

iii) there is a shared responsibility between authorities in both CPs[67].

1.7 EIA consent, reasoned conclusion and development consent

"The results of consultations and the information gathered pursuant to Articles 5 to 7 shall be duly taken

[66] *https://unece.org/environmental-policy/environmental-assessment/focal-points-administrative-matters*

[67] *https://unece.org/DAM/env/eia/documents/practical_guide/practical_guide.pdf*

into account in the development consent procedure"[68]

"The decision to grant development consent shall incorporate at least the following information: (a) the reasoned conclusion referred to in Article 1(2)(g)(iv); (b) any environmental conditions attached to the decision, a description of any features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment as well as, where appropriate, monitoring measures."[69]

"The competent authority shall be satisfied that the reasoned conclusion is still up to date when taking a decision to grant development consent. To that effect, CPs may set timeframes for the validity of the reasoned conclusion."[70]

When a decision to grant or refuse development consent has been taken, the competent authority or authorities shall promptly inform the public and the authorities referred to in Article 6(1) thereof, in accordance with the national procedures, and shall ensure that the following information is available to the public and to the authorities referred to in Article 6(1), taking into account, where appropriate, the cases referred to in Article 8a(3): (a) the content of the decision and any conditions attached thereto as referred to in Article 8a(1) and (2); (b) the main reasons and considerations on which the decision is based, including information about the public participation process."[71]

In all CPs, except in Serbia and Bosna and Herzegovina in the entity Republika Srpska, the main principle for energy projects listed in Annex I or II of the EIA Directive is the necessity of EIA consent or screening decision, to obtain a development consent – usually construction permit (AL, MK, MD, ME, RS, UA) or environmental permit (in Bosnia and Herzegovina, in the entity Republika Srpska, XK*), granting. In all Contracting Partes, except in Serbia, according to the EIA legislation of CPs is the EIA procedure precedes a development consent granting procedure. As the development concept is part of the permitting procedure, the insight into CP's legal framework and development consent procedure are elaborated in chapters 2.1. and 2.3.

The competent authority responsible for the EIA consent must be able to show why a particular comment was rejected on substantive grounds. Taking due account of the outcome of public participation as is required can be facilitated by certain logistical measures, such as the registration of written comments and the recording of public hearings. A table documenting the comments submitted and the ways in which they have changed the draft may be a good method when many comments are received, because similar arguments can be clustered in the table. A good practice used in some countries in handling comments received is to require the relevant authority to respond directly to the substance of the comments. For this purpose, comments that are substantially identical may be grouped together. Some countries require the substance of all comments to be addressed in a written document justifying the final decision. [72]

---

[68] *Article 8 of EIA Directive*

[69] *Article 8 (1) of EIA Directive*

[70] *Article 8a (6) of EIA Directive*

[71] *Article 9 of EIA Directive*

[72] *The Aarhus Convention: An Implementation Guide (second edition), 2014, available at: https://unece.org/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf*

The CPs set timeframes in the EIA legislation for the validity of Environmental consent. The validity period of an Environmental consents in CPs is linked to permits (e.g. the construction or environmental permit) or commencement of works, and it is set for 2 or 5 years, In **Albania,** the Environmental consent is valid for as long as the relevant construction permit of the project is valid. If the project does not start within 2 years, the EIA Report will be considered invalid. In **Bosnia and Herzegovina**, in the entity Federation of Bosnia and Herzegovina**,** the Environmental consent ceases to be valid if the applicant does not obtain a construction permit within 3 years. If the planned energy facility falls under the jurisdiction of the cantonal ministries of environmental protection, the cantonal ministry, after considering the submitted request, issues an environmental permit. If the planned energy facility falls under the jurisdiction of the Federal Ministry of Environment and Tourism, then it is in charge of the procedure for issuing an environmental permit. In **Bosnia and Herzegovina**, in the entity the Republika Srpska, the Environmental consent ceases to be valid if the project developer does not obtain a construction permit or an environmental permit within 2 years. In exceptional cases, the Decision on the approval of the Impact Study can be extended for another year at the request of the investor due to the delay of other authorities. In **Georgia,** an EIA consent is issued for an indefinite period. If the project developer does not commence the project provided for by such a decision within 5 years, the competent authority shall declare it invalid. In **Kosovo*** Environmental consent is valid for 5 years. In **Moldova,** the Environmental consent is valid for 4 years. The project developer may request the extension of the validity for one year, only once. If, at the expiry of the term of validity of the environmental consent the project developer has not obtained approval for the development of the planned activity, he shall resume the EIA procedure, start with the submission of the application for the preliminary assessment. In **Montenegro**, Environmental consent ceases to be valid if the project developer does not obtain a construction permit or apply of commence works within 2 years. In **North Macedonia,** the Environmental consent ceases to be valid if the project is not implemented within two years from issuing the decision. At the project developer's request, the decision validity can be extended. There is no limit to the number of times the project developer can request an extension. In **Serbia**, the validity of the Environmental consent is 2 years. If within 2 years the project developer has not started with the realization of the project, the competent authority, at the request of the project developer, decides whether a new EIA Report is necessary or if the existing EIA Report must be updated. In **Ukraine,** the Environmental consent validity is 5 years. If no commence of works or changes are made to the project documentation or changes to the legislation that require changes to the environmental conditions defined in the Environmental consent a new EIA procedure is required. If no activities related to the planned project are initiated within the 5 years, the Environmental consent becomes invalid meaning that the developer would need to undergo the EIA process again for re-assessment and issuance of a new consent.

In addition, in **Albania**, the Environmental consent is provided at the end of the EIA procedure and acts as a guideline for the authority responsible for granting a construction permit. In **Moldova** and **North Macedonia**, the Environmental consent is an integral part of the decision to consent to developing the planned activity. In **Serbia**, because of a non-compliance currently also addressed by a dispute settlement procedure launched by the Energy Community Secretariat, construction permits can be issued without EIA (development

consent before Environmental consent). In **Bosnia and Herzegovina,** the shortcomings of the EIA legislation with regards to the Environmental consent and the validity of the development consent are not yet resolved in both entities and the Brčko District of Bosnia and Herzegovina. Environmental Permits for renewable energy projects, in particular for HPP, are being prolonged and their validity extended for periods longer than 15 years based on outdated Environmental consents, which is not in line with the EIA Directive.

In EU Member States, the period of permitting procedure depends on the technology but also on the requirements of the legal system of the individual Member States. Based on the RES Simplify document[73], in EU the permit process for rooftop PV systems varies between 0.1 years in Malta and 0.8 years in Bulgaria. For ground-mounted PV systems, the reported duration varies between one year in Bulgaria and 4.5 years in Greece. Not specified PV installations show comparably high durations that range from one to 4.6 years. The duration of non-specified PV installations suggests that these power plants may be ground-mounted PV systems as well. For rooftop PV systems, the 2-year limit defined by Article 16 RED II is met all EU Member States. For ground-mounted systems durations potentially including legal challenges and EIA did not exceed two years in four out of seven Member States. Greece, Ireland, and Spain are exceptions as processes last for more than three or even four years here. Most processes for unspecified PV installations often do not exceed the duration of three years. Exceptions are France, Poland, and Portugal. The provided information on overall permitting process duration for onshore wind permitting showed a large variation between countries. For most countries, the duration of procedures varies around 6 years. The shortest durations can be found in Latvia with 2.8 years, the UK as well as Finland with 3 years. The longest durations with 8 and 9 years were reported in Greece and Ireland. Almost no country manages to realise permitting in 2 (respectively 3) years as was stated in the RED II.

Therefore, in addition to the general recommendation that the timeframe for obtaining the Environmental consent should be predictable, it is recommended to CPs, with focus on the permitting procedure for RES projects to establish specific timelines for the competent authorities to give the green light to projects after receiving the EIA request by the developer as well as for procedures for the repowering of existing RES projects. I

Croatian example: The validity of EIA decision and monitoring of environmental conditions[74]

[73] *European Commission, Directorate-General for Energy, Tallat-Kelpšaitė, J., Brückmann, R., Banasiak, J. et al., Technical support for RES policy development and implementation – simplification of permission andadministrative procedures for RES installations (RES Simplify) – Final report, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2833/894296*

[74] *EC, Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report*

The Croatian Environmental Protection Act regulates the EIA procedure in Croatia. Article 92. sets the duration of validity of the final EIA decision for up to 2 years. More specifically, it renders the EIA decision invalid if an operator does not request a permit leading to the construction permit within two years of the date the decision entered into force. Validity of final EIA decision can be extended for another 2 years if the conditions based on which it was issued have not changed. Monitoring of the state of the environment is carried out for interventions for which this has been determined by assessing the impact of interventions on the environment. In accordance with the Article of 142. operator is obliged to monitor the state of the environment for the procedures for which monitoring is prescribed as part of the EIA. The collected data is submitted to the Ministry on the prescribed forms and within the prescribed deadlines. Article 224. sets a possibility of inspection. Article 238. further stipulates that the inspector can order the implementation of environmental protection measures and monitoring of the state of the environment in accordance with EIA decision. If the works are carried out contrary to the prescribed environmental protection measures, the inspector decides on the suspension of works.

1.8 Streamlining EIA and other assessments

"The environmental impact assessment may be integrated into the existing procedures for development consent to projects in the Contracting Parties, or, failing this, into other procedures or into procedures to be established to comply with the aims of this Directive."[75]

"In the case of projects for which the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and from Council Directive 92/43/EEC and/or Directive 2009/147/EC of the European Parliament and the Council, Contracting Parties shall, where appropriate, ensure that coordinated and/or joint procedures fulfilling the requirements of that Union legislation are provided for.

In the case of projects for which the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and Union legislation other than the Directives listed in the first subparagraph, Contracting Parties may provide for coordinated and/or joint procedures.

Under the coordinated procedure referred to in the first and second subparagraphs, Contracting Parties shall endeavour to coordinate the various individual assessments of the environmental impact of a particular project, required by the relevant Union legislation, by designating an authority for this purpose, without prejudice to any provisions to the contrary contained in other relevant Union legislation.

Under the joint procedure referred to in the first and second subparagraphs, Contracting Parties shall endeavour to provide for a single assessment of the environmental impact of a particular project required by the relevant Union legislation, without prejudice to any provisions to the contrary contained in other relevant Union legislation."[76]

In all CPs, the EIA and the procedures of obtaining the development consent such as construction permit (procedures governed by the planning and construction legislation) are

[75] *Article 2 (2) of EIA Directive*

[76] *Article 2(3) of EIA Directive*

established as separate procedures. The mechanism ensuring that the binding environmental conditions set out in the Environmental decision (Reasoned Conclusion) are followed by and included in the Development Consent (construction permit, operating permit etc.) is described in Chapter 2 Permit granting.

The EIA and other ecological assessments under EU legislation (the Habitats and Birds Directives[77], SEA Directive[78], the Industrial Emissions Directive[79], the Water Framework Directive (WFD)[80], the Seveso Directive[81]) in the most of CPs (BiH, GE, NM, RS, UA) are not streamlined (joint or coordinated).

The procedures In **Albania**, **Kosovo***, **Montenegro,** and the assessment on ecological network in **Moldova** is included in EIA Report but the institutional capacity must be increased to facilitate a streamlined process. In **Bosnia and Herzegovina**, **Georgia**, **North Macedonia**, **Serbia** and **Ukraine,** the EIA is not streamlined with other assessments.

It is recommended that CPs simplify environmental permit-granting when several environmental assessments stemming from a number of directives are required, and several authorities are involved. For instance, in Croatia, assessment of the impact on the ecological network is carried out as part of the EIA procedure for those interventions for which EIA is required and as an independent procedure for other interventions. Both procedures are unified in Croatia, as in most other EU Member States. Unification of procedures brings advantages related to saving time and resources.[82]

Under the "one-stop shop" approach, the above assessments and their approval can be prepared separately but be coordinated; they can also be joined together as part of a single process.[83]. As regards efficiency, planning the streamlined coordinated and/or joint procedures creates certainty and regulatory stability.

Slovenian "Single Environmental Permitting Platform," which implements the Single Environmental Permitting Regime that simplifies, harmonises, and draws up many environmental permits, can be highlighted as an example of good practice.

Good practice of coordinated environmental procedures in Slovenia
Slovenia introduced the streamlining of environmental assessments under EIA and Habitats Directives prior the revision of the EIA Directive. Coordinated procedures have been established for EIA, Water Framework Directive and Industrial Emission Directive.

[77] *https://bookshop.europa.eu/en/the-eu-birds-and-habitats-directives-pbKH0514026/*

[78] *https://eur-lex.europa.eu/legal-content/EN/AUTO/?uri=celex:32001L0042*

[79] *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02010L0075-20110106*

[80] *https://environment.ec.europa.eu/topics/water/water-framework-directive_en*

[81] *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012L0018*

[82] *https://www.haop.hr/hr/publikacije/prirucnik-za-ocjenu-prihvatljivosti-zahvata-za-ekolosku-mrezu-opem*

[83] *As regards the EIA and the Nature Protection Directives (Habitats and Birds), the one-stop shop approach is required under the EIA Directive*

CPs has flexibility to choose the most appropriate model, provided that project developers are not required to contact more than one contact point.

In the EU, various options exist for designing: i) administrative one-stop shop channels the communication between the project developer and the competent authorities; ii) an extension of the mandate of the administrative contact point can also be envisaged, and the contact point can be entrusted with issuing all the necessary permits itself and iii) multiple one-stop-shops can be set up to deal with different project sizes, technologies or administrative divisions in a CPs, as long as each applicant has one single contact point to rely on for a particular project.

Good practice in Denmark: DEA as single contact point
The Danish Energy Agency (DEA) has been designated as the contact point, and provides overall guidance on the administrative process, including the steps that need to be taken to establish and operate renewable energy facilities. In the case of offshore wind, DEA itself issues permits for projects within Denmark's territorial waters and its Exclusive Economic Zone. DEA prepares and issues the licenses through an iterative process with the relevant authorities and conveys project-specific information to the authorities to mitigate conflicting interests.

Although the scopes of the assessment conducted under the SEA and EIA Directive differ, various areas of potential overlaps in the application of the two directives are present. The purpose of both procedures, the EIA and the SEA is to ensure that administrative decisions, whether taken at plan or programme level (SEA) or project level (EIA) consider the significant impacts of such decisions on the environment. In both procedures, the central tool to comply with this obligation is the environmental report, which has to present the findings of the proponent/developer about the environmental impacts of the project, plan or programme, and which has to serve as the basis of the informed decision of the competent Access to Justice. Whether joint procedure (SEA and EIA) is possible or appropriate will depend upon the decision-making process and particularly the relative timing of SEA and EIA. In many cases it is likely that SEA will and should occur before an EIA and therefore scope for joint procedure is going to be limited. Where EIA and SEA might both apply it is recommended that CP determine how to best co-ordinate the content of the assessment and the decision-making process and should consider whether it is appropriate to create clear differential responsibility for different aspects at different levels[84].

"*Contracting Parties shall ensure that, in accordance with the relevant national legal system, members of the public concerned: (a) having a sufficient interest, or alternatively; (b) maintaining the impairment of a right, where administrative procedural law of a Contracting Party requires this as a precondition;*

[84] *Sheate, W., Byron, H., Doug, S., Cooper, L. 2005. The relationship between the EIA and SEA Directive. https://wayback.archive-it.org/12090/20151221015008/http://ec.europa.eu/environment/archives/eia/pdf/final_report_0508.pdf*

have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of this Directive"[85]

Following the EIA Directive requirement to provide a right of access to justice related to decisions that are or should be subject to public participation under the EIA Directive, in all CPs, access to justice is guaranteed by the transposing EIA legislation for participants of the EIA process, developer and the public concerned. The appeal procedure is carried out in accordance with the EIA legislation and/or regulation governing the administrative procedures and disputes, depending on the CP legal framework.

EIA legislation of most the CPs does not contain specific provisions on mediation, negotiation, or alternative dispute resolution mechanisms. These procedures are regulated by specific laws in all other CPs. However, CPs can provide in their EIA laws for mediation and alternative resolution of environmental disputes under their legal judicial system which can lead to faster resolution of environmental disputes.

In this context, the **mediation** can be used at different stages of the EIA process, including scoping, impact analysis, and decision-making. The **scoping phase** of the EIA process involves identifying the potential environmental, social, and economic impacts of the proposed project, and determining the scope of the EIA study. Mediation can be used to facilitate the scoping process, by bringing together different stakeholders to identify the issues and concerns that need to be addressed in the EIA study. This can help to ensure that the EIA study is comprehensive and addresses the concerns of all stakeholders. The **impact analysis phase** of the EIA process involves assessing the potential environmental, social, and economic impacts of the proposed project. Mediation can be used to facilitate the impact analysis process, by bringing together experts and stakeholders to review the data and analysis, and to identify areas of disagreement or uncertainty. Mediation can help to clarify the issues and to identify ways to resolve disagreements or uncertainties. The **decision-making phase** of the EIA process involves determining whether to approve the proposed project, and if approved, what conditions or mitigation measures should be imposed. Mediation can be used to facilitate the decision-making process, by bringing together decision-makers and stakeholders to review the EIA study and to identify areas of agreement or disagreement. Mediation can help to identify creative solutions that meet the needs of all parties and can help to build consensus around the decision.

According to the European Commission's 2012 "Study on environmental complaint-handling and mediation mechanisms at the national level,"[86] which encompassed 10 Member States, the countries with established national rules and institutions for environmental mediation are Austria, Germany, Greece, Ireland, Poland, and Slovenia. Conversely, among the Member States examined, Denmark, France, Lithuania, and Spain lack environmental coverage for alternative dispute mechanisms. Mediation as a method for resolving planning conflicts has

[85] *Article 11 (!) of EIA Directive*

[86] *"Study on environmental complaint-handling and mediation mechanisms at the national level," available at: EU_mediation_and_complaint-handling.pdf (unece.org)*

been used more intensively in **Austria** since the mid-1990s.[87] The 2000 Environmental Impact Assessment Act established a precise legal framework that allowed project developers to initiate a mediation procedure, interrupting the formal EIA process.[88] The legislation also created an important basis for recommending the conflict resolution tool in the event of a stalemate. According to Austrian Society for Environment and Technology the majority of the environmental mediation processes in Austria ended - even with years of conflict - with an amicable solution. The first environmental mediation process in was carried out in 1996 by the Leube cement works and the largest completed procedure concerned the construction of the ÖBB high-speed route Gasteinertal. The mediation process at Vienna Airport, is considered as the most complex process to date. [89]

Good practice concerning access to justice and environmental mediation are shown in the boxes below.

Good practice in Finland: Access to Justice[90]
The website of the environmental administration provides information on different environmental procedures, including information on access to justice. The websites of the 4 Regional State Administrative Agencies competent in environmental and water permit matters include registers on pending permit matters and permit decisions. There is also a joint web-based Permit Information Service available on environmental and water permit matters. Further information on specific environmental procedures and access to justice may be provided on the websites of municipalities.

Good practice in Environmental mediation by Milan Mediation Chamber (Italy)[91]

[87] *Österreichische Gesellschaft für Umwelt und Technik (1998). Umweltmediation in Österreich - Informationsstand, Einstellung, Erwartungen,Wien*

[88] *https://www.ris.bka.gv.at/Dokumente/Erv/ERV_1993_697/ERV_1993_697.pdf § 16(2) "If major conflicts of interest between the project applicant and the other parties involved or affected are revealed in the course of the procedure, the authority may interrupt it for a mediation procedure upon request of the project applicant. The results of the mediation procedure may be forwarded to and considered by the authority, within the limits of statutory possibilities, in the rest of the development consent procedure and in the decision. Further agreements between the project applicant and the parties involved or affected may be documented in the decision. The project applicant may submit a request on the continuation of the development consent procedure at any time."*

[89] *"Mediation in Environmental Impact Assessment - Information Sheet, Aleksandra Bujaroska, June 2023"*

[90] *https://www.ymparisto.fi/en/joint-website-finlands-environmental-administration*

[91] *Environmental mediation (camera-arbitrale.it)*

The website of the environmental administration provides information on different environmental procedures, including information on access to justice. The websites of the 4 Regional State Administrative Agencies competent in environmental and water permit matters include registers on pending permit matters and permit decisions. There is also a joint web-based Permit Information Service available on environmental and water permit matters. Further information on specific environmental procedures and access to justice may be provided on the websites of municipalities.

1.9 Digitalized EIA process

Albania has established a digitalized permitting process including application for environmental impact assessment (March 2020)[92]. In **Georgia**, all relevant documents are exchanged digitally between all parties involved. The EIA process in **Bosnia and Herzegovina**, **Kosovo***, **Montenegro**, **Serbia** and **Ukraine** are not fully digitalized; hard copies of documents are still needed.

Digitalization of document and procedures as well as establishment of digital communication platform can substitute the use of paper form and enable submission of digital version of documents (applications, EIA reports and other documentation), e-communication between participants, following of the EIA process, better access to documents and identification of the difficulties and barriers in processing. Technical support trough different programmes and projects will provide a prerequisite for digitalization. This includes i) strengthening of human capacities and organisational structure through the employment of educated staff with IT background ii) standardized education on the provision of e-services and advanced training in the field of ICT and new technologies for current staff, iii) systematic analysis of EIA procedures and supporting processes, iv) modernization of the IT infrastructure and procurement of appropriate software solutions, keeping in mind that upgrade of existing digitalized structure is less cost intensive then having a new one and v) conducting of activities to raise public awareness of the existence of the e-system and the use of e-services, as well as generate educational materials on how to use the aforementioned digital services.

In addition, digitalisation of EIA process should enable to project developers to review digital documents easily and to check in what stage their application currently is. Furthermore, the digital documents can be sorted and review easily by administrators and shared between the parties involved, included public concerned.

1.10 Costs

Expenses related to the development, submission, and translation of the EIA Report and costs associated with information dissemination and organizing of public hearing falls upon the Developer in all CPs. The Developer pays administrative fees depending on the procedure stage (AL, BiH, GE, MN, NM), a value investment (**Kosovo***), and the size of the project

[92] *e-Albania*

(**Serbia**). In **Ukraine**, project holders bear the costs only for organizing public hearings.

It is recommended for CPs to ensure that EIA administrative charges are transparent, and cost related.

2 Permit granting

2.1 EIA, locational conditions, and development consent

In all CPs, except in Serbia and in Bosnia and Herzegovina, in the entity Republika Srpska, the main principle for energy projects listed in Annex I or II of the EIA Directive is the necessity of EIA consent[93] or screening decision, to obtain a development consent[94] – usually construction permit (AL, MK, MD, ME, RS, UA) or environmental permit (in Bosnia and Herzegovina, in the entity Republika Srpska, XK*), granting. In all Contracting Partes, except in Serbia, according to the primary legislation of the CPs (EIA Laws), the EIA procedure precedes a development consent granting procedure.

In some CPs (AL, in Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, XK*, MD, ME, UA), prior to obtaining development consent, it is necessary to obtain locational conditions that confirm compliance with environmental conditions from the EIA procedure. However, in others (in Bosnia and Herzegovina, in the entity Republika Srpska and RS) it is not the condition. Locational conditions have different names in CPs, such as developing permit in Albania, urban planning consent[95] in the in Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, location conditions in Bosnia and Herzegovina, in the entity in Republika Srpska, terms of construction in Kosovo*, urban planning certificate for the design in Moldova, urban-technical conditions in Montenegro, location requirements in Serbia, and urban planning conditions in Ukraine.

In **Albania**, according to Law No. 28/2017 amending and supplementing Law No. 107/2014 on the territory planning as amended, there are two kinds of permits in the construction permit granting procedure, developing permit and construction permit. A developing permit is a document issued by the competent authority that defines the developing conditions for a particular project and serves as a basis for the request for the construction permit.

In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, according to the Law on Spatial Planning and Land Use, before submitting a request for a construction permit, it is necessary to obtain an urban planning consent based on the EIA consent. Urban planning consent is development consent in the entity Federation of Bosnia and Herzegovina. In Bosnia and Herzegovina, in the entity Republika Srpska, in preparing for and applying the location conditions, a project developer must submit an application for determining the obligation to develop an environmental impact assessment and scope of impact assessment, if such assessments are compulsory as per special regulation. However, the EIA consent is needed in applying for an environmental permit and construction permit.

In **Kosovo***, terms of construction, environmental permit and construction permit are official

[93] *EIA consent - consent on the EIA Report.*

[94] *Article 1(2) of the EIA Directive: (c) 'development consent' means the decision of the competent authority or authorities which entitles the developer to proceed with the project.*

[95] *Article 37. of the Law on Spatial Planning and Land Use of FBiH (Official Gazette of FBiH, no. 2/06, 72/07, 32/08, 4/10, 13/10, 45/10, 85/21 and 92/21).*

documents issued by the Ministry of Environment, Spatial Planning, and Infrastructure. Environmental permit allows the project developer to carry out activities in accordance with defined conditions. Environmental permit is development consent in Kosovo* and is the final stage of checking whether the environmental conditions have been implemented. With the application for environmental permit, EIA consent is submitted. Accordingly, the EIA process is done prior to the issuance of the environmental permit, which is in turn required before applying for a construction permit. It is necessary to obtain an environmental permit before granting a construction permit. According to Administrative Instruction No. 04/2022 for environmental permit, after receiving the screening decision, the municipality issues an environmental permit, while after receiving the EIA consent, the ministry issues an environmental permit. The issuance of the construction permit consists of two stages – obtaining the terms of construction and issuance of the construction permit. Terms of construction refer to terms determining location, type, size, construction methods, safety requirements, and any other necessary requirement for construction works. Terms of construction serve as a basis for the development of construction documents. If the concerned area of construction has no spatial planning document in force (Urban regulatory plan) establishing all the necessary terms for construction, the first stage is establishment of the Terms of construction from the ministry. The EIA procedure precedes the issuance of permits: terms of construction, environmental permit, and construction permit.

In **North Macedonia**, the application for a construction permit must contain detailed information about the proposed construction, including the location, purpose, and technical specifications. To grant a construction permit, it is necessary to have an infrastructure project for line infrastructure constructions, basic design (revised and approved) and EIA Report as approved by EIA consent, proof of construction right (ownership, right of use or concession), geodetic elaborate on the numerical data for the construction land, and authorization for construction[96] for production of electricity if the RES power plant has an installed capacity above 10 MW. A construction with a total installed electrical and/or heat capacity of up to 10 MW can be constructed without authorization for construction. A construction permit is not necessary for photovoltaic power plants installed on rooftops, whereby they use the produced electricity for their own consumption as described in Chapter 2.2.2 on Small-scale and self-consumption RES projects.

In **Moldova**, an urban planning certificate for the design must be obtained before submitting a request for a construction permit. The EIA consent[97] is an annex to the urban planning certificate for design and it is attached to the application for construction permit. Therefore, locational conditions confirm compliance with environmental conditions from the EIA procedure.

In **Montenegro**, urban-technical conditions contain conditions and measures for

[96] *According to Energy Law ("Official Gazette of the Republic of North Macedonia ", no. 16/11, 136/11, 79/13, 164/13, 41/14, 151/14, 33/15, 192/15, 06/16, 96/18, 96/19, 236/22) to be able to build a construction to produce electricity and heat, authorization for the construction is required.*

[97] *Called environmental agreement in Moldova.*

environmental protection[98]. EIA Report must be approved prior to application for construction permit and EIA consent is attached to the application for construction permit[99].

In **Serbia**, before granting the construction permit, location requirements must be obtained. As per the Law on Planning and Construction, the Ministry of Environmental Protection assesses whether an EIA Report is necessary while issuing location requirements. If the Ministry of Environmental Protection decides that an EIA Report is not needed, it may specify minimum requirements for environmental protection under bylaws. The Ministry of Environmental Protection does not check the compliance of the project and project documentation with the measures and conditions of environmental impact assessment from the EIA consent, i.e. the decision that EIA is not required. Its compliance is confirmed by the statement of the project developer and the responsible designer, which confirms that the documentation for construction permit granting is in compliance with EIA measures and conditions, and which must be attached to the application for the granting construction permit.[100]

In **Ukraine**, after obtaining the EIA consent and before granting the construction permit, the project developer must obtain the following documents: a document confirming ownership or the right to use the land; urban planning conditions and land development restrictions, technical conditions, and design tasks; and design and estimate construction documentation.

In all CPs, there are required documents needed for granting development consent. As shown in the overview before, before issuing the development consent, it is necessary to satisfy locational, technical, and other conditions in different phases of the project. In all CPs, according to EIA Laws, environmental conditions from EIA consent are incorporated or attached to the construction permit, except in Serbia.

The special feature of the construction permit granting procedure in **Albania** is that the EIA consent acts only as a guideline for the competent authority granting a construction permit. Therefore, the competent authority granting the construction permit can decide, contrary to the EIA consent, but must provide relevant arguments to support such a decision. Such uncertainty in decision-making calls into question the expediency of the EIA procedure.

In **Serbia**, in the procedure of granting a construction permit, the competent authority granting a construction permit does not check compliance. The competent authority responsible for issuing a construction permit is not responsible for verifying the project's compliance with the construction permit or the project documentation regarding the measures and conditions outlined in the EIA consent. Instead, the project developer and responsible designer must confirm compliance by providing a statement confirming that the

---

[98] Law on Spatial Planning and Construction of Structures („Official Gazette of the Republic of Montenegro", no. 64/17, 11/19, 82/20, 86/22), Article 55 (1(6)).

[99] Law on Spatial Planning and Construction of Structures („Official Gazette of the Republic of Montenegro", no. 64/17, 11/19, 82/20, 86/22), Article 181 (3(4)).

[100] Law on Planning and Construction ("Official Gazette of the Republic of Serbia", no. 72/2009, 81/2009 - corrected., 64/2010 – decision of the Constitutional Court, 24/2011, 121/2012, 42/2013 - decision of the Constitutional Court, 50/2013 - decision of the Constitutional Court, 98/2013 - decision of the Constitutional Court, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 – other law, 9/2020, 52/2021 i 62/2023), Article 135 (1).

attached documentation meets the necessary environmental protection measures and conditions required for the construction permit application.[101] Also, there is a discrepancy between the Law on Planning and Construction and the EIA Law because the Law on Planning and Construction determines that the Ministry of Environmental Protection is the only competent authority that determines whether an EIA Report is required or not at the initial stage when obtaining the location requirements for the project, while the EIA Law gives that possibility to the local government as well.[102] The EIA Law[103] stipulates that the EIA consent or the decision that an EIA is not required, are an integral part of the documentation that is attached to the application for the issuance of a construction permit or to the application for the commence works (construction, execution of works, change technology, change of activity and other activities). This wording of Article 18 has led to confusion and misapplication of that article, resulting in the construction permit being obtained before the necessary EIA consent. This indicates a potential deficiency in the clear expression of legal provisions, which can lead to misinterpretation and circumvention of environmental regulations in construction of energy facilities projects. The Law on Planning and Construction[104] determines that the EIA consent is included in the notice of commence works, after obtaining the construction permit (Article 148.), thus using the flawed formulation from the EIA Law. It is necessary to propose a new EIA Law that provides the obligation to attach the EIA consent to the application for granting a construction permit so the construction permit can take into account the outcome of the EIA consent. There is a need for subsequent harmonization of the Law on Planning and Construction with the new EIA law.

In all CPs the competent authority that grants the operating permit controls if the conditions set out in the construction permit were applied during the project's realization. After determining whether all conditions of the construction permit are met, the competent authority grants an operating permit. All CPs determine the procedures regarding the monitoring of significant adverse effects on the environment after development consent is granted. In all Contract Parties is a lack of publication of monitoring reports of significant adverse effects on the environment. It is recommended to have structured reports and to publish them on the official website of the competent authority.

In all CPs, the environmental inspection (AL, XK*, UA, MD) or technical inspection (BiH, ME,

[101] *Law on Planning and Construction ("Official Gazette of the Republic of Serbia", no. 72/2009, 81/2009 - corrected., 64/2010 – decision of the Constitutional Court, 24/2011, 121/2012, 42/2013 - decision of the Constitutional Court, 50/2013 - decision of the Constitutional Court, 98/2013 - decision of the Constitutional Court, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 – other law, 9/2020, 52/2021 i 62/2023), Article 135 (1).*

[102] *Law on Planning and Construction ("Official Gazette of the Republic of Serbia", no. 72/2009, 81/2009 - corrected., 64/2010 – decision of the Constitutional Court, 24/2011, 121/2012, 42/2013 - decision of the Constitutional Court, 50/2013 - decision of the Constitutional Court, 98/2013 - decision of the Constitutional Court, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 – other law, 9/2020, 52/2021 i 62/2023), Article 55 (4a).*

[103] *Law on Environmental Impact Assessment ("Official Gazette of Republic of Serbia", no. 135/04 and 36/09), Article 18.*

[104] *Law on Planning and Construction ("Official Gazette of the Republic of Serbia", no. 72/2009, 81/2009 - corrected., 64/2010 – decision of the Constitutional Court, 24/2011, 121/2012, 42/2013 - decision of the Constitutional Court, 50/2013 - decision of the Constitutional Court, 98/2013 - decision of the Constitutional Court, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 – other law, 9/2020, 52/2021 i 62/2023), Article 148.*

MK, GE, RS) authority has the right and obligation to ensure the complete fulfilment of the environmental conditions and measures set in the EIA consent for projects that have undergone the EIA procedure, before granting construction permit and/or before granting operating permit. In case of violations, the inspection shall submit a report to the competent authority, determine punitive measures to the project developer, and require the suspension of the project.

The time it takes to obtain a construction permit depends on several factors, including the complexity of the project, the regulations concerned, and the involvement of the project developer and competent authority. The required documents in the permit granting procedure are not coordinated by competent authorities, in all CPs. At each stage of the permit granting procedure, the project developer collects the required documents and coordinates the entire procedure independently. The procedure is not automated in such a way that one body directs the project developer to what the steps in the procedure are to which competent authority and when to contact with requests for certain permits. Competent authorities only serve as holders of approval for issuing certain types of permits, but they are not mutually coordinated. It is recommended to coordinate the documents in such a way that the competent authorities collect them ex officio. In all CPs, a quite number of documents are required to obtain a construction permit for all projects, except small-scale and self-consumption RES projects which already have a simplified procedure in most CPs. For example, in **Albania**, the developing and construction phase includes nine different key permits from different competent authorities before obtaining a construction permit. The operation phase includes four permits. In **Bosnia and Herzegovina**, in the entity Federation of Bosnia and Herzegovina, it is necessary to obtain 10 permits, and in Bosnia and Herzegovina entity Republika Srpska, the key development milestones and the key permits and authorisations include 6 permits. None of these key permits can be obtained in a parallel procedure since they are mutually connected and conditioned, which means that the issuance of one permit or administrative act is connected to obtaining another one. Moreover, the procedure for obtaining any of the above-mentioned permits requires multiple steps and obtaining opinions, elaborates, and consents from completely different authorities from the same or different government levels. In **Montenegro**, to build a renewable energy power plant it is necessary to obtain nine permits. In GE three permits, in MD seven, in MK four, in RS seven, and in UA nine. In all CPs, the construction permit granting procedure is a multi-stage procedure and requires applying for different types of permits, where one type of permit is often a precondition for obtaining another type of permit. It is recommended that project developers are allowed to apply for multiple permits in parallel and that competent authorities collect needed documents ex officio.

Examples of simultaneous procedures (Austria, Portugal, Finland).[105]
In Austria, for example, developers could apply for multiple permits (electricity production license, approval under the nature conservation law procedure, aviation law procedure, forestry law permit, water law permit, occupational health and safety law permit, building permit) in parallel. Site selection and the grid connection application could also be done in parallel. In Portugal, obtaining an electricity production license and connecting the power plant to the grid may be carried out simultaneously once the applicant has successfully obtained a grid capacity reserve title. In Finland, it was possible to combine construction permit and different environmental permit processes (joint procedure). As a part of the joint procedure, all applications were possible to be submitted electronically to competent authorities simultaneously. Moreover, the applicant could provide supplements for different applications at once, public hearings for all the processes were organised simultaneously, and decisions were published together.

Regarding to timeframe for issuing a construction permit, in **Albania**, issuance of the construction permit for small-scale projects is done within 15 days. For complex projects, projects of national importance or strategic investments the construction permit is issued within 30 days. In **Montenegro**, construction permits for structures that require the EIA Report, shall be issued within 60 days following the date of applying for construction permit. In **Serbia**, the competent authority issues the construction permit within 5 days of receiving the complete application. In all CPs, permitting times include not only the deadline for issuing a construction permit as such, but also all applications, and permits that precede it, as well as publication of documents online (where applicable), comments from the public concerned, registration of permits (where applicable), application supplements, etc. Accordingly, permitting time can take several years. Providing all required information to project developers through one stop shop (RES shop in Chapter 2.6) can speed up the permitting process, as well as digitalization (Chapter 2.5) and improvement of institutional capacity (Chapter 2.8), which is recommended to all CPs. Also, the principle of administrative silence should be established in cases where the environmental impact is assessed, and pertinent environmental-related permits are issued. Considering the deadlines from the Directive (EU) 2018/2001[106] and Directive (EU) 2023/2413[107], all CPs must speed up the process of granting

[105] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[106] *Article 16 of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), stipulates a deadline of two years for power plants, including all relevant procedures of competent authorities, and which can be extended by up to one year. These deadlines were reinforced by the RED III.*

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0082.01.ENG&toc=OJ:L:2018:328:TOC

[107] *Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, stipulates that within renewables acceleration areas, permitting times shall not exceed one year (two years for offshore projects) for new plants and six months (one year for offshore projects) for repowering of plants and for new installations with an electricity capacity of less than 150 kW. These durations may only be extended by a maximum of six months, both in and*

permits.

2.2 Specific permits for renewable energy projects

2.2.1 RES permit-granting threshold

In all CPs, RES are divided by installed power, by type of category, or location (protected areas, distance restrictions from inhabitant areas and nature and/or environmental area limitations etc.). Depending on the power level and type of the energy project (AL, BiH, XK*, ME, MK, RS) or the location of the construction project (GE, MD, UA) the construction permit is granted at a national or local level.

In **Albania**, there is a difference in permit granting procedures between small-scale projects and complex projects, projects of national importance, or strategic investments.[108] There is also a difference between the construction of new facilities and existing generating facilities with a capacity of up to 2 MW of installed power and those which have more than 2 MW.[109] According to the council of Minister's Decision No. 822, dated 7.10.2015. on the approval of procedures for building new capacity which are not subject to concessions, the construction of new facilities and existing generating facilities with a capacity of up to 2 MW of installed power requires the approval of the Minister. These types of facilities do not need to undergo the concession procedure. For power plants with an installed power capacity of more than 2 MW, construction approval is granted by the Council of Ministers. To request approval for the construction of a generating facility over 2 MW is submitted on the specific form listed in Annex I of Decision No. 822, along with the documentation mentioned in Articles 7 to 10 of the same decision, which includes the EIA Report of the proposed project. Depending on the specific type of RES, additional information may be provided. Regardless of the type, compliance with environmental norms for air, water, and soil discharges, as well as for every environmental component, according to the legislation in force in the field of the environment, is needed. A feasibility study that includes detailed and reliable information regarding the proposed project's environmental impact based on the EIA Report is also needed.

In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, The Law on Spatial Planning and Land Use at the level of the Federation of Bosnia and Herzegovina prescribes the jurisdiction of the Federal Ministry of Spatial Planning, which issues permits for construction in accordance with the provisions of this law. In Bosnia and Herzegovina, in the

outside the designated areas. All extensions need to be reported to the project developer explaining the extraordinary circumstances that justified the extension. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202302413

[108] *Law No. 107/2014 on the territory planning and Development (Official Gazette of Republic of Albania", no. 137/15, 126/15, 75/17, 193/20).*

[109] *Decision No. 822, dated 7.10.2015. on the approval of procedures for building new capacity which are not subject to concessions, amended by Decision No. 718 dated 12.10.2016, amended by Decision No. 633 dated 27.10.2021, and amended by Decision No. 192 dated 04.05.2023.*

entity Federation of Bosnia and Herzegovina, competence is divided between entity-level and canton-level organs, depending on the size of the facility. In In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina the Urban Planning Consent is issued by the competent local self-government. Exceptions are projects of specific importance to the canton or an entity. Cantons usually regulate project implementations spreading in the territory of two or more municipalities/cities. There are few exemptions when the Urban Planning Consent is issued by the entity-level such as the construction of an electric power plant with an installed capacity of 30 MW or more, along with associated buildings or wind farms accompanied with a minimum of 4 wind turbines. According to the Law on Spatial Planning and Land Use at the level of the Federation of Bosnia and Herzegovina in Art. 17. stipulates that the area of special characteristics of the Federation is determined especially for the area of construction of large hydropower buildings (more than 30 MW of installed power) determined by the Spatial Plan of the Federation. Besides, it is the entity's jurisdiction when the construction is spread in the territory of two or more cantons as well. Location Conditions are issued by the municipality for electricity power plants from RES up to 250 kW of capacity, otherwise, it is issued by the Ministry of Spatial Planning, Construction, and Ecology of Republika Srpska.

In **Georgia**, the Code of Georgia on Spatial Planning, Architectural, and Construction Activities divides the buildings and structures into five classes (I, II, III, IV, and V). The class number is given to the building or structure considering the risk level to human health and safety and the environment. The higher the risk, the higher the class number of the building or structure. For buildings/structures that fall into classes II, III, and IV local self-government bodies are authorized to issue a construction permit. Technical and Construction Supervision agency under the Ministry of Economy and Sustainable Development of Georgia issues construction permits for class V buildings/structures. Class I includes hydropower plants (less than 50 kW), solar and biogas installations, and overhead power lines (less than 35 kV). Class III includes wind power plants, hydropower plants (up to 10000 kW), electrical substations (within 35 - 110 kW), and geothermal power plants. Class IV includes hydropower plants (within 10-50 MW), overhead power lines (less than 220 kV), and electrical substations (within 220 kV). For the construction of class I buildings and structures notification to the local self-government is required. For the construction of class II, III, IV, and V buildings and structures construction permit is mandatory. However, a municipality can allow notification to the local self-government for class II buildings as well.[110]

In **Kosovo*** renewable energy projects with a power of less than 10 MW are classified as type II category of construction works (construction works of medium risk such as hydropower with relevant dams, thermal power plants, objects for producing energy from renewable energy sources, and also power plants with combined production)[111], while those with a power of more than 10 MW are classified as type III category of construction works (construction works of

[110] *How to obtain a construction permit in Georgia, Teona Zhizhiashvili, Vano Gogelia, PwC Georgia, 2019., https://www.investingeorgia.org/en/ajax/downloadFile/1052/How_to_obtain_a_construction_permit_in_Georgia.pdf*

[111] *Administrative Instruction MESP No. 04/2017 on the construction categorization, ("Official Gazette of the Republic of Kosova", no. MMPH-04/2017-UA). https://gzk.rks-gov.net/ActDetail.aspx?ActID=14819*

high risk and national interest as hydropower dams and power plants with the power of 10 MW or more, power plants with the power of 10 MW or more, power plant-electrical heating plants with the power of 10 MW or more and also electrical transmission lines and transforming station of 110 KV or more)[112]. For type II categories, the competent authority for issuing the construction permit is the municipality, while for type III the competent authority is the Ministry of Environment, Spatial Planning, and Infrastructure.

In **North Macedonia**, the first category of constructions are nuclear power stations, thermal power stations, and hydropower stations with a capacity of 1 MW and more, long-distance transmission lines with a voltage level of 35 kV and more, constructions for generation of electrical energy from renewable energy sources with a capacity exceeding 1 MW, transformers with voltage level of 35 kV and more. The second category of constructions are thermal and hydropower stations with a capacity of up to 1 MW, windmills, constructions for the generation of electrical energy from renewable energy sources with a capacity of up to 1 MW, solar power plants installed on the ground, long-distance transmission lines with a voltage level of up to 35 kV, and transformers with voltage level of up to 35 kV. For the first category of construction, the competent authority for issuing the construction permit is the Government, while for the second category of construction, the competent authority is the municipality.[113] According to the Energy Law, the project developer must have authorization for construction, from the Government, for the production of electricity from renewable energy sources if the power plant has an installed capacity above 10 MW.[114] The Ministry of Transport and Communications is the competent authority issuing a construction permit for power plants from renewable energy sources with an installed capacity of over 1 MW, while the municipality on whose territory the power plant from renewable energy sources is planned to be constructed is the competent authority for issuing a construction permit for those power plants with an installed capacity of up to 1 MW.

In **Montenegro**, complex engineering structures, are, among others, distribution and transmission power facilities of voltage level 35 kV and higher (overhead and underground transmission lines and substations), power plants with a capacity of 1 MW and more (hydroelectric power plants, thermal power plants, wind power plants, solar power plants, etc.), structures for production, transport and distribution of thermal energy for district heating and cooling with a capacity of 1 MW and more, structures for production, transport and distribution of thermal energy for industrial use with a capacity of 1 MW and more, and power plants for obtaining energy from waste with a power of 1 MW and more.[115] A competent authority issuing construction permits for the building of a complex engineering structure is the Ministry of

---

[112] Annex 1 of Law No. 04/L-110 on constructions ("Official Gazette of the Republic of Kosova", no. 18/2012). https://gzk.rks-gov.net/ActDetail.aspx?ActID=2833

[113] Law on Construction ("Official Gazette of the Republic of North Macedonia", no. 130/09, 124/10, 18/11, 36/11, 54/11, 13/12, 144/12, 25/13, 79/13, 137/13, 163/13, 27/14, 28/14, 42/14, 115/14, 149/14, 187/14, 44/15, 129/15, 217/15,226/15, 30/16, 31/16, 39/16, 71/16, 132/16, 35/18, 64/18,168/18, 244/19, 18/20 and 279/20).

[114] Energy Law ("Official Gazette of the Republic of North Macedonia", no. 16/11, 136/11, 79/13, 164/13, 41/14, 151/14, 33/15, 192/15, 06/16, 96/18, 96/19, 236/22).

[115] Law on Spatial Planning and Construction of Structures („Official Gazette of the Republic of Montenegro", No. 64/17, 44/18, 63/18, 11/19, 82/20, 86/22), Article 172.

Tourism, Ecology, Sustainable Development and Northern Region Development. For other facilities, the issuing of documents is the responsibility of the local government body.[116]

In **Moldova,** Law 163/2010 on the authorization of the execution of construction works[117] does not divide construction for the use of renewable energy sources by type and power. It only provides that construction works can be performed without the urban-planning certificate for design and the construction permit for power plants using renewable energy sources within the limit of individual houses within the limit of the private land on which the power plant is located. An issuer of the construction permit is the executive authority of the local public administration.

In **Serbia**, the Ministry of Construction, Transport and Infrastructure is the competent authority for issuing the location requirements and construction permits for power plants for the production of biogas with a capacity of more than 100 t/year, renewable energy power plans with power 10 MW and more, thermal power plants with power 10 MW and more, and other power plants for electricity production with power 10 MW and more, as well as for power lines and transformation stations 110 kV and more. For all other energy projects that are not previously mentioned, the competent authority is the unit of local self-government in whose territory the project is located.

In **Ukraine**, there is a difference in permit granting procedure between large-scale projects or industrial projects and small renewable energy projects, such as small-scale solar installations, wind turbines, or mini-hydro plants, based on the project's size, location, and specific characteristics. Construction permits are issued by the State Inspection of Architecture and Urbanization of Ukraine (DIAM). An industrial permit is typically required for the operation of facilities that have environmental impacts, including renewable energy projects. This permit focuses on the environmental aspects of the operation, such as emissions, waste management, and other environmental protection measures. For renewable energy projects, an industrial permit would ensure that the operation of the facility, whether it's a wind farm, solar plant, or bioenergy plant, complies with environmental regulations and standards. A construction permit is required for the physical construction of facilities, including renewable energy power plants. This permit involves the approval of the design, safety, and compliance with zoning and land-use regulations. It ensures that the construction meets all the necessary construction codes and standards. For renewable energy projects, a construction permit would be needed for the initial development phase, which includes building the structures necessary to house the equipment (like solar panels or wind turbines) and related infrastructure.

2.2.2Small-scale and self-consumption RES projects

In AL, XK*, MD, ME, MK, in Bosnia and Herzegovina, in the entity Republika Srpska, and RS a construction permit is not necessary for solar power plants installed on buildings/houses

[116] *Law on Spatial Planning and Construction of Structures („Official Gazette of the Republic of Montenegro", No. 64/17, 44/18, 63/18, 11/19, 82/20, 86/22), Article 181.*

[117] *Law 163/2010 on the authorization of the execution of construction works („Official Gazette of the Republic of Moldova", No. 155-158/2010), Article 2., Article 14.*

rooftops connected to the energy distribution grid and which the project developer uses for his own needs.

In **Albania**, regarding the self-consumption of the electricity produced by renewable sources, the New Renewable Energy Law[118] stipulates that those renewable self-consumers will have a maximum capacity of 500 kW and will have the right to generate, consume, store, and sell excess production of renewable electricity, through bilateral agreements, electricity suppliers and trade agreements with their counterparts, without facing discriminatory or disproportionate burdens. According to the Regulation for Development of the Territory, installation of photovoltaic panels is classified as works for which no construction permits are required, but their proceeding is allowed only on the basis of a preliminary declaration of works.

In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, according to the Law on Spatial Planning and Land Use, for all power plants, it is necessary to obtain a construction permit. Amendments to the Law on Spatial Planning and Land Use (currently valid from 2021[119]) are in the process from 2022, which stipulates that upon adoption for the construction of small solar power plants, such as those on the roofs of buildings/houses, in the territory of the Federation of Bosnia and Herzegovina, they will no longer need a license to perform energy related activities as well as energy, urban, construction, and use permits.

In Bosnia and Herzegovina, in the entity Republika Srpska, a construction permit is not required for power plants up to 50 kW, if they are built on buildings/houses that already have a construction permit. When it comes to prosumers, the maximum installed capacity per individual plant is limited to 150 kW, and the installed capacity of the power plant cannot be greater than the consumer's approved connection capacity.

In **Kosovo***, according to the Administrative Instruction No. 15/2023[120] a construction permit is not required for the installation of photovoltaic solar panels on the roof, for electricity generation for self-consumption with an installed capacity of up to 7 kW, as defined by the relevant legislation on energy. To become a prosumer in Kosovo, the project developer must apply and receive authorization from the Energy Regulatory Office (ERO). After completing the installation on site and obtaining ERO authorization as a self-consumption generator, the next step is that the project developer submits the request for technical acceptance at KEDS (DSO). After all the above-mentioned procedures are completed, the supplier will prepare the agreement for self-consumption (for generating capacities from renewable energy sources under the support scheme for self-consumption) which must be signed between the supplier

[118] Law no. 24/2023 on "Promotion of the use of energy from renewable sources"("Official Gazette of the Republic of Albania", no. 64/2023), Article 20. https://www.ere.gov.al/images/files/2023/06/06/ligj_nr._24_dt._23.3.2023.pdf

[119] Law on Spatial Planning and Land Use ("Official Gazette of Federation of Bosnia and Herzegovina", no. 2/06, 72/07, 32/08, 4/10, 13/10, 45/10, 85/21 i 92/21), https://fmpu.gov.ba/legislativa/zakoni/

[120] Administrative Instruction MESPI No. 15/2023 on amending and supplementing the administrative instruction MESP No. 08/2013 on construction works for which a construction permit is not required, published 05.09.2023.

and the prosumer.[121]

In **Moldova**, according to the Article 14 (3) of the Law No. 163/2010[122] power plants that use renewable energy sources are exempt from certain requirements if they are installed on private land for individual houses (including family houses, duplex houses, and row houses). This exemption applies to small projects, mostly photovoltaics, with a certain kW limit. For such projects, power plants need only be designed for the electricity and resistance compartment and do not require an urban planning certificate for the design or a construction permit. Therefore, these projects are not subject to EIA procedure, including screening. Producers of electricity from renewable sources, including prosumers of electricity from renewable sources, benefit from a simplified procedure for connecting the small-capacity power plant to the grid, through a simplified notification, provided that the stability, reliability, and safety of the electrical network is maintained. The simplified notification procedure is described in the Regulation regarding the connection to the electricity networks and the provision of electricity transport and distribution services, approved in accordance with Law no. 107/2016 regarding electricity.

In **Montenegro**, a prosumer who plans to connect a small power plant with power up to 10 kVA on an existing object must submit the following documents to CEDIS[123]: request for the issuance of conditions for the preparation of technical documentation for the connection of a small power plant to the distribution system, preliminary design or a single-pole scheme certified by an authorized organization and proof of ownership of the object. CEDIS, if all the necessary information and documentation have been submitted, after checking the possibility of connection, issues the Technical Conditions for Connection. After that, the prosumer applies for connection/request for the issuance of consent for the connection of a small power plant to the distribution system. Along with the request, a permit from the competent secretariat for the installation of photovoltaic panels on the building and a certified single-pole scheme of the small power plant and connection shall be submitted. Then, CEDIS, if all the necessary information and documentation have been submitted, after verifying the possibility of connection, issues a Decision on approval for connection. After that, the prosumer submits notice of fulfilment of contractual obligations/requests for concluding a contract in connection to the distribution system. Along with the notice/request, the equipment manufacturer's certificates, grounding certificate, contractor's statement, certified certificate, and report (expert opinion) of the authorized organization that the relevant prosumer installations meet the technical conditions ensuring the safety of people and property are submitted. CEDIS, if all the necessary information and documentation have been submitted, concludes the Connection Agreement with the prosumer.

In **North Macedonia**, under the amendments to the Building Law (October 2022), a construction permit is not necessary for photovoltaic power plants installed on rooftops,

---

[121] Guideline for becoming a prosumer, KEDS, July 2021 https://www.keds-energy.com/Uploads/Data/Docs/BecomeaProsumer-ENG_g46pCcUxSj.pdf

[122] Law No. 163/2010 on the authorization of the execution of construction works, ("Official Gazette of Moldova", no. 155-158/549), article 14 (3).

[123] Crnogorski elektrodistributivni sistem (Montenegrin Electric Distribution System).

whereby they use the produced electricity for their own consumption. For such a power plant, the project developer is obliged to submit a notification to install the photovoltaic power plant to the unit of the local authority in whose territory the object on which it is planned to be installed is located. To the notification is attached an extract from the Central Register of the Republic of North Macedonia or identity card, certificate of ownership for the object on which the photovoltaic power plant is planned to be installed, written consent for the installation of the photovoltaic power plant, basic project for setting up a photovoltaic power plant. A community of tenants can install solar power plants on residential buildings, although such projects need the majority of apartment owners' formal approval. Prior to the reforms, each municipality established its own rules, which caused delays. As a result, North Macedonia has the largest capacity for self-consumption among the CPs in the Western Balkans. Realized yearly connection of prosumers (self-consumption) to the distribution grid ranges from 6 MW up until 2019 to 58 MW only in 2022.

In **Serbia**, according to the Rulebook on Special Types of Buildings and Special Types of Works for which it is not necessary to obtain an act of the competent authorities[124], photovoltaic modules on rooftops that are built on the same parcel plot as the main structure and are not connected to the distribution grid are not subject to acquiring permits needed for construction. The Law on the Use of Renewable Energy Sources provides a simplified procedure for individual households with photovoltaic modules direct metering up to 50 KW and a customer's facility that is not a household or a residential community with an installed production capacity of photovoltaic modules up to 10.8 KW. A simplified procedure implies that no act of the competent authority is required to construct the photovoltaic module. According to the simplified procedure, there is no need to obtain the construction permit and there is no legislation that would require the project developers to engage in the EIA procedure.

In **Ukraine**, for small renewable energy projects, such as small-scale solar installations, wind turbines, or mini-hydro plants, the requirement for permits can vary significantly based on the project's size, location, and specific characteristics. While small renewable energy projects may not require the full range of permits needed for larger industrial constructions, they still need to comply with a subset of these requirements, particularly those ensuring legal use of land, adherence to local planning laws, and basic safety and environmental standards.

It is recommended to establish a simplified procedure for small-scale RES projects, in those CPs (In Bosnia and Herzegovina in the entity Federation of Bosnia and Herzegovina, GE) which do not have it. The development of small hydropower plants is excluded from this recommendation due to their significant impact on several different factors, for example, nature and biodiversity, population, human health, agriculture soil, water, and landscape. If such impacts and risks are not properly assessed in the project development phase, the negative consequences may be even greater and, in certain cases, irreparable. Local

[124] *Rulebook on Special Types of Buildings and Special Types of Works for which it is not necessary to obtain an act of the Competent Authority ("Official Gazette of Republic of Serbia", no. 87/23), Article 2 (1(5)). https://www.paragraf.rs/propisi/pravilnik-posebne-vrste-objekata-radova-za-koje-nije-potrebno-pribavljati-akt.html*

communities depending on the use of small watercourses in remote areas may be disproportionally affected by those damages.[125]

Self-consumption projects impacts can be compared to the one of small-scale projects. Reducing the procedure for self-consumption projects can lead to greater investment by citizens in such projects.

Examples of simplified procedure (Austria, Czechia, Portugal, Spain).[126]
Austria: In Upper Austria, there is an exemption from the electricity generation licence for small hydropower plants with a capacity of up to 400 kW. This is seen as a simplification of the procedure. The Building Code in the province of Carinthia was mentioned as a positive example. The Code is currently being revised and will stipulate that all PV systems installed on a roof should be completely notification-free. This would mean significantly less effort for the planning of these systems. Chechia: Procedures are simplified for rooftop PV projects with a capacity of up to 50 kWp. For these projects, no construction permit is needed. Previously this limit was set at 20 kWp. The basis for this is the amendment of the State Energy Policy from 2015. Portugal: For certain small-medium sized power plants, it is only necessary to notify the (Portuguese) Directorate-General of Energy and Geology (DGEG) of their intention to connect the unit to the grid – and, for specific cases, not even notification is required. Such an instrument provides agility to photovoltaic projects that fit in the criteria, reducing costs and optimising the time efficiency of projects. Spain: The Autonomous Community of Andalucía does not request a building permit for self-consumption units with power up to 10 kW. UNEF and SolarPower Europe conducted a study and reported that in many European countries (such as Germany, the Netherlands, Italy, and Sweden, among others) self-consumption units only require prior notification to the municipality. Others, however, require a building permit, which can delay the process up to 8 months.

2.2.3RES projects and public interest

In all CPs, legislation related to construction does not classify renewable energy projects as projects of public interest. However, in some CPs (MK, ME, XK*, RS), the classification of renewable energy projects as projects of public interest is determined in legislation related to energy (Energy Law, Law on Use of Renewable Energy Sources, etc.). It is recommended to implement the public interest principle in those CPs (AL, BiH, GE, MD, UA) which do not have it. According to the Directive (EU) 2023/2413[127], all Member States (accordingly CPs too) shall ensure that, in the permit-granting procedure, the planning, construction and operation of renewable energy plants, the connection of such plants to the grid, the related grid itself, and storage assets are presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in individual cases. But, in duly justified and

[125] *Policy guidelines by the Energy Community Secretariat on small hydropower projects in the Energy Community, 17 September 2020, file:///C:/Users/msalopek/Desktop/Task%202%20finalno/HPP_PG_02-2020%20(1).pdf*

[126] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[127] *Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202302413*

specific circumstances, restrict the application of overriding public interest to certain parts of the territory, to certain types of technology or to projects with certain technical characteristics in accordance with the priorities set out in their integrated national energy and climate plans, each Contracting Party may determine.[128] This concept implies that renewable energy projects are considered a priority and receive preferential treatment during permitting processes and land-use planning, with certain limitations. For example, the development of small hydropower plants can be limited due to ensuring that a potential adverse impact on the water body or water bodies concerned is justified and that all relevant mitigation measures are implemented. This would ensure a good working balance between the expansion of renewables and other societal interests such as the protection of biodiversity. It would help deal with the legal challenges that so often delay the construction of new renewables. Given the need to accelerate the deployment of energy from renewable sources, the designation of renewable acceleration areas should not prevent the ongoing and future installation of renewable energy projects in all areas available for renewable energy deployment. Such projects should remain subject to the obligation to carry out a dedicated environmental impact assessment pursuant to the EIA Directive and should be subject to the permit-granting procedures applicable to renewable energy projects located outside renewables acceleration areas.[129]

For the benefit of the rapid deployment of energy from renewable sources and because of their overall highly sustainable and environmentally beneficial quality, CPs (AL, BiH, GE, MD, UA) that do not have a determination of public interest principle in legislation should take into account the contribution of energy from renewable sources towards meeting environmental and climate change objectives, in particular when compared to non-renewable energy installations.[130]

[128] *Article 16f of Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202302413*

[129] *Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202302413*

[130] *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) (Text with EEA relevance.), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018L2001*

Examples of national legislation of implementation of the overriding public interest principle (Germany, Austria)[131].
In Poland, there is a Coordinator for negotiations with the President of the Polish Energy Regulatory Office (ERO), which is responsible for conducting out-of-court dispute settlement procedures between renewable energy prosumers and energy companies. Among other things, the coordinator deals with questions related to the grid connection of micro-installations and the provision of electricity transmission or distribution services. The key role of the coordinator is to help the parties to resolve the dispute. His key tasks are therefore to bring the parties' positions closer together and to propose a solution to them.

If the principle of overriding public interest and area of acceleration is applied, it does not exclude compensation measures for project developers, which can be monetary or non-monetary, to the local community or on the national level. Environmental compensation measures should address the negative impacts of human activities on nature, including loss of biodiversity and ecosystem services. However, successful compensation, achieving no net loss, requires broad quantitative information on different types of losses and gains. In some CPs, like North Macedonia, the secondary legislation for compensation measures is missing. It is recommended to establish a working group of independent experts that should analyse in each Contracting Party the scope of compensatory schemes that varies in what is considered compensable, across schemes with different needs. Compensation needs and selecting suitable compensation options, merging science-based information with normative issues and local concerns, should be identified. The financial mechanism that would secure the execution of the compensation measures, must be secured before approval of the project.

Compensation measures for negative effects on the landscape have to be taken into account in the early phase of planning projects in the region and they are considered beneficial to increase public acceptance of RES projects.

[131] *European Commission, Directorate-General for Energy, Tallat-Kelpšaitė, J., Brückmann, R., Banasiak, J. et al., Technical support for RES policy development and implementation – simplification of permission and administrative procedures for RES installations (RES Simplify) – Final report, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2833/894296*

Example of compensation measures for negative effects on the landscape (Germany).
Raa-Besenbek, a community of 600 people in the northern Schleswig-Holstein region in Germany is generating income for all residents and a second cash crop for farmers with a community wind farm that dates back to 1999, recently boosted its capacity from four turbines to eight, and now produces about 50 million kilowatt-hours of electricity per year, enough to power about 16,000 homes. The meadows on which wind turbines are built in Raa-Besenbek mostly belong to farmers. With recent changes under Germany's 2021 Renewable Energy Act, villagers who've invested in the wind farm receive a guaranteed share of the income, at a rate of 0.2 cents per kilowatt-hour, and most of the tax revenue on that income stays in the community. That changes the attitude toward these wind farms because the wind turbines are their own—they belong to the people and the village.[132]

2.2.4Hydropower projects and water permit

In all CPs, to obtain a construction permit for hydropower plants, a water permit is required, except in Kosovo* where the construction permit precedes the water permit.

In **Albania**, there is an absence of river basin management plans which poses significant challenges for the relevant ministry in effectively overseeing the quality and quantity of water resources at the basin level. Additionally, the river basin authorities presently grant water permits using individual regulations or decisions from the National Water Council, rather than relying on prior, basin-specific analyses and studies.[133]

In Bosnia and Herzegovina, in the entity **Federation of Bosnia and Herzegovina** the competence for issuing water acts is determined based on the location of the planned structure and the division of competencies as described by the Law on Water. Specific requirements for hydropower plants are obtained according to the Law on Water and Regulation on Location Requirements. Law on Water provides the following water acts: preliminary water consent, water consent and water permit.[134] Water consent and water permit are administrative acts adopted under the Law on General Administrative Procedure. The preliminary water consent shall be obtained as part of the EIA procedure for structures which require EIA procedure[135], as part of the procedure for granting urban planning consent for structures which not require EIA procedure[136] and as part of the procedure of issuing concessions for waters and water properties. Before initiating the concession granting procedure, the authority in charge of issuing concessions for the use of water and water

[132] *https://www.theenergymix.com/community-wind-farm-earns-support-generates-income-in-german-village/*

[133] *Albania support to Water Management, INSTRUMENT FOR PRE-ACCESSION ASSISTANCE (IPA II) 2014-2020, https://neighbourhood-enlargement.ec.europa.eu/system/files/2017-04/ipa_2016-038718-5_support_to_water_management.pdf*

[134] *Law on Water of the FBiH ("Official Gazette of Federation of Bosnia and Herzegovina", no. 76/06), Article. 107.*

[135] *Law on Water of the FBiH ("Official Gazette of Federation of Bosnia and Herzegovina", no. 76/06), Article. 112 (1).*

[136] *Law on Water of the FBiH ("Official Gazette of Federation of Bosnia and Herzegovina", no. 76/06), Article. 111 (2).*

property shall obtain preliminary water consent.[137] A water consent shall be used to establish that the documentation attached to the application for a water consent is in accordance with the preliminary water consent. A water permit is issued after water consent for a limited period, which shall not exceed 15 years. These plans should be used not only to resolve potential conflicts arising from different needs for the use of water resources but also to determine whether exceptions to the objectives of the law are justified. However, not always the plans meet these needs. In Bosnia and Herzegovina, in the entity Republika Srpska, in accordance with the Law on Water[138], there are the following water acts: water guidelines, water consents and water permit. Water guidelines determine the conditions that must be met in the documentation for the construction. The water consent establishes that the documentation attached to the request for the issuance of the water consent is in accordance with the issued water guidelines, water regulations and planning documents. A water permit is a prerequisite for issuing a building permit and is valid for 15 years.

In **Kosovo***, before obtaining the water permit, water conditions and water consent must be obtained. Water permits for energy projects can be valid for up to 40 years while the validity for other projects is no longer than 15 years. The Law on Waters of Kosovo[139] sets the rules on the water right issuance and the conditions. There are two ways to gain the water right, one is by the water permit and the other with concession. Further on, Articles 72 and 78 of the law provide details on the procedure to receive a water permit and also set the rule on when you need the concession. It specifies that the concession shall be issued by the Ministry of Environment, Spatial Planning, and Infrastructure and awarded, among others, for the use of waterpower for the generation of electricity. The water permits have been granted for hydropower plants instead of concessions. The main law violations found for the construction of hydropower plants are detected in the shadow report "Ecological breakdown – It's time to act".[140] In the same report, it has been given very precise recommendations on page 17.

All hydropower plant projects must be in line with the river basin management plan. River basin management plans serve as the foundation for achieving a healthy status of water bodies. These plans are to be used to resolve potential conflicts arising from different needs for the use of water resources but also to determine whether exceptions to the objectives of the law are justified. Also, it has to ensure the participation of the general public including users of water in the establishment and updating of river basin management plans.[141] It is necessary for all CPs to provide proper information on planned measures and to report on progress with

---

[137] Law on Water of the FBiH ("Official Gazette of Federation of Bosnia and Herzegovina", no. 767/06), Article. 113.

[138] Law on Water ("Official Gazette of Republika Srpska", no. 50/06, 92/09,121/12, 74/17).

[139] Law No. 04/L-147 on Waters of Kosovo („Official Gazette of Kosova", no. 10/23), https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=8659

[140] The shadow report "Ecological breakdown – It's time to act", September 2022, https://wwfeu.awsassets.panda.org/downloads/kosova_shadow_report_final_eng_web.pdf?7744866/Ecological-breakdown--Its-time-to-act

[141] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000

establishing a framework for Community action in the field of water policy, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32000L0060

their implementation with a view to the involvement of the general public before final decisions on the necessary measures are adopted, regarding water management. For the river basin district, the competent authority responsible for water management of the Contracting Party must enact and publish the river basin management plan for comments to the public.

2.2.5 Water permit and EIA

In some CPs, before obtaining a water permit, it is necessary to have EIA consent approval (in Bosnia and Herzegovina in the entity Federation of Bosnia and Herzegovina, MK, XK*). In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, in cases of facilities, plants or activities which shall be subject to the EIA procedure before obtaining EIA consent, the authority in charge of the issuance of water acts shall take part in such EIA on request by the competent authority conducting the EIA procedure. In **Serbia**, the Law on Waters does not explicitly reference the EIA procedure as a distinct procedure or requirement for granting a water permit. Water conditions for hydropower plants are obtained within the unified procedure and are a part of the location requirements that precede the EIA procedure. In **Kosovo***, many hydropower plants have started operating without having an environmental permit, although this is required by law.[142] In **North Macedonia**, the EIA consent approval is a compulsory prerequisite to initiate the process of obtaining the water permit.

It is recommended that the EIA procedure be carried out before obtaining a water permit in all countries where this is not the case (AL, GE, MD, ME, RS, UA). Also, construction permit granting must follow the water permit granting procedure. In countries where such a rule exists (XK*), i.e. issuing water permits and construction permits after the EIA procedure has been carried out, that rule must be applied and not violated (XK*).

2.2.6Concession agreements and EIA

In **Albania**, according to the European Commission's Report[143], due to the large number of planned small hydropower plants and negative effects on communities, concession contracts for hydropower plants are not sustainable. In this regard, further efforts are needed to frame hydropower development in a way that prioritizes environmental protection. It is emphasised that hydropower investment should strictly comply with national and international environmental, nature protection and water management standards, involve proper public participation and consultations, and be subject to SEA and EIA Reports that include high-quality assessments of the cumulative impact on nature and biodiversity. Further alignment of the legislative framework in concessions and public-private partnerships with the EU environmental acquis is needed.

---

[142] *The shadow report "Ecological breakdown – It's time to act", September 2022, page 16. https://wwfeu.awsassets.panda.org/downloads/kosova_shadow_report_final_eng_web.pdf?7744866/Ecological-breakdown--Its-time-to-act*

[143] *COMMISSION STAFF WORKING DOCUMENT Albania 2022 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2022 Communication on EU Enlargement policy, SWD (2022) 332 final, October 2022, available at https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-11/SWD_2023_690%20Albania%20report.pdf*

A specific issue in the Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina is that competence for issuing concessions for renewable energy is split between the federal and cantonal levels and is not uniformly regulated at the cantonal level. According to the Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina Law on Concessions[144], for hydropower plants of 5 MW or more, the Federal Government is responsible for issuing concessions, while cantons can issue them for smaller plants. Concessions for wind and solar plants of all sizes can be issued by cantons, but several of them have not adopted clear legislation on this issue. In some cantons, the use of land designated for construction can also be subject to a concession. In such cases, all kinds of electricity generation projects can be subject to such concessions. It is recommended to adopt amendments to the Laws on Concessions in all cantons that have yet to do so. This will harmonize the rules on concessions for wind and solar power plants.

In **Kosovo***, Law No. 04/L-045 on public-private partnerships outlines the criteria for evaluating and comparing technical proposals for public-private partnerships and concessions, one of which is compliance with environmental standards. However, the laws governing these partnerships and concessions do not clarify how environmental compliance is assessed prior to the awarding of these contracts.

It is recommended that the RES concession decision and concession agreements outline the obligations with regards to EIA, construction and other development permits.

2.3 Public participation and early engagement in construction permit

In the CPs GE, ME, MD, MK, and RS, the public is not involved in the issuing of the construction permit, so the participation process relies only on the participation within the EIA. In **Albania,** the public is involved in the construction permit granting process. In Albania, the request for a construction permit for an energy project with all accompanying documents is available on the Ministry of Infrastructure and Energy's official website for public consultation for 15 days. After consultation with the public, the project developer gives the explanation following comments from public concerns received. In **Kosovo***, public consultation is not foreseen while issuing an environmental permit (development consent). However, the inclusion of the public is envisaged when issuing the necessary water acts (water conditions, water consent, water permit) which precede the construction permit (water conditions, water consent). If the application is complete and meets all administrative requirements, the competent authority begins with the public participation process. An announcement of the request is made in a daily newspaper that is distributed throughout the territory of Kosovo, as well as on the official website of the competent authority. The content of the announcement includes information on the time and way the complete request can be viewed, as well as the period during which opinions can be submitted. Comments and questions from the public concerned are submitted in writing (hard copy) to the competent authority and answered

[144] *Law on Concessions of FBiH ("Official Gazette of FBiH", no. 40/02 and 61/06).*

within 15 days. According to the Report from KOSID,[145] there are numerous irregularities regarding the public consultation process. The problem is a lack of timely information or obstruction of access to information that could involve the community in public consultations.

In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina, the public is involved in the construction permit granting process. To obtain a construction permit, project developers must submit a report on the inspection of the main project design. Public participation is granted also by Article 124 of the Law on Water[146], whereas the competent body in order to ensure public participation and resolve any potential conflict of interest, prior to issuing a preliminary water authorization, notifies interested parties and the public in the river basin district of the application, by posting an announcement on the bulletin board of the authority in charge of the issuance of water acts, through advertisements in the local media and, in cases of inter-entity impact, also through at least two public communication media accessible to the public in Bosnia and Herzegovina, in the entity Republika Srpska. The public is then entitled to submit their comments and suggestions within the deadline stated in the public announcement, no longer than 30 days. In Bosnia and Herzegovina, in the entity Republika Srpska, the environmental permit (development consent) is issued by the competent authority[147] based on the project developer's formal application. Upon receiving a complete application, the competent authority informs the public and interested parties by publishing a notification in one of the daily newspapers in Bosnia and Herzegovina, in the entity Republika Srpska at the project developer's expense. Interested parties may submit to the competent authority their opinions on the project and attached documents in writing within 30 days from the date of publication of the notification. The competent authority is required to issue an environmental permit within 60 days. The environmental permit is valid for a maximum of 5 years, after which the project developer is required to renew it.

In **Ukraine**, the active participation of the public and non-governmental organizations can provide an additional level of control of the project. Public organizations can monitor compliance with the conditions of the EIA consent and make demands for taking measures to reduce the impact on the environment.

The first step in a participatory process is providing information. This can entail the handing out of information material or a discussion between experts and citizens. Stakeholders can express their views on the way space is used, which can be considered when spatial planning is taking place. This early participation is important as at this point citizens can still influence the siting of renewable planning. This process is still very open, and its outcome is not clearly defined. Although the general area of a project cannot be influenced during project planning, an early engagement during this phase is also important.

[145] *Legal Violations Running our rivers dry (November 2020), KOSID – Kosovo Civil Society Consortium for Sustainable Development, available at https://www.kosid.eu.com/wp-content/uploads/2020/12/Legal-violations-running-rivers-dry-KOSID-.pdf*

[146] *Law on Water ("Official Gazette of the Federation of Bosnia and Herzegovina", no. 70/06)*

[147] *Ministry for Spatial Planning, Construction and Ecology of Republika Srpska.*

Example of early engagement in local information, dissemination, and discussion (France).[148]
Even if there is no obligation to consider the opinions of local communities upstream of an onshore wind project, a wind energy company has set up an ethical charter. This charter stipulates a greater consideration of the local community in order to encourage transparent and broad communication so that the population can better understand the general framework of the development of a given project. Thanks to this informal impulse, parliamentary discussions should take place to provide a legal basis for public consultation in the pre-planning stage.

For the projects not subject to EIA or similar, it is recommended that all Contract parties consider the involvement of public participation. The public can be informed electronically and by public notices or by other appropriate means to reach different stakeholder groups. Publication of development consent, usually construction permit should be transparent so other institutions can check the compliance to regulations and the public concerned can submit complaints in a case of violation.

2.4 E-portals for construction permit

Some CPs have electronic communication via a central online portal (AL[149], BiH[150], XK*[151], ME[152], MK[153], MD[154], UA[155],) through which citizens and legal entities can communicate regarding various public services, and which allow applications for different phases of the project. On those online portals, the project developer can submit an application for the issuance of permits, see which documents are required for that, which is the competent authority, what is the issuing process, legal framework, fee and time to issue, etc.

Georgia and **Serbia** have not yet reached that level of providing public services through a central online portal.

In **Montenegro**, some institutions (government[156], local government[157]) have separate databases with information relevant to their field of activity regarding construction. There is no interconnection between these databases, so the information exchange does not take

[148] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[149] *https://e-albania.al/*

[150] *https://euprava.fbih.gov.ba/login?redirectTo=%2Fhome*

[151] *https://ekosova.rks-gov.net/*

[152] *https://www.euprava.me/*

[153] *https://www.gradezna-dozvola.mk/Account/Login?ReturnUrl=%2f*

[154] *https://actpermisiv.gov.md./#/home*

[155] *https://se.diia.gov.ua/en/*

[156] *https://www.gov.me/biblioteka?sort=published_at&dt=17&page=1*

[157] *https://bar.me/lokalna-uprava/sekretarijati/sekretarijat-za-urbanizam-i-prostorno-planiranje/gradevinske-dozvole/*

place, as it should. Information on procedures is not easily available and finding the existing information is practically quite complicated in all CPs.

In **Moldova**[158] and **Albania**[159]**,** there is an overview of possible requests and competent authorities and described procedures to follow for project developers. However, in both countries, the online portal has no service that includes a grid connection procedure.

In **Kosovo***,[160] although there is a central government online portal it is not possible to submit a request for a construction permit electronically, except for two municipalities (Municipality of Prizren and Municipality of Lipjan). In some CPs (MK[161], RS[162]) there is electronic communication via the official website of the competent authority for construction.

In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina there is a central government online portal[163] for the electronic submission of requests, but there are also forms on the official website[164] of the competent authority for construction which can be sent by post.

In **Georgia**, it is possible to submit documents for a construction permit electronically and send a notification about the issuance of a construction permit to a project developer.

It is recommended to improve (AL, BiH, XE, ME, MD, UA) or to develop (GE, MK, RS) a single database on construction matters that is available to the public concerned, enabling more efficient and systematic planning and monitoring of project implementation throughout the whole area of the Contracting Party.

The introduction of e-communication can substitute the use of paper forms and unifies the different application processes. For each application, a digital version of documents is prepared. Documents should contain the necessary information for permitting. After submitting their application online, participants can follow their application process. This way project developers can understand in which phase of the process they are. Officials also benefit from this: they can easily sort, store, and review applications. Thereby, they can get a better overview of all the documents that are present, access them quickly and process them. This e-communication platform should also allow for an easy application (from the developers' point of view) in the context of simplified authorisation procedures and simple notification for grid connection.[165]

---

[158] *https://actpermisiv.gov.md/#/ep/permit/19.*

[159] *https://e-albania.al/eAlbaniaServices/UseService.aspx?service_code=6093*

[160] *https://www.rks-gov.net/*

[161] *https://www.gradezna-dozvola.mk/Account/Login?ReturnUrl=%2f*

[162] *http://gradjevinskedozvole.rs/*

[163] *https://euprava.fbih.gov.ba/login?redirectTo=%2Fhome*

[164] *https://fmpu.gov.ba/download/OdobravanjeGradjenja.html*

[165] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

2.5 Digitalization

An integrated digitalized information system that would make it possible to connect all the existent databases, digitize data stored on paper, and share information between databases of different institutions, and electronic data collection should be developed in all CPs. A central independent information platform could be an appropriate and reliable source of information for all parties involved in the permitting of new plants. Digital versions of documents tailored to each request with the inclusion of necessary information for the permit granting procedure can be prepared and put in a central online portal. Once submitted request for a construction permit online, the project developer shall gain the ability to track the progress of their request, providing clarity regarding the phase of the procedure. This not only gives project developers insight into the status of their requests but has also proven useful for officers. They can organize, store, and review requests with less effort and faster, enabling a comprehensive overview of all relevant documents. This approach improves document accessibility, speeds up their processing, and creates more efficient administrative workflows. Also, it enables the connection of procedures in such a way as to track documents for different stages of implementation (EIA, development consent, water permit, concessions, etc.) as well as different stages of assessment (EIA and other assessments according to different directives). The application of digitization creates security in the circulation of documents. The transformation from paper to digital creates the initial cost of setting up digitization, which includes the creation of the digital platform, the education of officers who will use the platform, its maintenance, etc.

Example of good practice of online tools and digitalisation (Spain).[166]
Spain has created a fully digital permitting process at all levels of the administration for all renewable energy technologies, which significantly streamlined administrative processes throughout the country. National level (all administrations): https://rec.redsara.es/registro/action/are/acceso.do. Example of a local level: https://geria.sedelectronica.es/info.0. Possibility to consult the permitting status of a project: https://sede.miteco.gob.es/portal/site/seMITECO/navServicioContenido.

2.6 One-stop shop for RES

There is no one-stop shop (RES shop) in any Contracting Party, except in Kosovo*, as an organisation at a national, regional, or local level that provides a range of services to project developers to help them overcome barriers in the process of setting up their project at different stages of the permit-granting process. In **Kosovo***, a one-stop shop for RES[167] is

[166] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[167] *https://reskosovo.rks-gov.net/*

established to facilitate the investment process in the renewable energy sector and it operates under the Ministry of Economy.

All Contract Parties (except Kosovo*) have to establish RES shop. It can be different kinds of one-stop shops, one for each stakeholder group, for example for project developers, prosumers, and energy communities. The main benefit for project developers is that they only need to contact a single institution to gather all necessary information and permits to realise their projects. This saves time as all documents are sent to a single contact point. This way project developers do not need to communicate with more than one official who knows all the procedures. Beneficiaries also can be international developers that have little to no local knowledge.

It can support applicants with the permission of their projects. Officials who work at the RES shop communicate with the authorities instead of project developers. This way they gather the permissions of a project. Applicants do not need to engage with more than one official – **RES shop**. They concentrate on the preparation of all documents that are necessary for grid access, construction, electricity production license or the environmental impact assessment.

Another type of **RES shop gives out the permission themselves**. It reviews the documents that are presented by the project developers. Only if documents are not sufficient, they get into contact with other authorities. Designing an RES shop this way relieves authorities, but on the other hand, has high demands on the RES shop employees. As they are the responsible authority that permits, they must be prepared accordingly. Otherwise, this design of the RES shop could also lead to delays in permitting.

A **local RES shop** could support households and small businesses. A **regional RES shop** could deal with medium sized projects by regional project developers. A **national RES shop** could support very large projects. This way, the specialisation of the RES shop can be divided among institutions. Organising the RES shop in this subsidiary way could fulfil different needs when it comes to project planning, e.g. personal contact between consumers and an authority that knows the regional situation. National RES shop on the other hand could be highly specialised in one project type.

A **RES shop also can be designed as optional**. This way project developer can still directly contact a single competent authority. If an optional RES shop is working slowly, the project developer can skip it and directly contact a competent authority, so the permitting procedures can continue. Also, project developers still can benefit from RES shop officers. Project developers that work well with authorities can continue their style of working. This shows that there is a benefit in having different ways to apply for permissions.

Another understanding of **RES shop is that it simply acts as a guide** for project developers. This kind of RES shop simply guides the project developers towards responsible authorities and helps gather permissions. Project developers still would have to apply for permissions themselves.

It is recommended to draft one-stop shop administrative protocols for all CPs. The protocols will clearly outline roles and responsibilities for each participating authority in the decision-making process and integrate mechanisms that ensure transparency and accountability at every stage of the process as well as the options for digitalisation. The one-stop shop

administrative protocol is more flexible than other legal formats of regulation thus enabling fast action if some step of the procedure is problematic or takes time. Protocol also goes with the monitoring plan so the procedure can be improved.

Example of RES shop (Denmark).[168]
The Danish Energy Agency (DEA) serving as an RES shop for offshore procedures is very efficient according to an interviewed stakeholder. All the permitting decisions are coordinated by the DEA with other authorities, which are responsible for different offshore interests. The resulting licenses are thus "comprehensive" in the sense that they are granted on behalf of several authorities and include conditions stipulated by all these. The mentioned licences do not completely preclude the need to obtain permits from other authorities as seen above. The system however eases the process for the developer greatly and provides more certainty that the project can be established, as all relevant authorities have cleared the project on the stated conditions.

Example of RES shop for energy communities (Austria).[169]
The Austrian Coordination Office (COEC) for Energy Communities' initial support programme started shortly after the national legal framework for energy communities had been set up in the summer 2021. COEC's website offers a broad range of detailed information and resources addressing the basic informational needs of communities, in its second financial support programme, COEC decided for its second funding programme to provide support, particularly to communities testing/implementing innovative technological or social concepts.

Example of good practice of informing project developers on energy efficiency and RES (Moldova)[170]

[168] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[169] *Setting up Community energy One-stop-shop, Guidance document, European Commission, https://energy-communities-repository.ec.europa.eu/document/download/1b9aad5d-9b3d-4603-ba2f-a3a7868d82ba_en?filename=ECR_GuidanceDocument_OneStopShops_updated.pdf*

[170] *https://aee.md/ro/page/publica-ii*

To simplify and provide a better understanding to the project developers, the Government appointed the Agency for Energy Efficiency (under the Ministry of Energy) with the attribution of informing the project developers on energy efficiency and RES. Agency for Energy Efficiency's official website provides data about the production of energy from RES, legal basis, annual reports, information on public interest, and specific guidelines.

2.7 Guiding documents

It is recommended, that all CPs, make guidelines for authorities, project developers, and other stakeholders to act as a helping document when it comes to the realization of projects. The guidelines should inform and describe the permitting procedure and thus increase expertise and knowledge amongst all parties involved. It should also contain templates for all application documents and final decisions. The guidelines should inform the project developer about the institution (national or local) that is the competent authority for granting a construction permit for his project. It is recommended to develop structured cooperation between institutions of relevant sectors: environmental protection, construction permits, grid connection, and spatial planning. Constant communication and exchange of information between sectors have to be established.

Providing guidance to applicants throughout their administrative permit application and granting processes by means of an administrative contact point is intended to reduce complexity for project developers and increase efficiency and transparency, including for renewables self-consumers and renewable energy communities. Such guidance is to be provided at an appropriate level of governance, taking into account the specificities of Member States. The single contact points should guide the applicant and facilitate the entire administrative process so that the applicant is not obliged to contact other administrative bodies in order to complete the permit-granting process unless the applicant prefers to do so.[171]

The guidelines should be easily accessible to project developers and the public. Digitalisation is key when it comes to quick, easy, and transparent access to information. A digital central contact point must be implemented to make this access possible. With easy access to these documents project developers and authorities alike can integrate advice into their planning and work. This is true for all documents that can help to ease the process for both sides. Documentation and application templates can be downloaded quickly via a central platform, there is no restriction of use. This can ensure that the applications they receive are uniform and easier to process. In any case, a digital point of contact is of help for both sides.[172]

[171] *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) (Text with EEA relevance.) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018L2001*

[172] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

Example of good practice of guidance documents (Spain, Italy)[173]
Spain: The Spanish Aviation Safety Agency (Agencia Estatal de Seguridad Aérea – AESA) has elaborated guidance material, such as support documentation for the processing of applications. Four form templates are available to assist users in the processing of authorization applications, that can be used by wind power developers for instance. Some Autonomous Communities, such as Andalucía and Extremadura, published a guiding document explaining step by step how to install a renewable energy system for self-consumption. **Italy**: Good practice by the competent authority to provide project developers with guidance on the application process at the beginning of the authorization procedures, for example, the 'MUTA portal' of the Lombardy region.

2.8 Institutional capacity

For some CPs (AL, BiH, GE, MK, MD, UA,) there is no information on the number and educational background of employed officers who participate in the construction permit granting procedure. In **Montenegro**, The Report on the state of work for 2022[174] does not emphasize the need for additional capacities. In **Serbia**, there is a lack of human resources considering the number of requests submitted in the construction permit granting procedure. In **Moldova**, according to the Commission Analytical report on Moldova's alignment with the EU acquis (2023)[175], the institutional capacity needs to increase in the field of energy policy.

Depending on the number of the applications, there should be available officers in order to deal with the applications. The responsible officers have to be trained in order to have a sufficient level of expertise for the relevant aspects which have to be considered during a permission process by that authority. Additional education of officers such as attending courses, seminars, specialized study programs etc. is recommended. It is recommended to establish central departments with experts who are trained in certain legal areas (e.g. location conditions, water permits, concessions, building permits) can help competent authorities on the national and local level to process applications in a timely and valid manner. Such departments could be organised within the framework of the RES shop as described in Chapter 2.6. CPs should establish a monitoring process for the identification of regulatory barriers in the permission processes.

Example of good changes in institutional capacity (Finland, Germany).[176]

[173] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

[174] *https://www.gov.me/en/documents/8fa066dc-0720-4382-9a89-03fea91fc39b*

[175] *Analytical Report following the Communication from the Commission to the European Parliament, the European Council and the Council Commission Opinion on the Republic of Moldova's application for membership of the European Union (Brussels, 1.2.2023 SWD (2023) 32 final), https://neighbourhood-enlargement.ec.europa.eu/commission-analytical-report-moldovas-alignment-eu-acquis_en*

[176] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

Finland: As onshore wind has expanded rapidly within the last decade in Finland, the municipal authorities' expertise with it has also increased drastically. Municipal environmental and construction authorities exchange information with each other and have begun to network country wide. In addition, construction permit decisions from projects all across Finland are public documents and can be consulted as examples when in doubt.
Germany: The government used funds from the Recovery and Resilience Plan to increase the staff of permitting authorities and appeal courts. In several regions the permit granting processes were hindered or slowed down by capacity-related bottlenecks, which targeted funds will address by allowing for more staffing, the development of streamlined processes, adoption of IT infrastructure, and so on.

2.9 Legal review

In all CPs, the decision to refuse a construction permit states the main reasons for the refusal. In all CPs, there is the possibility of declaring a legal remedy against the decision on a construction permit, by natural or legal persons including the public who believe that an administrative act or another administrative activity violated its right or legal interest (AL, XK*, MD, ME, RS, UA), or just by applicants (BiH, MK). The problem occurs in access to information, considering that documentation (requests, decisions) is difficult to find on the websites of the competent authorities.

In all CPs, an administrative appeal can be submitted against any administrative act. It can also be submitted against administrative inaction if the public organ has not responded within the established deadline.

In all CPs, the legislation regulating construction does not mention the mediation/negotiation or alternative mechanisms for solving disputes. No options for mediation are recognized in the current legislation.

It is recommended to establish out-of-court dispute settlement procedures for all CPs.

Example of out-of-court dispute settlement procedures (Poland).[177]

In Poland, there is a Coordinator for negotiations with the President of the Polish Energy Regulatory Office (ERO), which is responsible for conducting out-of-court dispute settlement procedures between renewable energy prosumers and energy companies. Among other things, the coordinator deals with questions related to the grid connection of micro-installations and the provision of electricity transmission or distribution services. The key role of the coordinator is to help the parties to resolve the dispute. His key tasks are therefore to bring the parties' positions closer together and to propose a solution to them.

[177] *RES Simplify – Final report, Publications Office of the European Union, 2023.*

3 Planning and programming national spatial zones for RES

3.1 National Spatial Plan overview

National Spatial Plans (NSPs) are a strategic document that define the direction of development and future trends in spatial development for the CP. They are regulated by legislation – e.g. laws on spatial planning or physical planning, which determine the objectives, principles, and rules of spatial planning, among other aims and principles. They are planned for short term – for a period of 10 years or long term, spanning a period of 20 or 30 years, with 10-year periodical reviews.

All CPs have established national space planning systems, based on national practices, governance systems and legal framework. One of the important aspects of spatial planning is longevity of spatial plans, hierarchical order, and innate public participation.

BiH, XK*, ME, MK and RS have a valid, but outdated SNP, that remains legally in force but is no longer current or reflective of present-day conditions. These SNP were designed to guide development until 2020. Administrative obstacles which include lengthy procedures and legislative obstacles are cited as the main reason for the lack of a valid NSP, for those CPs with no valid National Spatial Plan. According to results obtained from a questionnaires survey, some CPs consider the negative public opinion and feedback as main reasons for the lack of a valid NSP.

CPs that have not yet adopted an NSP rely on laws and codes to overcome legislative obstacles and provide planning principles and direction while the NSP is in the process of preparation or approval.

Regarding the status of spatial plans, the Republic of **Albania** has a valid General National Plan "Shqipëria 2030" from 2015 to 2030 for the entire territory of Albania. With regard to Marine Spatial Planning (MSP), Albania developed Preliminary MSP study of the Vlora area and Preliminary guidelines for MSP elaboration and implementation.

In **Bosnia and Herzegovina,** the development of NSP is up to date with the exception of Brčko District. In Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina the spatial plan is or the period 2008-2028, was drafted and officially adopted by the House of Representatives of the Federation of Bosnia and Herzegovina Parliament in July 2014. The Proposed Spatial Plan of the entity Federation Bosnia and Herzegovina in Bosnia and Herzegovina has not been reviewed or considered by the House of Peoples of the Federation

of Bosnia and Herzegovina Parliament.[178] The current spatial plan of the entity Republika Srpska in Bosnia and Herzegovina is applicable until 2025. The plan was adopted at the session of the National assembly of the Republika Srpska Assembly, February 18, 2015. and published in the "Official Gazette of RS" number 15/2015. The development plan of Brčko District (BD) is the Spatial Plan of Brčko District 2007-2017, which is currently still in use. The validity period of the plan has been extended in accordance with the Law. New Development Strategy of the BD 2018-2038 was adopted in 2022, and after its adoption, the drafting of the new Spatial plan of the BD, and then the Urban plan of the city, has started. According to the strategy, the preparation and adoption of the BD NSP was planned by the end of 2023, and by the end of 2027 the adoption of implementation of spatial planning documents (10 plans). However, the preparation of the plan has not yet commenced.

The adoption of the new NSP in **Georgia** is governed by the provisions of the Code of Georgia on Spatial Planning, Architectural and Construction Activities. The purpose of the Spatial Planning Code is to regulate spatial planning, urban planning, and architectural and construction activities on the territory of Georgia. According to SUDA (LEPL Spatial and Urban Development Agency), administrative obstacles (lengthy procedures, etc.) and legislative obstacles (inconsistency of laws, etc.) are identified as the main reasons for the lack of a valid National Spatial Development Plan. SUDA also cites the lack of spatial data and the lack of qualified experts as additional reasons. The preparation of the plan has not yet commenced.

The current NSP of **Kosovo*** encompasses the period from 2010 to 2020+. **Kosovo*** has also developed Spatial Plans for Special Zones adopted on a national level. The NSP of **Kosovo*** is a multi-sectoral document that identifies the spatial aspect of territorial development and social, economic, and environmental policies with the purpose of creating sustainable and balanced development in the whole territory of **Kosovo***. The Zoning Map of **Kosovo*** is a multi-sectoral document that through charts, maps, photos and text determines the type, destination, planned use of space and action measures that are based on the duration and projections of available public and private investment for the entire territory of **Kosovo***. Spatial Plans for Special Zones are prepared for the areas identified in the Spatial Plan of **Kosovo*** and Zoning Map of **Kosovo***, with special features and require specific organizational, development, use and protection regimes.

Regarding the adoption of detailed SP at the local or regional level, most CPs have achieved up to 50% coverage of their territory. **Kosovo*** is a rare example of a CP with a high coverage of SP adopted at the local level (50-90%)).

In **Moldova**, to overcome some legislative obstacles, the draft Urbanism and Constructions Code was elaborated, which is currently in the process of approval. The acceptance of Government decision No. HG 715/2022, as a part of a framework of regulations designed to ensure the implementation of Law no. 835/1996 on the principles of urbanism and spatial planning was one of the latest steps toward Moldova's NSP.

[178] *USAID Energy Investment Activity Project (EIA) Gap Analysis of Area of Spatial Planning in FBiH, July 2017, available on: https://pdf.usaid.gov/pdf_docs/PA00W514.pdf*

The NSP of **Montenegro** until 2040 is currently under preparation and a public debate that precedes the final plan proposal is underway. According to the information available on the official website of the Government of Montenegro, the Concept of the NSP of Montenegro until 2040 (Phase III) was presented and determined at the Government session held on October 2023.[179] Numerous sectorial studies are listed as basis for this Concept (draft), among others concerning the renewable energy projects that are listed in this Concept.

In **North Macedonia's**, the expired planning period of the valid NSP of the Republic of Macedonia, as well as numerous socio-economic and other changes in the country, confirmed the urgency for adoption of a new Spatial Plan of the Republic of North Macedonia for period 2020-2040. However, preparations for new NSP have not yet commenced. The existing NSP was adopted in 2004 with validity until 2020.

Regarding the status of NSP in **Serbia**, the second NSP of the Republic of Serbia covers the period from 2010 to 2020. The third Spatial Plan of the Republic of Serbia for the period 2021 to 2035 is developed and in the process of adoption.

In **Ukraine**, the primary legislation is the Law of Ukraine "On Regulation of Urban Development" (VVR No. 3038-VI/2011). This law sets out the fundamental principles and regulations for urban development and spatial planning. Additionally, the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding Land Use Planning" (VVR No. 1599-IX/2021) brings significant updates, particularly influencing spatial planning for renewable energy (RE) projects. This legislation facilitates integrated land use planning, beneficial for the strategic development of RE projects.

The status of NSPs of all CPs regarding validity, currentness and status of new update NSPs is shown in *Table 1*.

Table 1 Status of NSP for each CP

	AL	BiH	GE	XK*	MD	ME	MK	RS	UA
Valid NSP or Programme	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
Up to date NSP	Yes	Partial	-	No	-	No	No	No	-
Working on revising or creating a new plan	-	Yes	Yes	Yes	No	No	No	Yes	No

The legal deadlines for the adoption of a spatial plan are not respected in all CPs and the process is extended by more than six (6) months.

CPs with an outdated NSP (UA, GE and MD) and facing delays linked to negative public

[179] *„Cabinet adopts Draft Spatial Plan until 2040", Government of Montenegro, October 10, 2023, available on: https://www.gov.me/en/article/cabinet-adopts-draft-spatial-plan-until-2040*

perception should prioritize early public engagement in the procedure. This includes allowing the public to provide their opinions and feedback during the drafting phase of a spatial plan, as well as during the public presentation of the draft planning document. It's essential to structure these engagements considering the principles of early and effective access to relevant information and public participation (see chapter 1.6.6. Access to information and public participation in EIA).

Public participation and opinion delivery should be taken into account during the creation of new SP, using extended deadlines to ensure larger-scale public participation with online and offline surveys, presentation, digital copies distributed to official sites of local and national authorities and regular public hearings. Additionally, CPs should establish and organize a conflict resolution mechanism at both the national and local levels.

Furthermore, CPs which have a valid but outdated NSP (BiH, XK*, ME, MK and RS) should also increase the institutional capacities to ensure sufficient and adequate staffing, for administrative procedures, validation of drafted SPs (quality control) of the preparation and consultation procedures.

Considering the importance of the NSP, CPs should put effort to stimulate the participation of citizens. This involves initiatives such as call for online surveys, free workshops and presentations for municipalities and cities regarding the importance of participation, publishing examples of good practice in newspapers and other media outlets.

Public participation is crucial in determining restrictions regarding distances of RES projects, dedicated RES areas, or similar measures, as they almost always require broad public acceptance. Such measures should be evidence-based, presented clearly in textual part of NSPs and designed to maximise the availability of space for project development with other spatial planning constraints included as well.

It is recommended to establish an online portal which contains info on spatial planning for RES implementation on a national and local level, to ensure time and procedure efficiency as well as concentrating technological, environmental and legal expertise into a single webpage, available for all potential stakeholders.

CPs should be responsible for monitoring of land use (and sea, in applicable) to create long term SP guidelines and strategies for urban development in the future. Monitoring should include a contemporary and updated cadastral parcel registry as well as land use mapping registry.

Good practice for Maritime Spatial Planning: Portugal

Portugal adopted its Maritime Spatial Plan, the Plano de Situacão do Ordenamento do Espaço Maritimo Nacional (PSOEM), corresponding to the subdivision of the mainland, the subdivision of Madeira and the subdivision of the Extended Continental Shelf in December 2019 by the Council of Ministers (Resolution No. 203-A/2019). The EU MSP Directive is transposed into national legislation through Law No. 17/2014 on 'marine spatial planning and management, approved for the entire Portuguese maritime space, including the continental shelf beyond 200 nautical miles. Its enabling legislation, Decree-Law No. 38/2015, entered into force on 12 March 2015, and develops the marine spatial planning and management law. Among others, the law also defines the following MSP instruments: the Situation Plan (the identification of the protection and preservation areas of the maritime space, and the temporal and spatial distribution of current and potential uses and activities) and Allocation Plans (for the private use of some areas or volume of the maritime area not considered in the situation plan).

3.2. Certification of experts

In **Kosovo***, preparation of spatial plans is performed by experts in the field of spatial planning and urbanism certified by the Ministry responsible for spatial planning. In **Moldova**, spatial plans as well as experts are certified and registered by the Ministry of Infrastructure and Regional Development. Regarding certification of spatial planning experts in **Montenegro**, issuance and revocation of licences and Licence Register are in jurisdiction of Ministry of Ecology, Spatial Planning and Urbanism.

The number of certified experts/companies (if existing) ranges in most CPs from 10 to 30. The main entity responsible for certification of the experts/companies is a state entity, such as ministries and national agencies.

Certification of spatial planning experts and/or companies is not mandatory Albania, Georgia, Serbia and Ukraine.

Establishing a certification process for experts significantly enhances the quality of the plan and fosters public acceptance. It provides assurance that professionals involved in plan development possess the necessary skills, knowledge, and expertise to address complex spatial planning challenges effectively. This certification can provide confidence among the public and promotes transparency, ultimately strengthening the credibility and effectiveness of the planning process. It is recommended to establish some form of periodic check-up or recertification of the experts to ensure ongoing competence and relevance. Multidisciplinary nature of spatial and urban planning regarding RES should be emphasized by mandatory involvement of RES experts in spatial planning, following legal requirements for RES.

3.3. Acceleration areas

Acceleration areas are designate regions or locations where the swift or accelerated development of RES infrastructure can be strategically planned. The European Commission defines RES Acceleration Areas as specific locations, whether on land or sea, particularly suitable for the installation of energy production plants utilizing renewable sources other than

biomass combustion. These areas prioritize artificial and built surfaces for renewable energy development, excluding protected areas and migratory routes, while utilizing appropriate tools and datasets to identify environmentally suitable locations for renewable energy plants.[180]

Such acceleration areas can be set achieved either by supplementing existing SP or by setting new legal requirements.

SP can be supplemented with regards to degraded areas which are already subject to requirements for remediation measures. Catalogues of brownfield projects have to be included in spatial planning documents, with requirements exceeding existing state, and temporal perspective for matching requirements for non-degraded space. This allows for additional layer of planned use of space, and priority treatment of RES infrastructure in "brownfield" areas, where balance should be found between existing degraded state and potential for RES deployment.

In identifying RES Acceleration Areas, the focus should be on artificial and built surfaces, such as rooftops, transport infrastructure areas parking areas, waste sites, industrial sites, mines, artificial inland water bodies, lakes or reservoirs. Where applicable, consideration should also be given to urban wastewater treatment sites and degraded land unsuitable for agriculture.

In the identification process CP must also exclude Natura 2000 sites and nature parks and reserves, the identified bird migratory routes as well as other areas identified based on sensitivity maps and the tools referred to in the next point, except for artificial and built surfaces located in those areas such as rooftops, parking areas or transport infrastructure. Such identification poses significant challenges for CPs that lack a finalized basic land use layering. Many areas remain inadequately assessed, lacking multiple layers of information related to nature protection, water protection, agriculture use, and similar.

To address this challenge, it is recommended that CPs prioritize areas that have already undergone assessment for their significance in terms of land use. This helps prevent the inadvertent selection of potential future NATURA 2000 sites, Emerald sites, and other nature protection areas that may lack national legal protection frameworks. Similar, CPs should consider areas already assessed for water protection, such as rivers covered by river basin management plans, as well as those categorized for agricultural use under relevant national protection regimes.

Furthermore, CPs need to conduct preliminary specialised studies for such areas, which will assess different data e.g. endangered species distribution and habitats, water bodies distribution and size, protected site location and protection buffer zone, cultural heritage sites, area of land under industrial facilities and related infrastructure, etc.

The RES potential (including grid expansion) is defined textually and graphically in NSP of all CPs. However, the level of detail and currency often falls short, especially regarding

[180] *„Acceleration areas for renewables", European Commission, available on: https://joint-research-centre.ec.europa.eu/scientific-tools-databases/energy-and-industry-geography-lab-eigl/acceleration-areas-renewables_en*

hydropower potential. The data available through GIS mapping tools offers a more comprehensive assessment of resource availability and suitability in each area. It can pinpoint optimal locations for RES by mapping variables such as wind speed, solar radiation, and water flow. Moreover, GIS can analyse the impact of RES installations on wildlife, water resources, landscape aesthetics, noise levels, cultural heritage sites, and more.

Furthermore, combining wind and solar in a single location can reduce space usage in comparison to separate power systems and it is ideal for areas with constant wind and solar radiation, as well as rural or remote off-grid areas without power lines.

In addition, national, and local authorities must also consider economic factors and grid availability for RES projects. It is also recommended that all CPs establish timeframes and procedural rules for creating regular updated spatial plans (on all levels) to ensure the efficiency of the faster implementation of RES projects.

Zone layering (including sensitivity mapping) for the development of RES projects is not defined, except in **Albania**, where specialised studies have been made to define such zones, but unclear legislation regarding certain types of projects, lack of financial resources and slow and/or unclear procedures for adopting spatial plans are the main obstacles that delay or stop the development of RES acceleration areas.

Ukraine does not have specific spatial planning documents exclusively dedicated to RE. Instead, RE development is generally included within broader spatial development plans. These plans cover various aspects of territorial development, including infrastructure, residential areas, industrial zones, and RE sites. In these comprehensive SP documents, the role and allocation of RE projects are considered as part of the overall land use strategy. This approach helps in integrating RE projects into the broader developmental objectives of a region or locality.

According to questionnaires, the main obstacles for all CPs are lack of interest (corporate or government), lack of spatial planning experts, lack of spatial data, lack of specialized studies for determination of such zones, undetailed and/or unclear procedures regarding the adoption of the spatial plan as well as generally unclear legislation.

All CPs must ensure they have adequate staffing to handle administrative procedures, validate drafted Strategic Plans (SPs) through quality control measures, and facilitate public participation procedures. Roles and processes should be clearly defined by legislation across all CPs to enable smooth drafting and adoption of SPs. Additionally, CPs should designate a national body tasked with regularly monitoring of key bottlenecks in the development of RES acceleration areas and providing recommendations for improvement.

Another crucial aspect to consider is the transboundary component inherent in RES acceleration areas, which arises from the cross-border impacts of RES projects. High collected, structured and defined data regarding potential cross border environmental impacts of RES projects is essential for effective decision-making and collaborative management among neighbouring countries. Such data should be collected, structured, and defined comprehensively to accurately assess and address potential cross-border environmental impacts of RES projects.

Good practice for zone layering: Setting up local development orders (LDO) to facilitate the delivery or RE in Swindon, UK
The process of applying for planning permission in the UK can be time-consuming, even where the principle for renewable energy has already been established in an area. To streamline this system, 'local development orders' were introduced to facilitate the granting of permission for renewable energy. Swindon Council has provided upfront planning permission in certain areas for solar photovoltaics and other renewable energy forms, via the creation of three low-carbon LDOs in 2015. The process requires landowners, developers and the community to submit potential sites for inclusion in their LDO. A consultation then takes place with full engagement of the community. This case study demonstrates how a streamlining of the system for granting permission for renewable sites has enabled a democratic and more efficient delivery of renewable energy in Swindon. This has been achieved using 'local development orders' (LDOs). LDOs require sites to be submitted upfront and then permission can be granted at the right time when the sites are ready to be developed.

3.4. Restriction/prohibitions

Based on the desktop research, spatial planning distance restrictions from inhabitant areas and nature and/or environmental area limitations for RES project are not stipulated in the legislation, nor by the national level SP of any of the CP. In some cases (XK*, MD, ME, RS, MK and AL), due to graphic standards in national spatial plan (the scale of the maps), specific distance restrictions can be defined by spatial planning documents of the lower planning level. In **Serbia**, the Nature Protection Law bans the construction of wind farms and hydropower plants in nature-protected areas (zone II protection regime). Construction of solar plants in the Zone II regime is not banned but is limited. In Zone III of nature-protected areas, the limitation is on both wind farms and solar power plants. In other cases (like **North Macedonia**), if the land plot on which the investor intends to build renewable energy project is classified as agricultural land (forests, pastures, arable or uncultivated land or similar), it must be converted from agricultural to construction land.

To effectively address RES project restrictions, CPs are advised to first identify areas where

the construction of RES projects is either not advisable or prohibited by existing legislation related to nature protection, cultural heritage, natural resources, infrastructure corridors, and specially designated zones like military or tourist areas, as well as populated settlements.

Once the list of restrictions is compiled, it can be used to map areas, providing valuable insights to future investors and stakeholders during the initial stages of decision-making regarding RES planning and site selection. This process is crucial as it ensures that stakeholders understand and anticipate potential delays and challenges associated with the planning and approval process.

3.5. National Spatial Data Infrastructure

A valid and up to date National Spatial Data Infrastructure (NSDI) is not available in most CP, based on desktop research (**AL, BiH, GE, UA**). Although **Serbia's** NSDI functionality remains an issue (launching an interactive browser for data/map viewing isn't accessible), the platform is implemented in high detail, with high transparency, enabling user-friendly layouts while combining different data set and digital information regarding spatial planning. The platform is regulated by the Law on National Spatial Data Infrastructure under the principles of the EU INSPIRE Directive. Also, The Digital Central Register of Planning Documents of Serbia (Central register) enables the availability of all adopted spatial and urban plans to all citizens. Kosovo*'s NSDI portal (https://geoportal.rks-gov.net/9) is the sole example of a both functional and usable portal, with features like the electric transmission network, thermal conductor system, cultural heritage sites, et al.

The NSDI geoportal covers all the obligations set by the INSPIRE Directive[181] represents best practice tool for screening and identifying Acceleration Areas for RES projects at the national/regional level (first level layering). One of the geoportal's (geospatial platform's) key components is the management of the ecosystem – using data standardisation, tools like life-cycle management, data analysis and multisectoral land analysis.

For "go-to areas" or "exclusion zones" defined at a higher planning level, the availability of consolidated and up-to-date spatial information in vector format will enable the accuracy of local-level data. Furthermore, this enables harmonisation at different planning levels (local, regional, national).

In Serbia, the current national capacities for establishing the National Spatial Data Infrastructure (NSDI) within responsible public authorities are inadequate. Sufficient human and technical capacity are crucial, given the complexity of INSPIRE implementation, especially from a technical perspective. Strengthening these capacities is essential for ensuring effective development and maintenance of the NSDI, which plays a pivotal role in

[181] *INfrastructure for SPatial Information (INSPIRE) is Directive 2007/2/EC of the European Parliament and the EU Council from March 14, 2007, regarding spatial data and supporting the creation of policy relating to the environment. The INSPIRE Directive entered into force on May 15, 2007. INSPIRE constitutes a future framework for NSDI's within EU Member States, available on: https://eur-lex.europa.eu/eli/dir/2007/2/oj*

facilitating data sharing and interoperability across various sectors and levels of governance. This consideration should be integral to the planning of NSDI by CPs.

To enhance graphic data quality, it is recommended to invest in new software, tools, educational resources, and workshops. It is essential to plan and secure the financial costs in advance as part of the state budget.

3.6. Overview of the competent authorities for spatial planning

For most of the CPs, the administrative framework is organized into two levels of government: central (national/state) and local (municipalities and cities). Few CP have also a regional level, between the prementioned two (RS, MD, AL). Detailed information on the institutional capacity of the spatial planning authorities is not available. It is recommended that the responsible authority (the Government) in all CPs creates an inventory (register) of all available experts and working staff within the institution and to update the register regularly (at least once every 3 months) to allocate the required work and projects more successfully among their employees.

In most CP there is a state entity responsible for the control of SP quality, usually the national body in the area of spatial and urban planning (Ministry or an organisation under the Ministry). In **Albania**, the responsibility for preparing spatial planning documents lies with a national authority, but technically they can also be carried out by third parties contracted for this purpose (private companies). In **Georgia**, the preparation of spatial planning documents which includes mostly technical work, is carried out by the national authority/organization, the Spatial and Urban Development Agency (SUDA), and experts from private companies. **North Macedonia** has a specific agency in charge of spatial plan development – the Agency for Spatial Planning, while the adoption of spatial plans on the national level is the responsibility of the Government of the Republic of North Macedonia.

Spatial planning documents in all CPs are grouped in two levels: central (national) and local. The central (national) level is the National Spatial Plan and local is municipalities and cities. Some CPs have specialized SP like spatial plans of areas of special interest (MK) or regional levels due to the levels of decision-making in the CP (RS).

The experts for spatial planning should cooperate tightly with experts from other fields (e.g. environmental protection) to include multidisciplinary approach. This collaboration ensures that spatial plans incorporate comprehensive assessments of environmental impacts, social considerations, and economic factors. By leveraging expertise from diverse disciplines, CPs can develop more holistic and sustainable strategies for the implementation of RES projects and spatial planning initiatives.

Establishing a multisectoral approach and fostering cooperation is essential to obtain more detailed input data, which will serve as the foundation for the data infrastructure. Good example of multidisciplinary approach represents the National Council for Sustainable

Development (NCSD), established in 2010, which operates as the advisory body to the Government of North Macedonia, entrusted with the responsibility of discussing and overseeing the comprehensive spectrum of the UN Sustainable Development Goals at the national level. Its primary role is to ensure coherence between ministries, municipal executive representatives, academia, private sector representatives and the civil society.[182]

[182] *The National Council for Sustainable Development (NCSD) of the Republic of North Macedonia comprises a diverse membership, including high-ranking government officials such as the Deputy President in charge of European affairs, the Ministers of various departments including Environment, Local Self-Government, Economy, Labor and Social Policy, Agriculture, Forestry and Water Economy, Finance, Information Society and Administration, Transport and Communications, Foreign Affairs, Education and Science, Health, and Justice. Additionally, the council includes representatives from the Macedonian Academy of Sciences and Arts, the Economic Chamber, the Chamber of Information and Communication Technologies, and the Chambers of Commerce. It also incorporates experts in sustainable development, economics, social development, and environmental protection, proposed by prominent state universities. More information available on: http://www.greendevelopment.mk/en/NCSDandTWG.aspx*

4. Strategic environmental assessment (SEA)

4.1. Overview of the SEA national legislation

Strategic environmental assessment legislation is mandated within the legal frameworks of each CPs although the effective implementation poses challenges.

In Albania SEA procedures are regulated by the Law No. 91/2013. Shortcomings regards the secondary legislation allowing for the revision of plans and programs approved without a completed SEA process.[183]

In **Bosnia and Herzegovina**, the SEA procedures in the entity of the Federation of Bosnia and Herzegovina are governed by provisions outlined in the Law on environmental protection, while in entity of the Republika Srpska, these procedures are regulated by the Law on environmental protection. Implementation of the SEA procedures are challenging for plans and programmes that concern both entities and are adopted on a national level.[184]

In **Georgia**, SEA procedures are regulated by Environmental Assessment Code of Georgia.

In **Kosovo***, the 2010 Law on Strategic Environmental Assessment is not fully aligned with the SEA Directive. [185] The proposed draft Law on Strategic Environmental Assessment (SEA) mandates the inclusion of mandatory scoping and addresses concerns regarding the content of SEA reports and NATURA 2000 network.[186] The revision of the secondary legislation related to the consultation process in the SEA procedure has not yet commenced [187].

Moldova made amendments to the Law No.11/2017 on Strategic Environmental Assessment (enforced in 2018.) in 2023 which will further algin the national legislation with the SEA Directive, however the implementation of the amending legislation is pending.[188]

Montenegro SEA procedures are regulated by the Law on Strategic Environmental Impact Assessment and aligned with the SEA Directive.[189]

In 2022, **Serbia** initiated amendments to the SEA Law in order to fully align it with the SEA Directive, however, the amending legislation has not yet been adopted.[190]

In **Ukraine**, legislation governing Strategic Environmental Assessment (SEA) procedures is

[183] *Energy Community Albania annual implementation report (2023)*

[184] *Energy Community BiH annual implementation report (2023)*

[185] *Energy Community Kosovo* Annual Implementation Report (2023)*

[186] *Energy Community Kosovo* Annual Implementation Report (2023)*

[187] *Energy Community Kosovo* Annual Implementation Report (2023)*

[188] *Energy Community Moldova Annual Implementation Report (2023)*

[189] *Energy Community Montenegro Annual Implementation Report (2023)*

[190] *Energy Community Serbia Annual Implementation Report (2023)*

outlined in the SEA law. An exemption was introduced, necessitated by martial law, exempting recovery programs for regions affected by the Russian invasion from SEA obligations[191].

The adoption of RED III has elevated the importance of the SEA Directive, necessitating SEA reports to include detailed measures ensuring robust environmental safeguards for RES projects within RES Acceleration Areas. These measures aim to facilitate the exclusion of such projects from the requirement for additional EIAs at the project level. Therefore, it is advisable for CPs to develop specific secondary legislation pertaining to the content of SEA reports prepared for RES acceleration areas. This legislation should reflect the SEA's anticipated role in providing comprehensive project-level measures as part of the plan-level assessment.

Recommendations on the different aspects of the SEA procedure are listed in the next chapters.

4.2. Screening

The screening phase for plans and programmes which are likely to have significant effects on the environment is foreseen in all CPs national SEA legislation. Generally, in the CP's the screening is done, on a case-by-case basis through analysis by the authority responsible for preparing the plan or program. In the screening process, the authority responsible for the preparation of the plan or programme obtains opinion from the environmental protection authority, and other concerned authorities and organisations. Most of the CP do not provide screening templates to the authorities tasked with plan preparation, leading to inadequate screening practices.

During the screening phase it is recommended to robustly and systematically consider the potential of the plans and programmes to give rise to significant effects before making a final determination on whether SEA report should be prepared. It is recommended that the responsible authority utilize a guiding template that elaborates on screening criteria in detail and provides clear operational guidelines on the screening process and information to be provided.

Considering that the obligation to publish SEA screening decisions lies within the authority that prepares the plan, and usually, this is a different authority, it is recommended to establish a digital online portal governed by the Government where all screening decisions can be published. This measure is highly recommended to enhance transparency and facilitate a better understanding of the process.

[191] *Energy Community Ukraine Annual Implementation Report (2023)*

Good practice example: Screening and Scoping stages in the Czech Republic are not separated.
To officially initiate plan or programme development, any public authority shall obtain preliminary authorisation from Ministry of Environmental Protection. This stage is called 'collection of facts or 'preparatory' stage. Ministry of Environmental Protection carries our screening and scoping, i.e. tries to identify whether the proposed plan or programme requires SEA, or not. In case if the conclusion is positive, it draws up requirements specification. In this specification the Ministry identifies environmental issues and aspects that shall be studied, including the methods for such studies, ways for ensuring public participation, stages and methods, as well as the authorities, which shall be consulted during the SEA implementation process. Consequently, the Ministry of Environmental Protection checks compliance with its indications and informs the respective decision-making authority.

4.3. Scoping

In all CPs except in Kosovo* scoping is mandatory step in the national SEA legislation and provided in the format of a scoping opinion. These authorities use the scoping opinion to guide the further development and implementation of the SEA, ensuring that all relevant environmental considerations are appropriately addressed. In **Kosovo**, the requirement for mandatory scoping of the SEA report set by the SEA Directive is not stipulated by the current legislation. The new draft legislation mandates this requirement; however, it has not yet been adopted.

The scoping opinion is typically prepared by the authority responsible for adopting the plan and is consulted with the authorities concerned, including the competent authority responsible for environmental protection and sustainable development.

In **Moldova**, environmental and health authorities are consulted during scoping, as defined in the national legislation. An important aspect of the scoping process in Moldova is that the qualifications required for experts are determined during this phase.

In **Georgia**, the scoping report must be prepared and consulted with the public and authorities concerned.

In certain cases, such as in **North Macedonia**, the competent authority appoints a specific commission tasked with cross-checking the SEA application, scoping report, and SEA report.

Gathering opinions from relevant authorities is often unclear in most CPs. Improving the process of collecting opinions from these authorities, usually defined by administrative law rather than SEA law, should be clearly outlined. For instance, employing ex officio methods could provide clarity in this regard.

For **AL, GE, MD, ME, and RS**, public opinion is being included during the scoping phase. Usually, there is a timeline defined for public opinion submission which is 10, 15 or 30 days.

It is recommended to conduct consultations with the concerned public on the scoping of the SEA report.

It is advisable that all CP's define a timeline (e.g. 30 days) for public opinion submission during the scoping phase. The competent authority should initially define the relevant stakeholders and then ensure early access to pertinent information (along with supporting documents regarding the plan). Active and accessible participation should be facilitated through a hybrid approach, allowing both in-person and online engagement to involve a wider spectrum of the public and experts from diverse sectors. The planning authority should announce the scoping process and draft scoping opinions for consultation on dedicated website, as well as in national and local media. Additionally, announcements can be placed in areas frequented by the public.

Good practice for scoping in EU: Slovakia
The SEA of the Slovak Energy Policy 2000 started at the initial phase of policy preparation. The Ministry of Economy developed an outline energy policy for comment by NGOs, then a discussion document for parliamentary meetings. Once a draft energy policy was available, its availability was notified in the Economic News (Hospodárske noviny), and the full text was made available on the Internet and at Government offices. Two months were allowed for public review and submission of comments on the SEA scope. More than 400 comments were received. The Ministry of Environment prepared the statement on the basis of the experts' opinion, other comments sent to the Ministry of Economy and Ministry of Environment, the public discussions and consultations between the Ministry of Economy and the Ministry of Environment, therefore public comments were taken highly into account as part of the whole consultation process.

4.4. Preparation of the environmental report and SEA experts

Certification of experts/companies for the preparation of SEA reports is not mandatory (not stipulated by the legislation) in **BiH, GE, XK*, MD, UA**. In **AL, ME, MK and RS** the certification is mandatory.

In **Montenegro**, according to the SEA legislation, a professional is qualified to prepare a strategic assessment, i.e. a report on the strategic assessment if he/she has a university degree in the appropriate field and at least five years of work professional experience (participation in the preparation of at least two reports on the impact of the plan and program on the environment).

In **North Macedonia**, the form and content of certificate as well the detail provisions on expert exam performance are stipulated in the Law on Environment. Conditions for a SEA expert is university degree in natural sciences, technical knowledge at an expert level in the field of environmental protection and has a minimum of 5 years' experience in the field to which the strategy, the plan or the program refers to.

Training or capacity-building on SEA reports at a national and local level should be strengthened in all CP's.

In **Montenegro**, the lack of sufficient administrative capacities at central and local level and inspection bodies, insufficient inter-institutional coordination and lack of a sustainable financial framework remain challenges to be urgently addressed and improved[192].

In **Moldova**, certification requirements for SEA experts are not fully established by the SEA legislation. Provisions require experts preparing the SEA report to meet specific criteria: possessing higher education in environmental sciences, climate sciences, natural sciences, engineering, urbanism, territorial planning, law, economics, or related fields; completing qualification studies in environmental assessment; having 3 years of professional experience, academic research, and consulting in environmental assessment; and maintaining a clean criminal record. In Moldova qualification required for the experts is determined during the scoping phase.

Improving the organizational and technical capacities of competent authorities responsible for leading SEA procedures is recommended for all CPs. In many cases, these authorities are unaware of the requirements for SEA procedure, leading to oversight or its omission from the preparation plan and adoption timeframe. It is recommended that legislation defining the adoption of network energy plans and programs should stipulate the preparation of SEA reports. This ensures that competent authorities are aware and can adequately plan the process.

Additionally, establishing a multidisciplinary team to lead the SEA process, with access to external expertise and knowledge hubs, is advisable. Process coordination should be overseen by the SEA team management and the team responsible for drafting the plan or program. This ensures synchronization of processes and enhances synergy between measures outlined in the SEA report and their reflection in the plan or program.

Furthermore, to enhance the quality of SEA report, it is recommended to ensure access to highly qualified experts and established procedure of their engagement. Specific RES expertise should be requested when assessing plans and programs related to definition of RES acceleration areas.

Questionnaires and interviews give good result for quantitative assessment of specific expected impact, or better identification of parameters of plan/programme goals. Questionnaires allow describing expected result in quantitative values, although, here is a certain risk related to selection of respondents. Often, it is practiced arranging the expert group meetings (so called panels), during which the issues are discussed by the group having similar interests and consensus.

Good practice example: strategic-based methodology for SEA reports in Portugal

[192] *Montenegro 2022 Report, European Commission staff working document, October 2022*

The procedure for the environmental assessment of plans and programmes as established in Decree-Law 232/2007 which establishes in national law European legal requirements defined by Directive 2001/42/EC, of 27 June. The Decree-Law further ensures the application of the Aarhus Convention of 25 June 1998, transposing Directive 2003/35/EC, of 26 May, which provides for the participation of the public in the preparation of environmental plans and programmes. The procedure for the environmental assessment of plans and programmes as established in the above-mentioned legislation can be implemented with a SEA methodology. The methodology in divided into 3 phases:
1 SEA Critical Factors for Decision-Making and Context (includes: identifying the object of the assessment and the critical factors for decision-making, as well as SEA objectives and establishing the appropriate forum of actors and the communication and involvement strategy as well as the integration between processes and identify decision windows).
2 Analysis and assessment (includes: usage of possible future scenarios and considers options and alternatives to achieve the proposed objectives, analysis the main trends associated to the CFD, assesses, and compares options that enables choices as well as opportunities and risk and proposes planning, monitoring, management and assessment guidelines)
3 Follow-up (includes development of a follow-up programme – planning, monitoring, management and assessment guidelines and the institutional adjustment required for good governance.
The SEA strategic-based methodology in Portugal carries these principles:
- SEA preparation is concurrent to the design and formulation of the planning and programming drafts and is dependent on contents prepared in that context, and on the respective scale of planning and programming, ensuring a sound inter-linkage with the inherent decision processes.
- The integration of SEA in the planning and programming process translates into the articulation of processes, timings, consultations, and the sharing of data and information. - A separate report on plans and programmes is required in SEA.
- The information to be used in SEA should be available at a reference scale that embraces the entire plan. The appropriate detail with respect to SEA information and outcomes must not be greater than that of the respective plans and programmes.
- National, European and international strategy and policy documents relevant to the application scope of the respective plans and programmes are deemed to be SEA benchmarks.
- Public consultation and the consultation of authorities with environmental responsibilities is phased and employs multiple methods to ensure the timely integration of the observations collected into plans and programmes.
- The proposed methodology complies with the provisions of Decree-Law 232/2007, of 15 June, and Directive 2001/42/EC, of 25 June, with necessary adaptations to the scale of the planning and programming process strategies.

.

Case example: SEA of the Municipal Master Plan (Moldova) – EaP GREEN

SEA of the Master Plan of the Municipality of Orhei helped the Master Plan development team to identify major environmental problems, obtain new environmental data and prepare environmental related maps that combine business data and development option with locations and borders of the natural monuments, river basin and nature protection zones, as well as air and water pollution data. This information considerably enhanced environmental chapter of the Master Plan. SEA also helped justifying introduction of proper waste management and waste collection schemes and indicated places where waste management facilities cannot be located. Based on SEA report Orhei municipally is now able to address the national government and donors with a request to allocate necessary resources for waste management schemes in the town. Data gaps identified during the SEA facilitated improvements regular statistical data collection and aggregation schemes both for the local and national levels. For example, after the SEA data on level of noise and impact of the stone mines operations on the surrounding urban areas could be available.

4.5. Public consultation and participation

Public participation in SEA procedure is mandatory by the legislation in all CPs. In **Ukraine**, challenges regarding public participation arise, particularly under martial law, where different options for disclosing environmental information to the concerned public should be considered due to martial law. This is especially relevant when recovery and restoration plans and programmes are not subjected to SEA and thus not open to public consultation.

Functional, and informative website (web portal) with all information on SEA procedures, which could inform the interested public on SEA procedures and news, is not available in most CPs, although some (**MD** and **RS**) include all information regarding the SEA decision for the public on official websites and gazettes of national and local levels. In some cases (**MK**), even if the information is published online on an official website of the responsible authority, the SEA report is not published with the corresponding plan or programme.

Good practice for availability of draft plan/programme and SEA report: Norway

To increase public participation in the development of the Nordland County Council (Norway) regional climate plan 2010, planners prepared an abridged version of the plan, published letters in local newspapers encouraging people to participate and used Facebook, Twitter and blogging. Planners also went on a month-long tour of Nordland in an electric vehicle. They used everyday items such as wellies and wine gums (representing climate refugees) to start discussions; debated climate and energy issues in general and related these issues to local matters; and attracted people by serving waffles and drinks. As a result, general awareness of the plan was raised, many comments on the plan were received, people were positive about meeting Council officers and Nordland County Council is now associated with climate and energy issues.

Regarding public hearings concerning the SEA report, various approaches exist among the CPs. In **Moldova**, public hearings are not mandatory in SEA. If public hearing is needed it is defined in the scoping phase on case-by-case bases. In **North Macedonia**, according to the

SEA legislation, at least one public hearing/discussion is obligatory. In **Georgia**, public hearing is stipulated in the EA Code. It states that the public will also be informed (via official websites of the responsible Ministry and the planning authority) about the aim, the time, and the venue of the public hearing, as well as the possibility of receiving important documents beforehand. The public can submit relevant comments, suggestions, and critiques in decision-making. These comments, suggestions, and critiques can be submitted in written or verbal form, including at the hearing. In **Albania**, the obligation for public hearing during the public consultation procedure is not stipulated by SEA legislation. Provision of the law implies that public hearings can be requested on a case-by-case basis.

Good practice for national public consultation: SEA of Naisaari Island development master plan (Estonia)
SEA Process involved future landowners, scientific associations, entrepreneurs, professional associations, unions, movements and other natural or legal persons. Several public meetings were arranged: **The first meeting with stakeholders** – the meeting was attended by representative of district and local governances, local landowners, other stakeholders. The purpose of the meeting to carry out SWOT analyses for the Island. Besides this, the development and environmental goals concerned with the future development of the island were discussed. **The second meeting with stakeholders** – with participation of the working groups. Information on planning and SEA processes were presented; various alternatives for complex planning were described; and information on their potential environmental impacts was provided. The representatives of the stakeholders participated in Matrix Analyses, which allowed them creating awareness on environmental outcomes of the various alternatives. **The third meeting with stakeholders** – draft project proposal on the issue under discussion was presented. At the same time, the positive and negative environmental effects, as well as the measures for their mitigation were considered. The public comments and recommendations on minimising possible environmental effects were discussed. Planning and environmental assessment processes were carried out in parallel and each of their stages envisaged public involvement. Project proposal and SEA Report were presented to the society for discussion and presentation of the proposals and comments within the 4-week period. The proposals and comments received from the stakeholders were incorporated into the final version of the project. Public participation became the most important element of the process. Informing society at the earliest stages allowed avoiding conflicts and finding new and original solutions. Besides this, the basic needs and claims of all stakeholders were timely identified and considered. This allowed avoiding modification and revision of the plan at the later, implementation stages, which would be connected with major extra costs

Different communication and public involvement methods must be used, depending on the characteristics of the relevant type of target groups, using appropriate communication means, both written and pictorial. Dissemination of information through traditional channels should be supplemented by electronic dissemination via social media platforms and other online channels using mailing lists. It is recommended that all CPs generate a preparation of

informative summary, using accessible language suited to the planning and programming process. Documents and information relevant to decision-making, such as the strategic reference framework, environmental reports, and environmental statements, should be disseminated to the general public through electronic media, such as dedicated websites.

The public hearings can be supplemented with mandatory meetings targeting specific groups, such as non-governmental organizations and business associations, play a strategic role in various phases of the process. They are instrumental in the process, particularly during the identification of critical factors for the SEA report, including the mitigation measures for identified negative impacts or the state of the environment. These meetings facilitate obtaining significant input and fostering debated thoughts. Questionnaires are a great toll for consultations with a set of authorities and selected public to obtain feedback.

Considering the broad spectrum of the public concerned that a plan or programme can impact, both online and in-person engagement methods should be employed. Organizing events, whether online or in-person, should not exclude one format but rather complement the other, enhancing the overall engagement process. All recommendations outlined in the EIA chapter apply equally to SEA processes.

A broader reflection and discussion with relevant authorities and selected public through forum or workshop-like sessions, for the discussion of analysis and assessment results and preliminary plan and programme proposals, is highly recommended.

Dialogue, negotiation and persuasion are important techniques in SEA, whether they are applied to consensus-driven approaches, and it is recommended that all CPs foresee such mechanism during the SEA stages. The participation and involvement techniques should be adjusted to the different target groups and their characteristics.

With regard to the consultation period, a flexible approach to setting time frames aims to provide the public with access to relevant documentation and adequate preparation time. While a minimum of 30 days between public notice and the start of public consultations is considered reasonable, flexibility allows for extension of this period as necessary, considering factors such as the nature, complexity, and scale of the proposed plan or programme. Where only the maximum time frame for public participation procedures is defined, regardless of the length of the maximum time frame, poses the risk of setting unreasonable time frames for consultation in individual cases.[193]

Decision regarding the SEA report (for example, the approval of a plan or programme) needs to be published in the media (both offline and online) and need to include detailed description on how comments, opinions and proposals of the public were considered, as well as reasons/justification of approving the document. The responsible national authorities in all CPs need to carry out monitoring of significant environmental effects caused by the approved activity and regularly publish the monitoring reports. Purpose of the monitoring is early revealing of predicted undesirable impacts and ensuring their timely elimination.

All CPs have similar approach to the transboundary consultations deriving from the

[193] *https://unece.org/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf page 144*

obligations of the Espoo Convention and the SEA Protocol to the Espoo Convention.[194] In **Serbia**, for example the SEA Law stipulates that the report on public participation and the results of transboundary consultation shall be an integral part of planning documentation, with document being accessible in written and electronic form (on the official website). In **North Macedonia**, the proof of notification of affected country in transboundary consultation procedure, as the final decision of SEA approval, is published on the website of the planning authority.

It is recommended for all CPs regarding transboundary consultations to define the documentation to be submitted to the affected Contract Party, language and translation needs. Who is the competent authority and public involved in the Contract party should be defined clearly. Specific provisions for the transboundary public consultations are evidenced in Chapter 1.6.6.3Transboundary consultations.

Good practice for transboundary participation in EU
The Irish Lough Agency is a cross-border Irish-United Kingdom agency that aims to promote the development of Lough Foyle and Carlingford Lough (water bodies) for commercial and recreational purposes in respect of marine, fishery and aquacultural matters. It runs joint public consultation processes for new regulations regarding the loughs, consistent with both countries' legal requirements for consultation, and treating both countries' publics equally.

4.6. Control mechanism by competent authority

In most CPs, there is one national authority designated to review the SEA process conducted by the authority responsible for adopting the plan or programme.

In **Georgia**, the agency and the Ministry, as both responsible authorities for the SEA process, have a similar role (both receive the draft of a strategic document at the earlies stage of preparation from the planning authority, both receive a screening application with all information about the planned activities and location details, as well as the nature of the potential impact on the environment, both issue a screening decision, both issue a scoping decision, etc.). However, the agency conducts the monitoring of the detected effects during the implementation of the strategic document by itself. Based on the monitoring results, the agency prepares and publishes regular monitoring reports, each separately and each publicly available.

The Ministry of Environment and Physical Planning in **North Macedonia** has the role of the control mechanism, it reviews the screening decision to subject the plan or programme to a SEA procedure and, where there is a decision to conduct SEA, reviews and confirms the scope of SEA proposed. According to North Macedonia's Law on Environment, when deciding on the scope and level of detail of the information in the Environmental Report, the body carrying

194

out the strategic assessment shall request the opinion of the bodies affected by the implementation of the planning document.

In **Bosnia and Herzegovina** SEA procedure is guided by the authority responsible for the preparation of the plan and program (authority at the national, regional or local level). Regarding the screening and scoping phase in **BiH**, the authority responsible for the preparation of the plan or programme must obtain the opinion of the environmental protection authority, other authorities and organisations concerned on the content and scope of information to be processed. The time frame for providing an opinion is 30 days. The decision to conduct/not to conduct the SEA procedure among the other relevant information, contains reasons and information relevant for making such a decision, along with the approval of the environmental authority.

In **Moldova**, the competent authorities are Ministry of Environment (which is responsible for developing the national legal framework on EIA/SEA and coordinates the transboundary EIA/SEA procedures and also for the expert register) and the Environmental Agency (which is responsible for ensures the national legislation on EIA/SEA and applying the EIA and SEA procedures). Within 5 working days from the receipt of the SEA report and the draft policy and planning document, the competent authority (Ministry of Environment and the Environmental Agency) sends them to the SEA Commission of Experts within the Environmental Agency for review.

In **Montenegro**, the authority responsible for SEA reports (preparing the report, monitoring plan's/programme's development, on the basis of the criteria for determining significant impacts on the environment, as well as quality control and screening and scoping phases) is the Ministry of ecology, spatial planning and urbanism.

A control mechanism is essential to be established in the SEA procedure to ensure transparency, accountability, and effectiveness throughout the process. This mechanism helps monitor compliance with regulations, identifies areas for improvement, and fosters stakeholder trust in the decision-making process. This control mechanism could be established within the competent authority responsible for environmental matters or authority with similar technical capacity, as they possess the expertise and mandate in the areas of sustainable development and environmental protection. This ensures that the control mechanism is aligned with the core objectives of the SEA process and can effectively oversee its implementation by the authorities responsible for adopting the plan or programme.

4.7. Monitoring

Monitoring of a plan or programme is defined by the legislation in all CPs although in practice, monitoring and follow-up are not always implemented consistently.

In some cases (**RS**), the legislation provides provision for monitoring environmental impacts in terms of providing content of monitoring programs. In **Georgia**, the National Environmental Agency (NEA) is one of the main national bodies involved in the SEA procedure and the main body responsible for preparation and publishment of regular monitoring reports, as stated in the Environmental Assessment Code of Georgia.

Monitoring results should be publicly accessible, although there isn't an explicit requirement for their dissemination to affected groups. A standardized protocol for monitoring is lacking, which includes defining roles (who undertakes monitoring and makes results available), scope (what to monitor), format (raw results or analyses), location, frequency, timing of results availability, and methods. Developing a tailored monitoring protocol will be essential for RES Acceleration Areas.

It is recommended that the monitoring program include, at a minimum, the following elements: a specific program goal, defined responsibilities (with the operator retaining principal responsibility for the monitoring and its quality even if external contractors are used for the actual monitoring work), the identified scope of the program, technical details of the monitoring method, specified units of measurement, defined location of measurements, and defined operational conditions. The monitoring scheme or program, along with the responsible authority for conducting the monitoring, must be integrated into the SEA report.

The responsible authority for monitoring should present the results in a summarized form to public authorities and the interested public. Additionally, a summary of the results over a specific period of time should also be presented to the public and authorities concerned and other relevant stakeholders.

5. Grid connection

Findings provided in this section are based on thorough market analyses conducted for all Energy Community CPs and information provided by the stakeholders of the analysed markets in Energy Community nine CPs - Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia, Georgia, Moldova, Montenegro, Serbia and Ukraine (Table *2*). Following the distribution of the study questionnaire to stakeholders in all CPs, the following stakeholders provided their feedback to the questionnaire: TSOs (all), DSOs (AL, BIH, MK), regulatory authorities (AL, BIH, GE, ME, MK), and business[195] (BIH, MD, ME, MK, RS, UA). The questionnaires used to collect information were designed considering the topics related to the connection procedure and connection charging applicable in the CPs.

Table 2 Number of TSOs and DSOs in the CPs

	AL	BIH	GE	XK*	MD	ME	MK	RS	UA
No. of TSOs	1	1	1	1	1	1	1	1	1
No. of DSOs	1	8	2	1	2	1	1	1	32

Below is a summary of specific findings and recommendations on different elements of the grid connection: connection arrangements (application handling), connection conditions (requirements), and connection charges.

5.1. Legal framework

5.1.1. Connection procedure

In all CPs, the main principles of connection procedure are set by the primary legislation and operator's act approved by the regulator. The connection procedure in **Albania** is governed by a dedicated act prepared by the relevant network operator (Regulation on Procedures for New Connections and Modification of Existing Connections with the Transmission/Distribution Network), while transmission/distribution Grid Codes establish technical requirements. In **Bosnia and Herzegovina**, the distribution grid connection procedure is governed by General Conditions for Electricity Supply in each entity (i.e., **Federation Bosnia and Herzegovina** and **Republika Srpska**) prepared and adopted by the relevant regulatory authority, while technical requirements are part of the Distribution Grid Codes (prepared by the relevant network operator and adopted by the relevant regulatory

[195] *In BiH, MK and UA the business support organisations (Chamber of Economy of Federation of Bosnia and Herzegovina, Economic Chamber of North Macedonia, Solar Energy Association of Ukraine), in ME and RS developers (Montenegro Akuo Energy Med, Elektroprivreda Srbije (EPS)), and in MD Institute of Power Engineering, Technical University of Moldova.*

authority). In Bosnia and Herzegovina, in the entity Republika Srpska, in addition to the General Conditions for Electricity Supply, there is also the Rulebook on the conditions for connecting power plants to the electricity distribution network in the Bosnia and Herzegovina, in the entity Republika Srpska and in the entity Federation of Bosnia and Herzegovina Rulebook on the methodology for calculating connection fees and defining terms and conditions for connection to the distribution network ("Official Gazette of the Federation of Bosnia and Herzegovina" number 89/14 and 84/19). In **Bosnia and Herzegovina**, the transmission grid connection procedure and technical requirements are part of the transmission Grid Code, approved by DERK. In **Georgia**, **Montenegro**, **North Macedonia**, and **Ukraine**, the connection procedure and technical requirements are part of the transmission/distribution Grid Codes prepared by the relevant network operators. In **Kosovo*** the Transmission/Distribution Network Connection Charging Methodology drafted by TSO/DSO prescribes the connection procedure and charges, while transmission/distribution Grid Codes establish technical requirements. The connection procedure in **Moldova** is governed by a dedicated act adopted by the regulatory authority (Regulation on connection to the electricity networks and the provision of transmission and distribution services). In **Serbia**, the connection procedure is governed by General Conditions for Electricity Supply adopted by the Government, while technical requirements are part of the Grid Codes.

The following five basic steps in the connection procedure are common to all CPs: application submission, connection (design) research, connection agreement, connection construction, and inspection/testing/commissioning.

In **Albania**, only the process for connecting a new generating plant to the medium voltage grid is outlined in the Regulation on new connections in the distribution system. Provisions for connecting producers to the LV grid must be added to the Regulation.

All CP network operators broadly use a system of first-come-first-served prioritization for connections, although the rationale for this approach is not set out explicitly. First-come-first-served prioritization has the advantages of administrative ease and transparency and appears to be accepted by stakeholders as fair or reasonable when there are few applications. We assume that because connections will naturally be processed in order of receipt, this approach has simply been continued in the CPs even where there is significant interest for connection.

The most conspicuous exceptions to first-come-first-served prioritization are special rules that allow for the prioritization of RE generation. These can be seen as a means of trying to recognize the social value such connections can play in supporting the achievement of national environmental and energy policy goals. Such provisions can be observed in **Montenegro** and **Kosovo***. In **Montenegro**, grid operators are required to ensure priority in the RE connection if there are no "technical limits" in the transmission or distribution system. In **Montenegro**, the "technical limit" implies that the spatial planning documents encompass the possibility of developing the connection infrastructure (extension and reinforcement assets) and the power plant. In **Kosovo***, the Distribution Grid Code gives prospective RE priority in reviewing the application for connection.

Policies driving decarbonization and connection abilities can conflict since technical limitations do not always match political goals. Achieving RES and emissions goals can be

challenging without an effective connection management process. As well as CPs, many countries worldwide have inadequate means to determine which projects are positioned to succeed and prioritize them for connection. The resulting backlog has two negative impacts: 1) it creates a bottleneck that prevents countries from reaching their renewable goals or encourages them to pick "favourite" projects, and 2) it prevents the operators from properly planning their system upgrades and investments since they cannot rely on certain projects to come to fruition, or to do so at the expected time. Some countries have made substantial progress in addressing queue management (QM)[196]. The best practice worldwide today to improve the queue process and accelerate the integration of RES is a first-ready-first-served approach. Different (innovative) prioritization approaches are implemented in some EU MS in response to a wave of connection applications to help ensure the rationality of reinforcement work and cost-sharing and to deal with connections in areas with scarce network capacity (allow the connecting party to connect more quickly and/or to lower their connection charge), which is further elaborated in the section of this document "dealing with limits in the grid". **Serbia** is the first CP to deviate from the transmission grid's connection request processing on a first-come-first-served basis. In **Serbia**, in October 2023, the new Regulation on the conditions of delivery and supply of electricity entered into force. The Regulation introduced the two "connection application windows" in the transmission grid, with applications within the application window processed collectively.

Virtual saturation refers to a situation in which a portion of the grid could theoretically allow connection of some power plants but cannot practically proceed because its whole capacity is reserved by plants that are not yet connected. To mitigate virtual saturations and alleged speculations in the connection procedure, EU countries generally follow two approaches: introduce a set of intermediate steps (milestones) for the grid connection process and introduce a reservation fee to be made by the plant developer when applying for the connection permit. In six CPs (AL, BIH, XK*, MK, RS, UA), some milestones put a stop to the connection procedure, preventing investors from endlessly delaying construction. In **Albania**, the deadline for connection to the distribution grid must not exceed two years from when the Connection Offer was delivered to the applicant. The applicant must reapply for a new connection if this time is exceeded. The transmission grid connection procedure in **Albania** does not include such a deadline. In **Bosnia and Herzegovina**, the investor can conclude the Connection Agreement with TSO after issuing Connection Conditions and the building permit. The Connection Conditions are valid for three years from the date of issue. The Power Permit usually has an indefinite validity period in the distribution grid. Still, if the investor does not complete the Connection Agreement within two years of the date it was issued, the Power Permit ceases to be valid. Only once, and for a maximum of two years, may the applicant request an extension of the deadline of the validity period for the Power Permit. In **Kosovo*** in the transmission grid, the Connection Agreement is issued for two years or until the regulator extends the Construction Authorization. If the applicant does not start the project construction within this period, the Connection Agreement will be considered invalid, and the process will end. In **North Macedonia**, the Consent to connect to the transmission grid ceases

[196] *Accelerating renewable energy investment in the Europe and Eurasia region – A worldwide review of best practices in queue management, USEA for USAID, Elia Grid International, December 2023.*

to be valid if the connection's building permit is not issued within three years following the Consent and the connection's construction does not begin by the deadline specified in the connection's building permit. According to the MEPSO (TSO) survey response, failure to pay the connection charge results in the termination of the connection process. Similarly, the Consent to connect to the distribution grid ceases to be valid if the connection's construction does not begin by the deadline specified in the connection's building permit or the applicant fails to conclude the Connection Agreement within one year of the day the Consent was issued. If the applicant does not pay the connection charge within 30 days of the Connection Agreement's execution, the **Montenegrin** DSO has the option—but not the obligation—to terminate the connection process. In **Serbia**, the new Regulation on the conditions of delivery and supply of electricity from October 2023 stipulates several milestones. In the transmission grid connection procedure, the connection study ceases to be valid: 1) if within 60 days from the date of delivery of the connection study, the applicant does not submit a bank guarantee; 2) if the Connection Agreement is not concluded within the 60 days from the date of delivery of bank guarantee; 3) if the applicant does not obtain "Approval to connect" (can be obtained only after acquiring the power plant building permit) within three years from the date of conclusion of the Connection Agreement; 4) upon expiry of the validity period of the Approval to connect. If the connection study ceases to be valid, the Connection Agreement ceases to be valid, as well as the Contract on the construction of the infrastructure, if it was concluded, and the connection procedure is terminated. In the distribution grid connection procedure, the connection study ceases to be valid: 1) if the applicant does not obtain "Approval to connect" within two years from the date of delivery of the connection study; 2) upon expiry of the validity period of the building permit. The validity period for "Approval to connect" is two years for a connection to the distribution system and three years for a connection to the transmission system. Only once, and for a maximum of two years, may the applicant request an extension of the deadline of the validity period for "Approval to connect". In **Ukraine**, in the distribution grid, if the applicant does not pay the connection charge within 20 days of receiving the invoice, the connection agreement will be terminated, and the technical conditions will be regarded as not having been issued (the connection process ended). In **North Macedonia**, the applicant has a long period of one year from the date the Consent to connect to the distribution grid was obtained to complete the Connection Arrangement. The DSO will not begin construction of the connection until the connection agreement is executed and the capacity in the grid is reserved for an extended period of time (i.e., these delays might hold up later applications, especially where network capacity is anticipated to be scarce).

The investor is frequently allowed an extended period to complete activities under his purview, or at the very least, no time limit (observe **North Macedonia** example in the paragraph above). On the one hand, this makes sense because the legal system frequently ensures that the authorities must follow specified deadlines. Investors are believed to be incentivized to act appropriately and expeditiously. However, experience demonstrates that some developers are more interested in selling projects and profiting from their development than in building anything. While the selling project may not be a problem in and of itself, it should not impede the regular progress of other projects.

We recommend CPs to consider setting up milestones to compel all parties involved—including investors—to act by the deadlines. To ensure developers are prepared, operators

shall establish increasingly strict requirements and transparent milestones for projects to advance. These could include demonstrating land ownership or right to utilize the land, signing required contracts (e.g., connection) with the TSO/DSO, determining which permits and licenses to require at each stage of the application, and requiring that applicants show they have filed for and obtained them (e.g., environmental permit, building permit), making required security deposits or showing support from financial institutions, contracting for key equipment (e.g., panels, turbines). The connection procedures should be terminated, and the network capacity allotted to them should be released for the upcoming projects if they are not followed. Developers shall be notified of non-compliance at each stage of the process and provided a limited period to "solve" the deficiency. If they cannot alleviate the problem, the operator shall retain their payments to date and require the applicant to resubmit their application. This would provide grid operators with a clearer understanding of which projects will be commissioned and when they will be ready. Such knowledge would help them assess how much capacity will be connected in a conceivable period of time and accommodate the planning. However, such an approach would require more communication and coordination between all actors.

In addition to milestones, another goal is the removal of speculative projects in the current connection queue, ensuring only viable projects are processed by the operator. This includes the following measures to be considered by the CPs: reservation fee (application deposit), financial securities and penalties if projects fail to meet milestones, and withdrawal penalties imposed as the connection process progresses. The distinctive feature of the reservation fee is that developers must pay in advance to the connection process. Introducing a reservation fee has two major advantages: First, the costs will entail a financial risk, considering that the investment will be futile if the reserved capacity cannot be sold in due time. Consequently, speculative behaviour will become riskier and, thus, less attractive. Secondly, the recipient of the reservation – usually the grid operator – could use the fee as an additional resource for grid development. Furthermore, forfeiture may be required if projects fail to meet milestones.

Worldwide, there is no "one size fits all" approach[197]. Even those countries with extensive experience continue to improve their QM procedures. However, operators across countries and regions with extensive QM experience use three main tools to manage connection queues: assessing and promoting project readiness, removing speculative projects, and measures to clear the queue. As CPs seek to improve their queue process management, evaluate projects' readiness, and discourage speculative projects, we recommend that they consider key principles from countries that have made substantial progress in addressing the QM question and accelerated the integration of RES.

5.1.2. Connection charging

Connection charges correspond to the fees charged by the Transmission and Distribution System Operators for the grid connection of the generators. They are generally paid once and

[197] *Accelerating renewable energy investment in the Europe and Eurasia region – A worldwide review of best practices in queue management, USEA for USAID, Elia Grid International, December 2023.*

aim to cover the costs incurred by the connection of the generators to the grid, generally including the costs of the physical connection to the grid and the costs related to the upstream grid reinforcement (shallow versus deep connection charges[198]). The choice of the methodology corresponds to a philosophy of cost recovery. The Energy Community acquis, namely Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity's Decision D/2022/03/MC-EnC, sets general principles and requirements for the charges and tariffs applied by network operators for access to networks, including connection charges, use of system charges, and, where applicable, charges for related network reinforcements. In particular, the emphasis is put on the following main principles: cost reflectivity, transparency, network security consideration, and system efficiency support through signals to network users. In EU MS and CPs, tariff-setting binding harmonisation is not considered adequate. Where binding harmonisation is not seen as adequate, as recognised in Cf. Recital (40) of Regulation (EU) No 2019/943, a best practice report on tariff methodologies should be issued to increase transparency and comparability in tariff-setting. To mitigate the risk of market fragmentation, the ECRB is tasked by Article 18 of Regulation 2019/943 to prepare a best practice report on transmission and distribution tariff methodologies in Energy Community CPs biannually. The last report has been published in November 2023[199].

In most CPs, the main principles for the calculation of the connection charge are set by the primary legislation and/or the regulator's act (BIH, GE, XK*, MD, RS, and UA), while in **Albania** and **Montenegro**, the methodology for the calculation of the connection charge is drafted by TSO/DSO and approved by the regulator. In **North Macedonia**, connection methodology is part of the transmission/distribution Grid Codes prepared by the relevant network operator and approved by the regulator.

In CPs and EU MSs, there is no common ground for the choice of the grid connection cost allocation approach (i.e., deep vs shallow). Each approach has its pros and cons. Connection charges are typically one-off charges covering the costs (or part of the costs) of connecting new users to the transmission or distribution networks. Since the network reinforcement due to new connections can also benefit other grid users, part of those costs is often socialised, i.e., covered by "use of system charges", creating thus a link between connection charges and the use of system charges. If well-designed, connection charges can incentivize network users to connect at points of the network that are more cost-efficient from a system point of view. On the one hand, the need for locational signals and increasing cost-reflectivity are the most frequently reported reasons for applying deep connection charges. On the other hand,

[198] *In general, to be connected to the transmission or distribution grid, new users are subject to a one off-charge that aims to cover the total or part of the TSO/DSO costs related to the connection to the grid, i.e., to a connection charge. Depending on the level of the coverage of the connection costs, the connection charge can be shallow, deep, or mixed (so-called "shallowish"). In this regard, a shallow connection charge covers only the costs needed for the physical connection to the transmission/distribution grid, not the upstream costs of needed grid reinforcements. In contrast, a deep connection charge covers not only the costs of the infrastructure for the connection to the grid but also all upstream costs associated with the connection. Finally, "shallowish" network charge is similar to the "deep" connection charge, however, it covers only part of the upstream costs associated with the connection.*

[199] *ECRB, Report on Electricity Transmission and Distribution Tariff Methodologies in the Energy Community (November 2023)*

countries that use shallow connection charges appear to value its simplicity, certainty, and visibility for the network users. The merits and drawbacks of each policy have been analysed from various perspectives[200]. The perspective represents the sum of interests that each market actor envisages to promote, and the regulator usually needs to balance these. This balance may also lead to different approaches regarding transmission and distribution. Intermediate situations that promote specific interests (i.e., promotion of RES) create the so-called "hybrid" charging policies, including semi-shallow or shared-shallow, super shallow policies. Finally, when setting charges, all network-related cost-burdens on the concerned network users should be considered, including those recovered via withdrawal charges, injection charges, connection charges, or other means (e.g., in-kind payments or mandatory free services provided by the producers to the system operators), to avoid any double-charging (i.e., recovery of costs which have been already recovered via other means).

So, the cost allocation approach is largely left to the regulatory authorities. In deep connection charging, the fact that the grid expansion and reinforcement must be borne by RE developers (and related increasing connection costs in the grids with scarce capacity for new connections) has been recognized[201] as a key barrier. In a grid with scarce capacity, the reinforcement costs might reach several times the value of the investment, which negatively affects the investment costs of RE projects. The "first mover disadvantage" is another drawback of deep charging. The 'first mover disadvantage (FMD)' is a situation where the first applicant to a new connection in the observed area covers the full cost of the grid expansion and reinforcement in the existing grid. Without the compensation mechanisms, the first applicant who funds the capital cost of a connection asset and reinforcements receives no contribution to that cost, even if another application later connects to the assets. Therefore, in case the deep connection charge is applied, the introduction of a certain cost-sharing "compensation mechanism" should be considered in case the infrastructure concerned also serves the future network users, i.e., re-balance of connection charges between the first mover and subsequent applicants (practical examples are further discussed below). On the other hand, the disadvantage of the shallow approach is the lack of a locational signal. Shallow costs refer to the developer paying the cost of equipment necessary to connect the applicant to the nearest point on the local grid (at the appropriate voltage level), regardless of whether the grid at the connection location the capacity has to accommodate the applicant. The grid operator will meet any grid reinforcement costs that are incurred to accommodate the generator, and these are generally recovered through "use of system charges". In effect, this means that the costs to a developer of connecting a generator are, by and large, the same regardless of the location of the connection point (i.e., connection charging does not provide locational signals to site the generators where there is a hosting capacity). The hybrid model takes advantage of the two (deep and shallow) policies, offering a shallow connection approach and providing a locational signal through a capacity charge. From the perspective of RE developers, it appears that a shallow connection charging strategy or a hybrid approach should be preferred; if all

[200] *The integration of Wind Power into competitive electricity Markets: The case of transmission grid connection charges, C. HIROUX, 2005*

[201] *RES Simplify final report (April 2023)*

reinforcement costs are being shared among users, the viability of the RE project is improved, and the connection pricing does not constitute a market entry barrier as the deep connection policy does.

As reported by the ACER[202], the connection charges for producers, while more often deep than the ones for consumers, are still, in most instances, shallow and based on actual individual costs. In the CPs[203] in the transmission grid, out of 9 in 5 CPs (AL, BIH, XK*, MK, UA), deep connection charges are applied, in 3 CPs (GE, MD, RS) shallow connection charges, while "shallowish"[204] connection charge is applied in **Montenegro**, Table 3.

Table 3 Type of transmission connection charges applied in the CPs

	AL	BIH	GE	XK*	MD	ME	MK	RS	UA
Shallow			*		*			*	
Deep	*	*		*			*		*
Shallowish						*			

In the distribution grid in 3 CPs (AL, BIH, XK*), deep connection charges are applied, in 3 CPs (MD, MK, RS) shallow connection charges, while "shallowish" connection charges are applied in **Montenegro** (Table 4). In **Georgia**, small RES connecting to the distribution grid pay either deep or "shallowish" connection charges. For small RES (>500 kW), the cost of connection comprises two components: fixed part (so-called cost of the second stage of connection[205]) and unit charge per connection capacity. The unit charge for RES up to 2 MW is five times less than that for RES between 2 and 15 MW. In **Ukraine,** DSO applies shallow connection charges for standard connections (unit charge per connection capacity) and deep connection charges for non-standard connections[206]. The costs for 'non-standard' connections mainly represent

[202] *ACER Report on Electricity Transmission and Distribution Tariff Methodologies in Europe (January 2023)*

[203] *ECRB, Report on Electricity Transmission and Distribution Tariff Methodologies in the Energy Community (November 2023)*

[204] *There are also intermediate situations aiming to promote specific interests (i.e. promotion of RES), which create the so-called "hybrid" charging policies, including a Semi-Shallow or Shared-Shallow Policy in which the costs of reinforcements and extensions are shared (rules for sharing are often based on theoretical allocations (i.e. capacity share)), and Super Shallow Policy which draws the charging boundary at the immediate connection assets with the TSO/DSO paying for the reinforcements, system extension, and sometimes part of the immediate connection assets. "Hybrid" charging methodologies may indicate whether the tendency is towards the "deep" or "shallow" direction. In such cases the respective charging principles may be referred to as "deepish" or "shallowish".*

[205] *Further details are comprised in Task 2 report for Georgia.*

[206] *The Law on Electricity Market defines two types of connection to the distribution system: standard connection and non-standard connection. The type of connection depends on the connection capacity and distance from the existing grid: standard – connection capacity of up to 50 kW and distance of up to 300 meters, and non-standard – connection capacity of more than 50 kW and/or distance of more than 300 meters. The non-standard connections are differentiated into turnkey non-standard and (non-turnkey) non-standard connection where the Customer designs the "linear part" of the connection. The linear part of the connection is a section of the grid from the existing distribution grid (an overhead line, a transformer substation, or a distribution point) to the node where the Customer's electrical installations are connected, all of which have the same voltage level. Further details are comprised in Task 2 report for Ukraine.*

deep connection charges, while for standard connections, shallow connection charges. In **Montenegro**, the "shallowish" connection charge reflects the standard average costs that the TSO/DSO will have for the connection of new network users. The unit charge (per connection capacity) is the same for all new users who want to connect to a specific voltage level. The system operator must organize an infrastructure value assessment and purchase it if the applicant builds the connection infrastructure at his own expense. Except for LV assets, when the infrastructure is purchased by the operator based on an adopted price list, infrastructure value is assessed by an independent evaluator. Deep connection charging is applied when the operator determines that, in the future, the new connection infrastructure will be used only by the concerned applicant (Table *4*).

Table 4 Type of distribution connection charges applied in the CPs

	AL	BiH	GE	XK*	MD	ME	MK	RS	UA
Shallow					*		*	*	*
Deep	*	*	*	*					*
Shallowish			*			*			

DSO from In Bosnia and Herzegovina, in the entity Republika Srpska is the only DSO that applies cost sharing among producers according to Annex III of the Rulebook adopted in 2014[207]. Cost sharing relates to extension (line and feeder bay) and reinforcement assets. Rules for sharing are based on theoretical allocations (i.e., capacity share and length of the extension line used by each producer). In the **Bosnia and Herzegovina** and **Montenegro** transmission grid, there is also a mechanism in place to „compensate" the user who paid a deep connection charge if the relevant connection infrastructure (or part of it) is going to be used by new users. In **Montenegro**, this assumes the TSO/DSO purchases grid user (RE) connection infrastructure.

In most CPs, the RE producers are subject to the same connection charging method as other transmission/distribution network users. In the transmission grid (BiH) and distribution grid (AL, GE, MK, RS), RE producers have different treatment compared to other network users as an incentive. In **Ukraine**, a lower connection charge is applied to connect energy storage facilities and EV charging stations by January 2025 to incentivize their integration. Even though introducing a different approach for the connection of some categories of network users (new technologies) is good for incentivizing their integration into the grid (i.e., all network users pay for network reinforcements caused mainly by RES through the Use of system charges), the application of this approach should be limited in time, i.e., until the specific goals for their integration are achieved.

Different approaches regarding transmission and distribution are typically present[208] (there is no binding harmonisation). Connection charges may be levied based on the actual costs of

[207] *Pravilnik o uslovima za priključenje elektrana na elektrodistributivnu mrežu Republike Srpske (March 2014)*

[208] *ACER Report on Electricity Transmission and Distribution Tariff Methodologies in Europe (January 2023)*

the connection, which is calculated on a case-by-case basis, or they may be pre-determined (with or without differentiation among various network user groups). The pre-determined charge may be a standard lump sum charge per connection, a unit charge per connected capacity, a unit charge per distance and/or it may be set based on other criteria (i.e., cost driver). The charging basis may be different for different network user groups, voltage levels, geographic locations, firmness of the connection, and/or based on other dimensions. It is also possible that part of the charge is based on the actual connection costs, while the other part is pre-determined by specific criteria. In the transmission grid, connection charges are typically based on actual costs, while pre-determined connection charges are more common in the distribution grid. The most frequently used dimensions to set those pre-determined (standardised) charges are the voltage level, the connected capacity, and the distance to the network. The choice to apply different charges for different network levels may consider that at higher voltage levels the connection costs are typically higher and vary more across the network users compared to lower voltage levels, which increases the need for more differentiated connection charges to ensure cost-reflective charges. At the same time, at lower voltage levels the number of network users is significantly higher, which may create too high administrative burden for the system operators to calculate connection charges individually.

As evoked in the new Electricity Market Design, the grids must be reinforced and expanded to cope with all new capacity that needs to be connected. It is crucial to change in the regulatory framework the way grids are developed, essentially by moving from an incremental approach (where the grid operator responds after demand is observed) to a build-for-the-future approach that includes, among other things, anticipatory investments to cater for future expansion of RES. Transitioning to this approach might have implications for the network connection charges policy. It could potentially result in a shift towards a flat per MW fee instead of a fee directly connected to a specific connection cost that can vary based on location.

To summarize related to connection charging:

- In the EU and CPs, connection charging binding harmonisation is not seen as adequate. To increase transparency and comparability in tariff-setting, the ECRB is tasked to prepare biannually a best practice report on transmission and distribution tariff methodologies in Energy Community CPs. The last report has been published in November 2023.
- Each approach to grid connection cost allocation, shallow and deep, has pros and cons. The merits and drawbacks of each policy have been analysed from various perspectives. The perspective represents the sum of interests that each market actor envisages to promote, and the regulator usually needs to balance these. This balance may also lead to different approaches regarding transmission and distribution. When setting a charging policy, all network-related cost burdens on the concerned network users should be considered, including those recovered via withdrawal charges, injection charges, connection charges, or other means. The hybrid model should be preferred as it takes advantage of the two (deep and shallow) policies, offering a shallow connection approach and providing a locational signal through a capacity

charge.

- In case the deep connection charge is applied, the introduction of a certain cost-sharing "compensation mechanism" should be considered in case the infrastructure concerned also serves the future network users, i.e., re-balance of connection charges between the first mover and subsequent applicants.
- Different approaches regarding transmission and distribution are typically present (there is no binding harmonisation in the EU and CPs). In the transmission grid, connection charges are typically based on actual costs (the connection costs are typically higher and vary more across the network users), while pre-determined connection charges are more common in the distribution grid (the number of network users is significantly higher, which may create too high administrative burden for the system operators to calculate connection charges individually).
- Even though introducing a different approach for the connection of some categories of network users (new technologies) is good for incentivizing their integration into the /grid (i.e., all network users pay for network reinforcements caused mainly by RES through the Use of system charges), the application of this approach should be limited in time, i.e., until the specific goals for their integration are achieved.

5.1.3. Harmonised grid connection requirements - Connection Codes

Among other objectives, the Connection Network Codes introduced by the Third Energy Package aim to ensure the integration of renewable electricity sources and make appropriate use of the facilities' capabilities in a transparent and non-discriminatory manner. Particularly, Regulation (EU) 2016/631 establishes a network code on requirements for grid connection of generators, as incorporated by the Permanent High Level Group Decision 2018/03/PHLG-EnC. This network code was a step towards harmonizing requirements for power-generating modules and power park units. The network Connection Code implementation process[209] requires updating existing national grid codes in the field of connection of power generating facilities, distribution systems, and industrial consumers. In the CPs, the Connection Codes are mostly transposed but partially implemented. The Connection Codes are implemented primarily through the transmission network codes (AL, BiH, XK*, ME, MK, RS). In **Georgia**, TSO (GSE) prepared a new version of the transmission grid code, but its approval is expected to take place together with the market opening, which was postponed[210]. In **Moldova**, the TSO submitted the missing set of non-exhaustive requirements to the regulator for approval. In

[209] *The deadline for transposition of the Connection Network Codes was 12 June 2018 and for implementation by 12 June 2021.*

[210] *According to Energy Community Annual Implementation Report (November 2023), the Government postponed the opening of the day-ahead, balancing and ancillary services markets twice in the course of 2023. The last postponement applied to the intraday market as well. The market opening is to take place on 1 July 2024.*

Ukraine, most but not all requirements were properly transposed in the transmission grid code. Except in **Kosovo***, in all other CPs, in the distribution grid codes, requirements are either not implemented (AL, BiH, GE, MD, RS, UA) or are not properly implemented (ME, MK). **Georgia** has the oldest Transmission Grid Code (from 2014), and **Albania** has the oldest Distribution Grid Code (from 2008) of all the CPs.

To establish harmonized connection rules for power-generating modules, all CP shall properly align rules governing connection with the requirements of the Connection Network Codes and improve implementation. Furthermore, the Grid Codes should be regularly updated to consider modern technological developments.

Despite the RfG network code, several requirements, particularly for distributed resources like solar PV, are still not harmonized in Europe. The European standardization body CEN-CENELEC has conducted significant work to create a (non-binding) European standard (EN 50549-1 for low voltage and EN 50549-2 for medium voltage), which national authorities should reference. It standardizes a number of elements not covered by the RfG or left to the discretion of countries. This gives each country the flexibility to select its individual set of functions and parameters required but also provides a detailed framework of the functions and capabilities that can be requested.

Harmonized grid connection requirements for DER
There are several countries almost directly referring to European standards. These only ask for country-specific settings utilizing the capabilities requested in the EN standard (e.g., Finland, Poland, Portugal, Romania), at least for equipment needed for Type A and B PGMs.

5.1.4. Strategic energy investments and TEN-E Regulation[211]

Five out of nine CPs have enacted legislation intended to pave the way for the introduction of expedited procedures to assist strategic investors. **Albania** (2015), **Kosovo*** (2016), and **Moldova** (2021) have all passed laws governing strategic investments, while **North Macedonia** (2022) and **Serbia** (2021) have amended their Energy Laws to include provisions for strategic energy infrastructure projects. In November 2021, **Moldova** Law no. 174/2021 (National Security Investment Law) entered into force which regulates the conditions for investment

[211] *The TEN-E Regulation 347/2013 presently in force was incorporated and adapted into the Energy Community acquis in October 2015. Decisions of the Permanent High Level Group no. 2018/03 and no. 2018/05 from 12 January 2018, in Article 1, items 1 and 2 defines the obligation for all Contracting Parties to transpose Regulation EU 2016/631 (Network Code on Requirements for grid connection of generators – NC RfG) and Regulation EU 2016/1388 (Network Code on demand connection – NC DC) without changing the structure and text, except for translation and adaptions made by the said Decisions. Each Contracting Party shall bring into force the laws, regulations, and administrative provisions necessary to comply with Regulation (EU) No 347/2013, as adapted by the Ministerial Council Decision 2015/09/MC-EnC of 16 October 2015, by 31 December 2016. In December 2023, the 21st Energy Community Ministerial Council adopted decisions to incorporate the TEN-E Regulation 2022/869 into the Energy Community framework.*

activities in areas of importance for state security (energy infrastructure is essential for state security). However, a functional mechanism related to this procedure has not yet been regulated (the secondary regulatory framework is scheduled to be approved soon).

"Accelerator unit" for strategic projects - Spain
The regional government of Andalusia in Spain has created an "accelerator unit" for projects considered strategic under the remit of the regional Department of Public Administration and Interior. The recognition of strategic importance implies the selected projects receive preferential treatment when it comes to the administrative processing of the permits and authorisations needed to develop them.

Incorporated and adapted by Energy Community Ministerial Council Decision 2015/09/MC-EnC of 16 October 2015 on the implementation of Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure, the Regulation lays down guidelines for the timely development and interoperability of projects of Energy Community Interest. **Kosovo*** has transposed and implemented the TEN-E Regulation (EU) 347/2013. **Moldova** transposed the TEN-E Regulation (EU) 347/2013 and partially Regulation (EU) 2022/869 (amendments to Energy Law in 2023). **Albania** transposed the TEN-E Regulation (EU) 347/2013 but no progress has been made in the implementation. **Bosnia and Herzegovina** and **Georgia** have not transposed the TEN-E Regulation (EU) 347/2013. **North Macedonia** and **Serbia** partially transposed the TEN-E Regulation (EU) 347/2013 (amendments to Energy Law), and no further progress has been made. In **Montenegro**, initially scheduled for 2019, the adoption of the new Law on Cross-Border Energy Infrastructure Projects, intended to transpose the Regulation (EU) 347/2013, is pending. Similarly, in **Ukraine**, the Law about Projects of National Interest in the Field of Energy was submitted to the Parliament in March 2023 with the aim of transposing TEN-E Regulation (EU) 347/2013 but has not been adopted.

The revised TEN-E Regulation (2022/869) was adopted in the Energy Community on 14 December 2023. Ministerial Council Decision 2015/09/MC-EnC, adapting and adopting Regulation (EU) No 347/2013, is thus repealed. CPs shall transpose and implement the new regulation until the end of 2024. To encourage progress in its implementation (strategic investments), all CPs shall develop a secondary regulatory framework and strengthen the capacities of implementing institutions.

Regulation (EU) No 347/2013 (old TEN-E Regulation) required a candidate project to prove a significant contribution to at least one criterion from a set of criteria in the process for the elaboration, which could have, but did not need to, include sustainability. That requirement, in line with the specific needs of the internal energy market at the time, enabled the development of projects that addressed only the security of supply risks, even if they did not demonstrate benefits in terms of sustainability. However, given the evolution of the Union's infrastructure needs, the decarbonisation goals, and the European Council conclusions adopted on 21 July 2020, according to which Union expenditure should be consistent with Paris Agreement objectives and the 'do no harm' principle of the European Green Deal, sustainability in terms of the integration of renewable energy sources into the grid or the reduction of greenhouse gas emissions, as relevant, should be assessed to ensure that trans-European energy networks policy is coherent with the Union's targets for energy and climate

and 2050 climate neutrality objectives, taking into account the specificities of each country in reaching the climate neutrality objective. With regard to the 'do no significant harm' principle the Regulation (EU) 2022/869 requires:

- project promoters shall draw up an implementation plan for projects on the Energy Community list, including a timetable for feasibility and design studies including, as regards, climate adaptation and compliance with environmental legislation and with the doing 'no significant harm' principle, and
- during project implementation, project promoters should report on compliance with environmental legislation and demonstrate that projects do 'no significant harm' to the environment and climate adaptation measures taken.

The EU Commission will conduct a study in 2024[212] assessing the implementation of the permitting provisions of the TEN-E Regulation. This will primarily enable identifying and disseminating of best practices that CPs can consider. We recommend taking the required actions to ensure that CPs are included in the EU Commission study or to perform a study for CPs to evaluate the application of the TEN-E Regulation's permitting rules.

5.2. Specific to RES

5.2.1. Clear roles and processes

In all CPs, it was challenging to analyse the connection procedure. In **Albania**, for example, reliable information sources on the DSO website were unavailable since, during 2023, participants outside of Albania could not access the website. We note that the "dedicated section" on the operator's website, which describes in detail the connection procedure, provides comprehensive data, and guidelines, and includes all the forms, is rare. The latter is also recognized by 2 TSOs (MD, MK), 2 DSOs (AL, in Bosnia and Herzegovina, in the entity Republika Srpska), and 2 business support organisations (BiH, UA). In response to the survey, they indicated that the lack of information readily available to the public is the reason for delays in getting the connection agreement. Albanian DSO stressed RE developers' incomplete applications due to insufficient information.

This leads us to the conclusion that the procedures and responsibilities should be more clearly defined and transparent.

Compared to other CP operators, the **Serbian** TSO[213] and **Montenegrin** DSO approaches illustrate more advanced practice concerning well-defined procedures. In 2020, **Montenegrin** DSO (CEDIS) adopted and made the 104-page document in Montenegrin publicly available, which comprises a detailed overview of the process, all relevant documents, and all forms

[212] *COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Grids, the missing link - An EU Action Plan for Grids*

[213] https://ems.rs/prikljucenje-na-prenosni-sistem/

associated with the connection procedure. Also, the CEDIS document provides the typical amount of time the DSO needs to complete connection infrastructure construction from receiving the construction permit (e.g., 45 days for an LV connection, 180 days for a 10 kV connection, and 18 months for a 35 kV connection). For any other operator, these statistics data are unavailable (at least, on the operator's connection process-related webpage). This is helpful information for developers when choosing who will design and construct the connecting infrastructure.

For CPs, we suggest the same course of action identified in the RES Simplify study[214]. It seems essential to define and clearly describe the process that must be followed in an application process and the parties' responsibilities. The design of the process should take the following elements into account:

- A clear sequential description of the application process should be provided;
- Individual responsibilities of the operator, applicant, and other authorities/parties should be clearly assigned;
- Transparency on required documentation for each process step should be provided (appropriate rules should avoid repetitive requests for (further) data and documentation; each documentation should only be required once);
- Clear deadlines for each step of the process should be defined;
- Concerns from other interests (environmental, spatial, etc.) should be formulated at an early stage to avoid a late appearance of show-stoppers;
- The process design should include a clear framework for complaint.

Guidelines for developers act as a helping hand when it comes to the realization of renewable projects. They inform and describe the connection process of RES. Developers can extract the necessary information and even application documents during the process. Information must be easily extractable (texts not formulated in a too complex manner), and knowledge should be displayed in an appealing way (figures can also help to show arranged information). It can be useful to integrate an actor from the target group (primarily investors in RE projects (different sources), customers, and other stakeholders involved in the process (RA, TSO, DSO)) when formulating guidelines as they can give feedback on how understandable the guidelines are. The second step is to make the guidelines easily accessible. Without easy access, the quality of the guidelines does not matter, as nobody can access and read the advice. Digitalization is key when it comes to quick, easy, and transparent access to information.

Connection guide – E-REDES DSO (Portugal)
Targeting all kinds of stakeholders, the E-REDES (DSO in Portugal) Connections guide is an example of a thorough and well-organized manual about connection to the distribution grid.

[214] *RES Simplify study (April 2023)*

5.2.2. Electronic submission and communication (information management)

Most CPs have regulations that specify several arrangements for submitting connection requests (e.g., in **Ukraine**, connection applications and copies of the attached documents can be submitted electronically to an e-mail address of the "one-stop shop" department or as hardy copies mailed to Ukrenergo). On the other hand, written filing of requests is still frequently presumed when it comes to procedures (e.g., in **Albania**, in the connection procedure, TSO and the project developer communicate via written documents; e-mail correspondence between the parties may be accepted during the various stages of the procedures' execution to speed up communication; still, in any case, it will only be considered official if it is accompanied by a letter). In almost all instances, operators that allow e-submission presume e-mail correspondence. The exception is Elektrodistribucija DOOEL (DSO) from **North Macedonia**. DSO accepts requests submitted in writing to the DSO or electronically through the e-building approval information system (signed with a valid digital certificate).

Digitalization is key when it comes to guidance and application documents. Therefore, at the CPs, a digital central contact point (information platform at one-stop-shop and/or network operator) shall be implemented to make this access possible.

Digital communication platform
Portugal–DSO E-REDES Due to its public service obligation, more than 6.3 million customers connected to the grid, ~2.800 employees, ~7.000 partners, and continuous action for the management of the electricity grid and the new smart grids, E-REDES practices and depends on a significant digitalization of its processes and on a permanently distributed and collaborative operation. DSO adopted the Technological Roadmap up to 2030, which presents an integrated vision of the company's transformation in the context of energy transition, communicated across the entire organization, and structured in 6 areas of action of a DSO. E-REDES is leveraging on digital to increase efficiency, among other aspects, in connection procedures. E-REDES Digital aggregates all the services that residential and business customers can request from E-REDES in a single place. These platforms allow the submission of grid connection or meter reading requests, monitoring the status of requests, reporting faults and losses, or even consulting consumption, production, and billing data. **France- DSO Enedis** https://www.raccordement-entreprise-enedis.fr/ **Estonia-TSO Elering** In Estonia, the national TSO Elering has an electronic application portal where all documents necessary to connect an RE installation to the transmission grid can be submitted.

It is worth mentioning that in **Ukraine**, in addition to electronic submission (e-mail, via DSOs website using an electronic digital signature, or by one of the other services that DSOs

provide[215]), the Distribution Code requires DSOs to facilitate the use of e-communication. If the customer wants to receive online information about the organizational and technical steps DSO has made to provide connection services (i.e., allocation of land plots, approval of project documentation with other interested parties, permit for construction works, the tendering processes, the commissioning, and testing, connection to the grid; all with an indication of the expected and final date of execution), on the connection application customer can specify that he wants a personal account on the DSO website. The personal account also enables electronic submission of application for connection, electronic signature of the connection and distribution service agreement, and receiving invoices. In other CPs, we see that e-communication is not used.

Using e-communication, including a mechanism for monitoring project progress, is beneficial for applicants and authorities alike. CP operators shall introduce IT platforms that allow clear tracking of individual requests. This accelerates the permitting process and provides transparency (tracking of open tasks, ongoing permits, and overdue tasks). The platform should enable communication, including questions, answers, and comments in both directions. Ideally, this replaces communication via e-mail or the phone so that all information can be stored and tracked in one place. This also increases flexibility, for example, in the case of staff changes, both on the side of the applicant and the operator. Finally, IT infrastructure should not only support interaction between operator and applicants but also contribute to the effective and efficient processing of applications within the operator. Operators can easily sort, store, and review digital documents and share them between the parties involved. They can identify a specific project with a unique application number and always know where an application is "located" in the process, who is responsible for which step, which steps can be worked on in parallel, and who is responsible next. It also allows the operators to manage the timing of the individual process steps. Finally, such a system can be used to analyse indicators across applications and detect bottlenecks that lead to long processing times rather than only help manage specific programs.

The CP transposing legislation shall specify for the connection procedure the points at which the calculation of the time limit begins and ends, and the communication platform (single contact point) shall be tasked with monitoring the implementation deadlines.

Digital communication platform - E-REDES (Portugal)
Digital communication platform allows for easy application and tracking (Dashboard Status) of processes on a daily basis for Renewable Power Plants, Self-consumption, and Electric Mobility.

[215] *As stipulated in the Distribution Grid Code, approved by the resolution of the National Commission for State Regulation in the Energy and Utilities Sector dated March 14. 2018 No. 310 "On Approval of the Distribution System Code". All DSOs in Ukraine shall comply with the Code.*

Tools for governments to speed up RE expansion – WindEurope initiative[216]
The RED mandates EU Governments to digitalize their procedures within two years. WindEurope observed that the rules are not enough; governments need the tools to digitalize. WindEurope has been working with Amazon Web Services and Accenture to develop a solution for permitting that can help public administration streamline the application revision process. Together, they have developed the EasyPermits platform, which is currently being tested with a Danish municipality. The platform will offer a single location for automated workflows, increased application accuracy, and enhanced process transparency. It will also help to engage community members and allow them easy access to timely and relevant project information. These should all contribute to a more effective permitting process and, ultimately, more new wind farms to get built with community support.

As recommended in the EU Action Plan for Grids[217], ENTSO-E and the EU DSO Entity should support system operators in digitalising and streamlining procedures for grid connection requests, for example, by issuing guidance and recommendations, at the latest by mid-2025. Such guidelines and recommendations shall also be developed for (extended to) CP operators.

5.2.3. Publicly disclosed grid hosting capacity

In three CPs (AL, XK*, ME), the applicant and TSO may engage in preliminary discussions regarding new connection. In **Montenegro**, the TSO uses this preliminary analysis to provide comments on spatial planning documents. These preliminary discussions are held at no cost, do not count as an application, and provide preliminary cost estimates for potential connection. We recommend adopting such a practice in all CPs to provide information on scarce capacity in the grid (if any) and connection costs. Also, concerns from other interests (environmental, spatial, etc.) should be formulated early in the process before significant time and money are spent on the project. This allows RE project developers to make informed decision on the project's continuation.

Queues on grid connections cause long delays in bringing renewables on stream. These are often the result of insufficient information for project promoters but also of the modalities of the permitting process. Thus, bringing visibility on available grid capacities helps directing connection requests to where they can be dealt with most readily.

Except in **Ukraine**, **Moldova**, and **Georgia** (transmission grid), in all other CPs, for TSO and DSO, there are no requirements to publish hosting capacity for RES integration, i.e., existing grid availability. In **Ukraine**, operators are required (under the grid codes) to publish and update all information pertaining to the conditions of grid connection as well as details about the components of their systems. However, at the moment, this information is not readily available on the operators' websites. Certain obligations have recently been enforced in **North**

[216] *WindEurope – EasyPermit platform*

[217] *COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Grids, the missing link - An EU Action Plan for Grids (November 2023)*

Macedonia. According to the amendments of the Energy Law from November 2022, the Government, on the recommendation of the Ministry, annually adopts an "*Indicative plan for the construction of facilities for the production of electricity from renewable energy sources*", based on the approved plan for the development of the transmission grid and the plan for the development of the distribution grid, as well as the data received from the competent institutions (Regulatory Commission for Energy, the ministry responsible for agriculture, the ministry responsible for spatial planning, the ministry responsible for environment, and self-government). The Indicative plan contains data on the total installed capacity by region, which can be connected to the transmission system and distribution grid. After the first plan is adopted, the quality of the data it provides can be evaluated. Examples of good practices are **Montenegrin**, **Georgian**[218], and **Moldovan**[219] TSOs and DSO[220]. Even though not legally obliged, **Montenegrin** TSO (CGES) made information on the grid's hosting capacity for new connections available to the public[221].

It is crucial for project developers to have clear visibility of the existing available network capacity when planning their projects. Such transparency enables developers to focus on locations with higher availability of grid capacity and factor in the anticipated grid connection costs in their site selection decisions. Operators should provide transparent, understandable, granular, and regularly updated information on grid hosting capacities and connection request volumes in line with the Commission's new Electricity Market Design. Data on available network capacity is not binding and does not influence whether a project is permitted but ensures visibility for developers.

[218] *GSE Free capacity at substations*

[219] *Moldelectrica Capacities available for power plants*

[220] *Rețelele Electrice de Distribuție Nord Availability of power plant connection to the electrical distribution network*

[221] *https://www.cges.me/o-nama/karta-prenosnog-sistema/prikljucenje-na-prenosnu-mrezu*

Access to data on available grid (hosting) capacity - examples
• **France**: https://www.capareseau.fr/ • **Portugal**: https://e-redes.opendatasoft.com/explore/dataset/capacidade-rececao-rnd/information/ • **Netherlands**: TSO:https://www.tennet.eu/nl/de-elektriciteitsmarkt/connecting-dutch-high-voltage-grid/netcapaciteitskaart DSO: https://capaciteitskaart.netbeheernederland.nl/ • **Spain**: https://www.edistribucion.com/es/red-electrica/Nodos_capacidad_acceso.html • **Czech Republic**: https://geoportal.egd.cz/itc/default.aspx?ck=1&SID=&serverconf=prip2&br35info=1 • **Ireland**: https://www.esbnetworks.ie/new-connections/generator-connections-group/availability-capacity-map • **Belgium**: https://www.elia.be/en/customers/connection/grid-hosting-capacity

5.2.4. Operators fit for purpose

The grid connection study assesses a RE project's grid connection method and costs. Except in **Moldova**, where the RE project developer develops and TSO approves the grid connection study, in all other CPs, the grid connection study is developed by the relevant operator. In response to the study questionnaire, TSOs from CPs indicated that the connection study development takes 30 days (AL) to 180 days (UA). DSOs suggested that the connection study development takes 10 days (in Bosnia and Herzegovina, in the entity Republika Srpska) to 40 days (MK), Table 5.

Table 5 Average duration (in days) of the connection study development, including revisions.

	AL	BiH	GE	XK*	MD	ME	MK
TSO	30	few months	60-120	30	RE developed study	90	120
DSO	30	10 in n Bosnia and Herzegovina, in the entity Republika Srpska	n.a.	n.a.	n.a.	n.a.	40

Research has been carried out to look at the legal requirements in CPs related to the number of days to provide a connection offer/draft agreement for a grid connection (from the date of the applicant's request for an offer), Table 6.

Table 6 Legal requirement related to the number of days to provide a connection offer/draft agreement for a grid connection (from the date of the applicant's request for an offer)

	AL	BiH	GE	XK*	MD	ME	MK	RS	UA
TSO	60(90)[1]	90(30)[2]	35;45;65[3]	90(30)[4]	30[5]	90	120&60&15[6]	45[7]	10[8]
DSO	20	30-60[9]	30	30-60[9]	30	15;90[10]	40	45[7]	10-20[11]

[1] *60 calendar days, or within 90 days if the TSO requests more information or data*

[2] *if TSO develops the connection study, it must issue the Conditions for Connection within 90 days of the request date or within 30 days of the connection study's revision if another professional institution develops the connection study*

[3] *based on the connection's voltage level: 35 days refers to 6(10)-35 kV, 45 days to 110 kV; 65 days to ≥220 kV*

[4] *90 days if the application is not complex; otherwise, the connection study is developed, and the Connection Offer is delivered within 30 days after the completion and revision of the study. There is no legal deadline for the study development.*

[5] *connection study developed by the applicant; 30 days after the completion and revision of the study*

[6] *60 days relate to specification of the variant(s) and development of preliminary connection analyses; 120 days refers to grid connection study development and revision; within 15 days of the date the fee for the grid connection study was paid, TSO issues a Consent to connect to the transmission grid*

[7] *Consent to connect to the grid must be provided within 45 days from the date of the applicant's request; however, this limit does not include connection study development, which must be developed prior to the request. There is no legal deadline for the study development. Serbia reformed its transmission grid connection process in October 2023, adding two "connection application windows" every year, which indirectly limits collective study development to 180 days.*

[8] *TSO delivers a draft connection agreement no later than ten working days after the application. If the applicant does not accept the TSO offer, a feasibility (connection) study is developed. TSO evaluates the applicant's connection proposal no later than 10 working days after receiving the study*

[9] *30 days if the application is not complex; otherwise, the connection study is developed, and the deadline might be extended by an additional 30 days*

[10] *15 days if ≤50 kW, otherwise DSO develops a connection study, and the deadline is 90 days*

[11] *20 days if TSO approval is required*

In addition, the questionnaire inquired about the average time span between the RE project connection application to the operator and the project's final energization (operation). The transmission grid connection procedure takes 1 year (UA) to 7 years (BiH). MV distribution grid connection procedure takes 1 year (AL) to 2 years (MK) and 3 months (AL) to 1 year (MK) in LV grids, Table 7. Compared to EU countries[222], where project permitting can span up to ten years from project start to permits granted, the data provided by the operators in the study survey can be regarded as reasonable. We believe this is because the existing network's hosting capacity is still sufficient for connecting new RE without requiring large network reinforcements. However, the interest in RE connections is already quite strong in the CPs (ranging from 0.7 (ME) to 3.7 (AL) times the capacity of the existing power plants), and the

[222] *McKinsey Renewable-energy development in a net-zero world: Land, permits, and grids (October 2022)*

issues EU Member States experience in grid infrastructure construction procedures will also be seen in CPs.

Table 7 Average time span between RE project connection application and final operation (commissioning), according to information provided by grid operators (years)

	AL	BiH	GE	XK*	MD	ME	MK	RS	UA
HV	4	2-7	1-2	3-4	>2	3	3,4	2,5[1]	1
MV	1	0,5[2]	n.a.	n.a.	n.a.	n.a.	1-2	n.a.	n.a.
LV	0,25	0,5[2]	n.a.	n.a.	n.a.	n.a.	0,5-1	n.a.	n.a.

[1] *information provided by the RE developer*

[2] *relates to Bosnia and Herzegovina, the entity Republika Srpska; no data for distribution grids in the n Bosnia and Herzegovina, in the entity Federation of Bosnia and Herzegovina*

Except in **Ukraine**, in all other CPs, the grid connection works (design, approvals for construction, negotiations of land rights, procurement, construction, etc.) are considered contestable works. The applicant for connection has a choice of who performs the grid connection works: an accredited independent company contracted by the applicant or the operator. In Ukraine, RE > 400 kW develops the design documents and is responsible for land allocation (expropriation) necessary to place the connection infrastructure. Construction, installation, and commissioning are non-contestable works that TSO/DSO must complete. For RE <400 kW, DSO provides a complete connection service. CPs are attempting to promote faster delivery, flexibility, and cost-effectiveness by enabling contestable connection works, giving RE developers more options and better control over the connection process.

In response to the study questionnaire, **Montenegrin** TSO (CGES) indicated that the main reason for the most significant delays in getting the connection permit is "insufficient experienced staffing at TSO". The Economic Chamber of **North Macedonia**, **Serbian** EPS, and two TSOs (MD, UA) also recognized the latter. Considering the vast number of recent RE connection requests, it can be expected that operators are understaffed concerning the number of employees. In general, the challenge is either that operators are understaffed, and their technical experts are overwhelmed leading to delays, or that respective staff lacks expertise (even though employees' expertise has risen in recent years) – the issue could be a combination of both. Staffing concerns are a challenge not only in CPs but also in large EU Member States[223] (DE, FR, IT, ES, PL, AT, DK, SE), while the lack of expertise is often reported in developing markets. Considering the demand for experts in the RE industry and the difference in salaries, keeping experienced staff working in the operators is an additional challenge. Operators in the CPs should ensure sufficient staffing with relevant skills and qualifications (software on networks, new digital and technology skills, anticipating competencies) and implement streamlined processes (digitalization).

In line with Article 59 of the Directive (EU) 2019/944, regulatory authorities in the CPs shall

[223] RES Simplify final report (April 2023)

monitor the time taken by transmission system operators and distribution system operators to make connections.

Out of 15 in 8 responses to the study survey (TSOs in BiH, GE, XK* and RS; DSO in North Macedonia, Solar Energy Association of Ukraine, and developers from RS and ME) have recognized bureaucratic issues as the reason for delays. The survey participants did not go into detail. Thus, we believe that are bureaucratic issues such as lack of legal coherence, i.e., a large number of authorities that have to be approached and involved, and to this related, large number of uncoordinated permits required by authorities, the lack of communication by authorities, rules that force project permitting to be restarted due to minor changes of the technical design, discretion which allows authorities to interpret laws inconsistently without explanation and that prevented project and/or network operators from filing an appeal when authority decisions are delayed. We notice the reluctance of investors and developers to take legal action against competent institutions because this could worsen their relationship with decision-makers and possibly impede their future projects. Even if unlawful steps have been taken or deadlines not met by competent authorities, investors and developers rarely object to relevant institutions. Instead, informal persuasion methods might be undertaken for decision-makers to respect their obligations. Legal action is often viewed as an unnecessary complication with additional costs, long duration, and uncertain outcomes. Establishing a One Stop Shop or a single contact point can help with bureaucratic issues to enable smoother and quicker permitting of individual projects (for both RE and operators) and to detect bottlenecks that lead to long processing times (eradicate crucial barriers). A One Stop Shop or a single contact point aims to reduce permitting complexity for project developers and increase their efficiency and transparency. The industry also emphasized the lack of digitalization in the permitting processes. Applications for approvals require a lot of paperwork in the CPs, as in most European countries. The demand for simplification includes the possibility of submitting project documents digitally (at least a signed digital version sent by e-mail). It is also critical to determine whether the number of documents, such as descriptions, grid sheets, expert surveys, etc., are necessary for some steps, particularly for small projects.

Green Sprint Project - E-REDES (Portugal)
In 2022, E-REDES DSO from Portugal adopted and started implementing a roadmap of initiatives in four main areas: organizational adjustment, proactive information, digitalization, and proximity. Organizational adjustments introduced more agile working methods, e.g., daily meetings, KPIs, and shared targets. As a result, lead time for RE grid connection studies was reduced by 27% in 2022 (from 56 to 41 days), and 3.5x more producers were connected in 2022 (vs 2021).

In **Montenegro**, monetary compensation is stipulated if the consent for connection is not resolved within the prescribed time frame (200€ for requests that need connection study, and 20€ in all other cases). However, it is not a significant sum. In **Ukraine**, RE (developer) cannot organize connection works (construction) on behalf/instead of the operator. Distribution Grid Code prescribes the deadlines for works in case of standard and non-standard "turnkey" connections (i.e. when DSO oversees all activities in the connection procedure). For reasons not dependent on the DSO (e.g., delay in allocating land plots for connection infrastructure),

in case the connection service is provided with a delay, the customer is eligible for reimbursement and payment of damages for the violation of the terms for providing the connection service following the Distribution Grid Code.

On the other hand, occasionally, even the applicant might cause a delay in the procedure. As previously mentioned, in **North Macedonia**, the applicant has one year from the date the consent was obtained to complete the connection arrangement. To reserve network capacity in the connection procedure for such a long time is not recommended (i.e., the applicant should have a shorter time to complete the agreement - to decide on the continuation of the project). Establishing a bank guarantee obligation to TSO by the RE developer in **Serbia** is an example of such a practice[224].

CPs should provide a clear framework to disincentivize the application for connection requests where a solid project does not substantiate the request and is not sufficiently committed by a developer or the requests of over-capacities beyond what is needed for the project, to avoid the reservation of connection capacities is given to projects less likely to materialize or whose primary business plan is to sell the right for connection. For instance, generation projects that are financially bound or pay for the grid connection costs when requesting a connection are less likely not to proceed with their projects.

In Spain, Denmark, and Italy, connection applicants must make guarantee deposits. In Germany, the applicant must go through a bidding phase for subsidized projects. If the project is not realized as in the original commitment, penalties or losses of subsidies – where applicable – will be applied.

5.2.5. Dealing with limits in the grid

Issues related to grid connections are widespread and, although generally less problematic in terms of causing delays than other administrative barriers, they can halt overall RE deployment. The lack of transparency regarding the availability of grid capacity creates a bottleneck in identifying a location for the project (see section on Publicly disclosed grid hosting capacity). Another barrier to RE deployment is connection charging, which can threaten the economic viability of RE projects, particularly where the costs of grid connection and expansion must be borne by project developers (see section on Connection charging). However, the main grid connection issues often result from inadequate grid capacities, resulting in (temporary) connection request denial.

The relevant regulation strongly obliges operators to connect parties requesting a connection. CPs should transpose the Electricity Integration Package and shall be obliged to fulfil Article 42 of the Directive (EU) 2019/944, which states: "*The transmission system operator shall not be entitled to refuse the connection of a new generating installation or energy storage facility on the grounds of possible future limitations to available network capacities, such as*

[224] *The Decree on the Conditions of Delivery and Supply of Electricity ("Official Gazette of RS", No. 84/2023)*

congestion in distant parts of the transmission system. The transmission system operator shall supply necessary information" and *"The transmission system operator shall not be entitled to refuse a new connection point, on the ground that it would lead to additional costs resulting from the necessary capacity increase of system elements in the close-up range to the connection point"*. In EU MS[225], common reasons for refusals include issues such as insufficient capacity in the existing grid and obstacles related to land-use planning. Responses to the study questionnaire have also confirmed the latter. All CP operators stated that connection request denials are primarily due to grid limits and impediments connected to land-use planning in two countries (ME, UA). Grid codes in **Montenegro** allow operators to deny connection requests if there is a "technical limitation in the grid," referring to spatial planning documents that do not provide a means of building the connection infrastructure and the power plant. Growth in RE project applications to connect to the network means that the network requirements needed to serve would-be connecting parties now (or very soon) significantly exceed available network capacity. Figures on refused connection requests in the CPs show that in the last six years (2017-2022), there were never more than three refusals per year (responses were received from all TSOs and three DSOs). However, the interest in RE project connections is already quite strong in the CPs, ranging from 0.7 (ME) to 3.7 (AL) times the capacity of the existing power plants in the observed countries, according to information provided by operators (Figure 1, March 2023), and it is continuously increasing (Figure 2). Due to inadequate grid preparation, lengthy waiting lists for connections will soon develop, and (temporary) rejections owing to capacity issues may become inevitable.

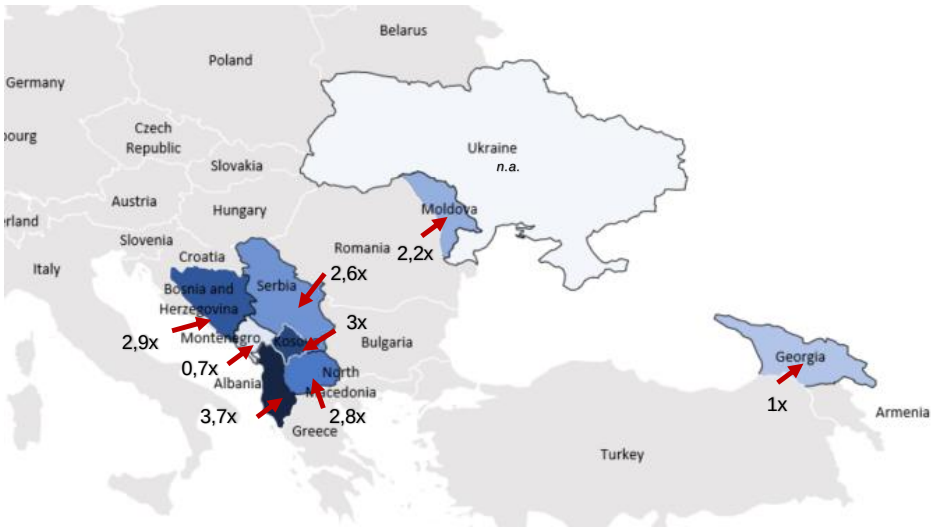

Figure 1 The interest in RE project grid connections in the CPs, expressed as the multiplier of the capacity of the existing power plants

[225] *CAN Europe, Guidelines to Faster and Fairer Permitting for Europe's Renewable Energy Transition (October 2023)*

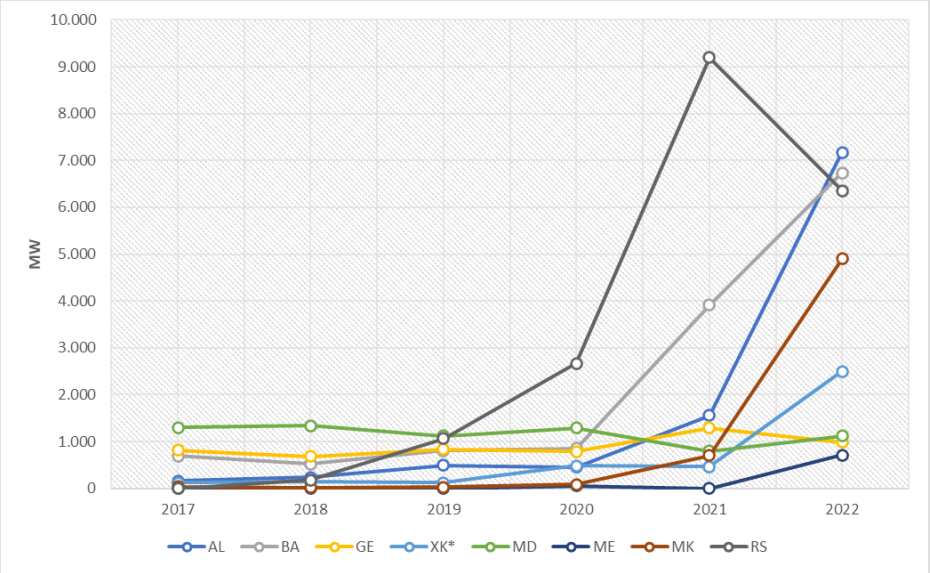

Figure 2 Installed capacity of applications for connection to the transmission grid in CPs (except UA), per year

Regulatory reforms to reduce waiting lists and encourage more efficient waiting list management can be observed in many EU jurisdictions. Adoption of connection application window, limited (flexible) grid connection agreements, anticipatory grid investments, and preferential treatment of grid friendly RE project applications are innovative approaches to handling connection applications in areas with scarce network capacity. They deserve consideration in the CPs because some of the strategies listed may be a solution to the issue of the network's capacity scarcity.

Connection application window

Several countries (IT, IE, HR) use "connection application windows", with applications within the application window processed collectively as an alternative to first-come-first-serve management of connections. After the window closes, a collective evaluation of the applications seeks to create the best technical solution to remedy grid constraints and maximize cost savings while implementing all connections. It is applied regularly (IE, HR transmission grid) or exceptionally (IT). Croatian Rules on connection to the transmission network[226] (adopted in July 2023) stipulate annual connection application windows for producers' connections in the transmission grid. On July 28, 2023, the US Federal Energy Regulatory Commission (FERC) issued a new rule[227] to reform procedures and agreements that TSOs use to integrate new generating facilities into the existing transmission system, i.e., transitioning from a first-come-first-served serial process to a first-ready-first-served cluster study process. TSOs will study proposed generating facilities in batches (clusters) rather than separate studies for each individually. To ensure that only ready projects can enter and proceed through the queue, TSOs will impose additional financial readiness and site control requirements. As already mentioned, in **Serbia**, in October 2023, the new Regulation on the

[226] *Croatian Rules on connection to the transmission network (July 2023)*

[227] *E-1 | Order 2023 | RM22-14-000*

conditions of delivery and supply of electricity entered into force, introducing the two "connection application windows" in the transmission grid. Every year, TSO(EMS) will collect and process applications for connection in two windows: March 1st to June 30th and September 1st to December 31st. The request for the connection study development contract must be filed no later than the first day of the month preceding the first month of the "connection application window" during which TSO (EMS) develops connection studies. As a result, requests should be filed no later than February 1 and August 1. The exception are only strategic partners whose requests are processed within the timeframes set by the RES Law.

"Open season" - Italy
In Italy, the "connection application windows" are an exception from the usual grid connection process, which functions according to a first-come-first-served criterion. This is the special arrangement in the regulation for managing connections when network capacity is limited. In areas facing critical capacity shortages, the local DSO and the TSO have the option to activate a so-called "open season" for an initial period of three months. The procedural regulations and the open season measure's timeframe are the same at the transmission and distribution levels. After publishing information about the planned "open season" one month in advance, the grid operator can collect connection requests throughout the three-month application window. During the open season window, connection applications are collected but not immediately processed. Instead, all the applications are jointly assessed after the window closes.

"Batch application process" – Ireland
In March 2018, the Ireland Commission for Regulation of Utilities (CRU) decided on the Enduring Connection Policy – Stage 1 (ECP-1), which replaced the previous Group Processing Approach (GPA) system that has been operational since 2004. In 2020, CRU decided on ECP Stage 2 (ECP-2). This provided for one application processing batch each year for three years (2021 to 2023) and prioritized large RE projects. ECP-2 also facilitates government-defined community-led renewable energy projects by allocating these separately and not requiring planning permission to apply for a grid connection. The CRU is currently developing the following stages of the Enduring Connection Process. A new connection policy may need to allow for more frequent processing of applications in comparison to the current ECP regime, which has a single annual batch opening window (e.g., quarterly or bi-annually).

Preferential treatment of grid friendly RE projects

Beyond transmission, grid congestion also arises from a lack of systemwide flexible assets (such as battery storage systems or pumped stored hydroelectricity) that help manage the significantly higher level of variability inherent to wind and solar energy. Because the stability of the power grid depends on predictability and a balance of supply and demand, the grid is not always able to immediately integrate all new wind and solar power. In **Serbia**, in the last two years, the requested capacity for RE connection has increased from 4.8 GW to 20 GW, which is 2.5 times the capacity of the existing power plants. To keep the system balanced, amendments to the Law on the Use of Renewable Energy Sources from April 2023 provided for the possibility for the TSO to postpone the RES connection if the adequacy analysis indicates risks to the safe operation of the power system due to the lack of reserves for system

balancing. The Law also introduces prioritization in response to a wave of connection applications. TSO and DSO are not allowed to postpone RE connection application which provides automatic Frequency Restoration Reserve (secondary reserve) to TSO for balancing. The secondary reserve can be secured by RE (20% of RE installed capacity), another market participant, or storage (at least 0.4 MWh/MW of RE installed capacity). In addition to **Serbia**, **Kosovo***, **North Macedonia,** and **Ukraine** have recognized that the development of renewable energy sources, such as wind power plants, requires additional reserves for balancing services. Except for **Serbia**, which recently introduced prioritization of connection applications that provide a reserve for balancing, other CPs do not prioritize specific connection applications.

Grid reservation for priority groups – Lithuania
In July 2022, the Lithuanian Parliament voted to restrict commercial solar plants to 2 GW grid capacity (out of 4.4 GW total grid capacity dedicated to solar). That meant all the solar plant grid reservations were pro-rata given proportional access to the grid with possible curtailing. In February 2023, the Lithuanian government decided to allow new commercial solar plants to connect to the grid until grid capacity allows, but they are subject to 100 % curtailment. The remaining 2.4 GW grid capacity for solar was divided into priority groups, with the most preferred being energy poverty reduction and renewable energy communities run by municipalities. The grid reservation for priority groups, coupled with improving the conditions for prosumers, meant that from July 2022 to September 2022, 54,489 households and businesses became self-consumers with an additional solar capacity of 564 MW, and the number is growing further.

Some EU countries apply additional incentives to "grid intelligent" or hybrid projects by facilitating their grid connection. Combined technology power plants, also referred to as hybrid plants, use and combine different renewable and related technologies (e.g., wind, solar, and/or storage assets) at the same location. In the context of scarce grid connection capacity, hybridisation allows optimising the use of grids and can help to reduce the infrastructure investment costs as the technology mix (e.g., wind and solar) provides a portfolio effect where variability is reduced (but not eliminated[228]). Co-location of storage device provides a necessary flexibility in storing the energy that would otherwise need to be curtailed when the RE generation exceeds the allowed grid connection capacity. What follows are examples of jurisdictions that have introduced scoring systems to incentivize specific projects by giving them higher priority for grid connection and/or speed up the implementation of mature RE projects that have been waiting in line for a long time.

[228] *Solar and wind technology have complimentary intra-year generation shapes with solar peaking in Q2-Q3 and wind peaking in Q1 and Q4.*

Bonus for "grid-friendly" solar projects in the grid connection procedure – Portugal

In Portugal, according to the Decree-Law no. 26-2019, grid connection requests are ranked with weighting criteria corresponding to their "grid friendliness", i.e.:
• if they plan to use existing or planned infrastructures (3 points if the grid connection construction is anticipated in the network development plans, 1 point if the grid connection is based on existing infrastructure with reinforcement);
• if projects include storage with a capacity equal or higher to 5% of the total power capacity and with a minimum of 2 hours storage capacity;
• if projects rationalize the use of infrastructure (a single big project compared to several small ones or several projects sharing grid connection).
The ranking then determines the priority with which projects will be considered and dealt with by the grid operator. This effectively incentivizes solar and storage or the rationalization of infrastructure use.

Bonus for solar and storage projects in the grid connection procedure – Spain

In Spain, according to the Order TED/1182/2021 adopted in November 2021, the grid connection is awarded based on a grading of the project (out of 100 points). The points are awarded based on technical features, socio-economic features, project maturity, and environmental impact. The technical feature criteria rewards, for instance, the co-location with storage (projects get 6 points if the battery storage capacity is 5% of the total capacity of the solar system), reactive power, short-circuit potential, kinetic energy, the ability to reduce frequency deviations, voltage stability or the capacity to reduce power automatically. Such a system is highly beneficial to incentivize investments into hybrid solar and storage projects or "grid-friendly" solar projects. Spain has also introduced regulatory changes that allow access to the grid by power installations using different generation technologies if it is technically feasible. In the case of hybridisation of existing assets, and provided that certain conditions on capacity and distance between the assets are met, only an update of the existing connection agreement is required.

New Grid Connection Priority Framework Favours PPAs and Energy Storage – Greece

In August 2022, following a longstanding unofficial halt in the approvals of new applications for grid connection offers (GCOs), the Ministry of Environment and Energy published a new decision on the priority framework for GCOs to RES projects. The provisions of this decision set out the priority order in which the pending requests for granting final GCOs will be considered: requests are classified into priority groups. They are subsequently assessed based on such classification. RES projects are grouped into six priority categories (further divided into subcategories). Applications for granting GCOs are processed by the TSO in each category, starting from Group A (which mainly relates to the largest projects, strategic investments, and plants close to the borders) and down to Group F. Group B includes only plants intended for concluding PPAs Another significant factor differentiating the decision from all previous regimes is the restriction in the uncontrolled licensing of RES projects, through the allocation by the competent TSO of a capacity limit per group/subgroup.

Limited (flexible) grid connection agreements

System operators address grid capacity issues by offering flexible connections, which allows restricting access to the network at times of peak load. They are primarily used to accommodate the connection of variable renewable generation to the grid and allow the connecting party to lower their connection charge and/or to connect more quickly. In Article

42 of Directive (EU) 2019/944, the legislator offers a derogation from connection refusal when stating that the prohibition *"shall be without prejudice to the possibility for transmission system operators to limit the guaranteed connection capacity or to offer connections subject to operational limitations, in order to ensure economic efficiency regarding new generating installations or energy storage facilities, provided that the regulatory authority has approved such limitations"*. As recognized in the EU Action Plan for Grids[229], regulatory authorities should establish frameworks for non-firm connection agreements, where relevant. Where network development is the structural solution to the capacity problem, non-firm connection frameworks should be designed so system operators do not delay grid buildout. In other cases, where grid development may not be economical, non-firm connections could be considered a long-term solution.

According to the ACER Report on Electricity Transmission and Distribution Tariff Methodologies in Europe[230] in EU MS, currently, there is limited interest in offering interruptible or flexible connection agreements to the network users, i.e., less than one-third of the countries apply these, and out of them, only four provide discounts to the connection or use-of-network charges. The current national legal and regulatory frameworks in CPs do not recognize "flexible connection agreements". They do not provide for the possibility of flexible connection in grid areas with scarce capacity.

We recommend support to CP national regulators in evaluating the advantages and disadvantages of enabling interruptible or flexible connection agreements in each CP.

Non-firm access rights - Great Britain's grid code changes to further accommodate
Non-firm connection agreements only appear to be widely used in Great Britain, although similar mechanisms are being developed in other EU MS. Great Britain has recently undergone a significant grid code review for grid access and forward-looking charges to accommodate the transition to a low-carbon energy system at the lowest cost. Even before these code changes, alternative connection agreements were possible to help connect faster or more cheaply. Still, the arrangements may have been loosely defined or required the user to face an undefined amount of curtailment. The amendments ensure that a standardized option is available for non-firm access for larger network users going forward and that the flexible connection agreements will have clear curtailment limits and end dates for non-firm access arrangements. Crucially, smaller network users have been deemed out of scope. These changes are also accommodated by significant changes to the distribution connection forward-looking charges where, going forward, the need to contribute to broader network reinforcement costs is removed for demand connections and reduced for generation connections. This will reduce the overall connection charges for those connecting to the distribution network, and demand connections are only charged for network expansions.

[229] *COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Grids, the missing link - An EU Action Plan for Grids (November 2023)*

[230] *ACER Report on Electricity Transmission and Distribution Tariff Methodologies in Europe* (January 2023)

Flexible (non-firm) connections – France
In France, DER producers already utilize flexible connections, especially at the transmission level. The regulator, CRE, has also introduced a regulatory sandbox, where some DSOs are currently testing flexible connections for DER producers. The current legal framework allows the DSO and TSO to propose a non-firm connection for producers in three distinct cases: • "Anticipated connection", where the DSO or TSO allows the connection of the power plant, with power modulation pending the construction of the distribution or transmission network. The regulatory framework introduced by CRE specifies the terms that should be included in the contract, including the maximum number of hours of power limitation and the duration of network construction; • "Alternative offer", where, in response to a request by a producer, the DSO or TSO can propose a flexible connection to optimize the investment and reduce the price of the connection. Any curtailment within the agreed limits is not compensated for. The regulatory framework sets out rules that should be adhered to by the network operator to propose an alternative offer. These rules include that the curtailed energy cannot exceed 5% of the annual production of the installation, and the guaranteed connection injection power cannot be less than 70% of the power requested; • "Intelligent offer", where, within the regulatory sandbox zones, the DSO can propose to connect a producer on a saturated primary substation/power transformer without creating any new capacity (adding additional transformers). In return, the producer is curtailed with compensation in case of congestion.

Introducing regulatory incentives for forward-looking grid build-out

The recent EU reform of the electricity market design through amendment of the relevant electricity market legislation[231] mandates regulatory authorities to promote public acceptance and the use of anticipatory investments, encouraging the acceleration of grid development to meet the accelerated deployment of renewable generation, including where appropriate, in designated renewables acceleration areas. Also, the revised TEN-E Regulation (EU) 2022/869 from June 2022 includes strengthened integrated infrastructure planning provisions to ensure, through sector integration, the most effective and efficient solutions and allow anticipatory grid investments to cater for future expansion of renewables generation capacities. Anticipatory investments can be relevant, for example, for investing in areas with high untapped onshore PV potential, such as renewable acceleration areas set in accordance with RED, or for building smart grids that support EV infrastructure charging national plans or municipal plans for heat pump rollout.

However, the regulatory framework is among the main drivers impacting the level and effectiveness of investments in grid development. Grids are typically regulated assets; consumers pay for investments through network tariffs. Higher energy system development costs will, therefore, normally lead to increased network tariffs and, hence, consumer prices, even though final consumer prices need to remain affordable. In addition, limiting project development to those based on current system needs may increase future system costs and, hence, consumer costs. Therefore, an agreement of concerned parties on the need for

[231] *Reform of electricity market design*

anticipatory investments is essential[232].

Such a major overhaul of tariff methodologies requires the right balance between, on the one hand, anticipating future infrastructure needs, accepting a higher degree of uncertainty that an infrastructure asset might not be fully utilized from its commissioning, and allowing for the early recovery of the related costs on the one side, and, on the other, affordability for consumers who bear the costs through network tariffs. The socio-economic welfare losses of delaying the network upgrades necessary to connect renewables will frequently outweigh the additional initial cost of anticipatory investments. Moreover, given the long lifespan of network assets, significant cost reductions can occur in the future when today's investments are made already considering upcoming needs.

As recognized in the EU Action Plan for Grids[233], reliable and high-quality network planning coupled with an enabling framework for anticipatory investments in areas with firm plans for renewable, electromobility, or heat pump deployments, together with streamlined permitting procedures for those grid projects, can substantially increase grid hosting capacities for new renewables and flexibility sources for the system.

We propose assistance to operators in increasing their capacity for determining and maximising hosting capacity to connect additional RES and for high-quality network planning (including assessment of non-grid reinforcement solutions, i.e., infrastructure digitalization and flexibility deployment). Also, we propose support to CP national regulators in drafting updated methodologies that will enable anticipatory investments, allowing grids to integrate higher volumes of innovative renewable energy.

---

[232] *Complementing the work on anticipatory investments being conducted by the Copenhagen Forum, the Commission, with support from ACER, ENTSO-E and EU DSO Entity and in consultation with relevant stakeholders on both electricity supply and demand side, will by Q1-2025 propose guidance identifying conditions under which the approval of anticipatory investments should normally be expected, taking into consideration different levels of development certainty of projects and ways to address the different levels, such as via the conditional provision of the anticipatory investments.*

[233] *COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Grids, the missing link - An EU Action Plan for Grids (November 2023)*

The Renewables Grid Connection Regional Schemes (S3REnR) and industry-led anticipation studies - France
Since 2010, France has introduced a strategic methodology to plan the development of its grid following the pace of deployment of local renewable capacities: the S3REnR (Schémas Régionaux de Raccordement au Réseau des Énergies Renouvelables). The schemes are published every 5-10 years and require setting a goal of network capacity for renewable energy according to the national energy objectives fixed by the State, the regional energy objectives fixed by the local authorities, and the local dynamic of renewable energies. The S3EnR is developed by the transmission system operator in cooperation with the distribution system operators and shall detail the necessary infrastructure works and their costs, the available capacity for new renewable capacities, and the provisional timeline for the related studies and works. The draft S3REnR is submitted to the consultation of stakeholders and is subject to an environmental assessment. It is approved by the regional representative of the State. Following the approbation of the State, the information on the S3REnR is made publicly available, and the new network infrastructure projects are launched. Following the S3RenR, the system operators (RTE, Enedis, and the local DSOs) are updating a website that displays information on the available network capacity. This planning tool enables the Regional Directorates for the Environment, Planning and Housing and project developers to closely monitor the electricity network development throughout the country. In addition, these plans provide planning and anticipation of grid connections needed in the future. In the S3RenR framework it takes three years to draft a plan, which is causing delays in building the infrastructure for new projects. In 2020, the French renewable energy association (Syndicat des Energies Renouvelables – SER) therefore launched "small S3REnR", which consists of anticipation studies realised every year, anticipating on the need for grid infrastructure.

5.2.6. Accelerating deployment through a faster permitting process for construction and reinforcement of the grid

As connection procedures might take 7 to 10 years in the most congested areas[234], overcoming the cumbersome permitting process for construction and reinforcement of the grid is crucial. Grid infrastructure construction can take significant time (e.g., the average lead time to build an overhead transmission line equals 10.2 years), largely dominated by the time represented by planning and permitting[235].

Ukraine is a good example of a CP taking action to rectify existing issues and accelerate RE project installation. The introduction of Law No. 5009, "On Amendments to Certain Legislative Acts of Ukraine on Simplification of Connection to Electric Networks," in August 2021 was driven by the cumbersome bureaucratic procedure for registering rights to land plots for connection infrastructure. Concerning the connection procedure, the Law provides for "connection on a turnkey basis, " removing some approvals and permits for the connection and facilitating easier access to land plots for grid/connection infrastructure. The DSO is solely responsible for developing and agreeing with other stakeholders on design documentation for

[234] *Eurelectric, Power System of the Future: Keys to delivering capacity of the distribution grid (September 2023)*

[235] *Average lead times to build new electricity grid assets in Europe and the United States, 2010-2021 IEA (2023)*

construction and/or reinforcement of the grid if the capacity of a customer's electrical installation does not exceed 400 kW, including the expropriations needed in these cases. The Law establishes a "single window" mechanism to streamline communications between "customers" and state and municipal administration, as well as other relevant entities. "Customers" include developers, DSOs, and project documentation developers for the construction and/or reinforcement of the grid and the construction of the "linear part" of the connection. To implement the mechanism, the Unified State Information Web Portal, a "One-stop shop for Customers and Developers of Project Documentation," should have been created by February 2022.

Regarding the land and construction, approval of the Cabinet of Ministers of Ukraine (CMU) is no longer needed to change the designated purpose of state or municipal forestry land for constructing Infrastructure Objects. Furthermore, the Law makes it clear that easements may henceforth be granted by users of state or municipal land without the consent of landlords to facilitate the development of Infrastructure Objects. For Ukraine, at the moment, it is not possible to assess the effectiveness of the advancements made possible by the Law. However, a "single window" is undeniably beneficial in facilitating communication between interested parties, particularly with executive authorities, local self-government bodies, institutions, and organizations.

In the CPs construction and reinforcement of the grid should qualify for the most favourable procedure available in permit-granting. Grid connection procedures should be bound by clear timelines that grid operators can reasonably meet, subject to the release of grid works permitting by authorities where necessary. These recommendations align with the revised RED timescales and proposals for accelerated grid permitting, qualified as overriding public interest, and they should be enforced until climate neutrality is achieved. This implies the need for streamlining grid development permitting (whether physical or digital). Policymakers must establish clear policy guidelines emphasising that the grid is a critical infrastructure of public interest and take decisive action to expedite permitting procedures for grid infrastructure while adhering to environmental imperatives. Administrative delays should be minimised by recognising the crucial role of grid development, thereby avoiding any hindrance to RE projects, which are themselves boosted by the RED directive.

5.2.7. Simplified grid connection procedures

Easing and simplifying project procedures is a simple approach to speed up permitting. According to art. 17 (1) RED II, Member States and CPs shall establish a simple-notification procedure for the grid connections of renewable energy systems developed for self-consumption and demonstration projects with an electrical output of 10.8 kW or less. The DSO can either approve or reject the requested grid connection or suggest an alternative which it must justify (e.g., safety reasons or technical incompatibility with the system). If the grid connection application is approved by the DSO or if there is no decision by the DSO within one month after receipt of the notification (silent approval), the RE systems can be connected. In addition, Member States are allowed to establish a simple notification procedure for the grid connection of renewable energy systems with an installed capacity of more than 10.8 kW

but not exceeding 50 kW. However, this can only be upheld if the grid's stability, reliability and safety is ensured (art. 17 (2) RED II). According to the RES Simplify project[236], simple notification procedures for RE projects are common in nearly half of the EU MS. Some countries (IE, IT, DK, HR, LT, MT, SI, PT) apply a simple notification procedure for the grid connection of small-scale projects.

Simple notification procedure for the grid connection of small-scale projects – Ireland, Lithuania, Denmark, Croatia, Slovenia, Portugal, Italy
In Ireland, for example, there is a straightforward, simple notification procedure for the grid connection under the micro-generation scheme for rooftop PV and onshore wind. This applies to installations with an installed capacity of less than 11 kW. In January 2021, the Department of Communications, Climate Action and the Environment launched a public consultation on a new micro-generation scheme for residential users. Based on this, experts expect the capacity limit to increase from 11 kW to 50 kW. In Lithuania, a simple notification procedure applies for the grid connection of prosumers' installations with an installed capacity of less than 30 kW. In Denmark, a simple notification procedure for grid connection to repowering projects is already in line with Article 16 (8) RED II. In Croatia, a simple notification procedure was introduced in 2023 and relates to self-consumers (simple structures, including rooftop PV systems) up to and including 11.04 kW three-phase and up to 3.68 kW single-phase. Portugal has set up a specific grid connection procedure for smaller projects, according to which the developer or consumer must simply notify its willingness to connect the project to the grid. After the power plant inspection, a grid connection agreement is issued, and the project is connected to the grid. The process steps have clear deadlines, often of 10 working days. In Slovenia, solar self-consumers can connect to the grid only by notifying the grid operator of compliance with certain technical conditions. In addition, a specific and simplified grid connection procedure is also available for smaller solar installations below 1 MW, with limited requirements compared to regular plants. In Italy, from 2015, the new single model - "Modello Unico" is a single procedure streamlining the authorization and connection procedures of small rooftop photovoltaic systems. It applies to PV systems ≤20 kW installed on the roof of a building that already has a connection to the grid and is registered with the "Scambio sul Posto" net-billing scheme. The procedure consists of two steps. In the first step, the applicant must send relevant data for the grid connection. Within 20 days, the grid connection has to be approved, and the grid connection process can proceed. In the second step, the applicant must send additional data and accept the operating requirements (the provision of the on-site exchange service). Within ten days, the network operator shall activate the connection.

In the CPs, the simplified procedure relates to self-consumers. In some CPs (MD, ME, MK, RS), a construction permit is not necessary for solar power plants installed on buildings/houses rooftops connected to the distribution grid and which the project developer uses for his own needs. In **Montenegro**, there are no specific rules for self-consumers regarding the connection process (no differences in the treatment of producers and self-consumers). For power plants under 50 kW, DSO issues technical requirements for connection within 15 days of receiving an orderly request. For power plants ≥50 kW, DSO develops an analysis of the feasibility of connection to the distribution grid ("grid connection study") and issues technical requirements for connection within 90 days of receiving an orderly request. In **North**

[236] *RES Simplify final report (April 2023)*

Macedonia, self-consumers have been granted a simplified (and less costly) connection procedure under the 2019 Distribution Grid Code. DSO is required to give Consent to connect to the distribution grid within 15 days of receiving the completed request. If the total power of all producers' and self-consumers' issued Consents does not exceed the threshold values per substation (set in the Grid Code), then the connection cost self-consumer consists only of the administrative costs for issuing the Consent under the Pricelist of the services that are provided by DSO. DSO is required to install a metering device free of charge for self-consumers. In **Serbia**, a simple notification procedure for household self-consumers up to 10.8 kW has been introduced in 2022. Since 2019, **Albania** has applied a simplified authorization procedure for the connection to the distribution grid of small solar RE projects for self-consumption. DSO must respond to the application for connection authorisation within 30 working days of the date of the application. In August 2023, **Kosovo*** adopted a new Rule for renewable energy self-consumption with an eased connection procedure for self-consumption. Under the Rule, operator shall prioritize the application for self-consumption, and the evaluation period shall not exceed 30 calendar days from the date of application. The Resolution of the NEURC from November 2022 defines the specifics of the installation of generating units within the consumers' installations in **Ukraine**. The DSO must return the application to the consumer with a description of observations no later than ten working days from the next working day following the registration day.

Table 8 provides for the installation capacity limit for RE self-consumption in CPs. In addition, CPs limit the installed generation capacity to the connection capacity of the final customers. Table 8 also summarises the legal requirement (in days) for DSO to decide on a self-consumption application (from the date of the applicant's request).

Table 8 Installation capacity limit for self-consumption and legal requirement (in days) to decide on self-consumption application (from the date of applicant's request)

Description	AL	BiH	GE	XK*	MD	ME	MK	RS	UA
Installation capacity limit - households [kW]	500	10.8	500	7	200	no limit	6	10.8	30
Installation capacity limit - legal entity [kW]	500	150	500	200	200	no limit	40	150	50
Legal requirement (in days)	30	30	10	30	10	15	15	30	10

Repowering[237] of existing installations is the way to make a rational use of grid capacities and to limit grid expansion needs and should, therefore, be facilitated as much as possible. REDII requires to facilitate the repowering of existing plants by ensuring a simplified permit-granting process, which does not exceed one year. Furthermore, according to Article 16(8) REDII, countries may also establish a simple notification procedure for grid connections for repowering projects where no significant negative environmental or social impact is expected,

[237] *Repowering is defined by RED as renewing power plants that produce renewable energy, including the full or partial replacement of installations or operation systems and equipment for the purposes of replacing capacity or increasing the efficiency or capacity of the installation.*

instead of requiring a new permit application. The CP connection rules are ambiguous on what principles apply to repowering/refurbishment. Thus, we conclude that repowering is currently subject to the same procedures as establishing new installations or making changes to an existing connection. Concerning repowering, simple notification procedures were detected only in Denmark[238].

The CP connection rules shall clearly prescribe the connection procedures for repowering.

Repowering/refurbishing
For repowering/refurbishing see RES Simplify[239] for good practice examples in Italy, France, Germany, Denmark, and Portugal.

[238] *RES Simplify final report (April 2023)*

[239] *RES Simplify final report (April 2023)*

Energy Institute
Hrvoje Požar

Savska cesta 163
10000 Zagreb
Hrvatska

Tel: +385 1 6326 588
Email: eihp@eihp.hr
Web: www.eihp.hr