



# **CEI SUPPORT FOR STRENGTHENING ENERGY REGULATORY AUTHORITIES IN THE WESTERN BALKANS**





## BACKGROUND

At the 2015 Vienna Summit, six Contracting Parties of the Energy Community in South East Europe [Western Balkans 6 (WB6) – Initiative, involving Albania, Bosnia and Herzegovina, Kosovo\* Montenegro, North Macedonia and Serbia] decided to take concrete steps to improve energy connectivity in the Region, by facilitating investments and prioritising market development.

In April 2016, the WB6 countries committed to implementing a memorandum of understanding setting out general principles of cooperation, as well as concrete actions to develop the regional electricity market. To do this, important efforts in terms of regulatory and institutional development are required to achieve a smoothly functioning spot market, cross-border balancing and capacity allocation mechanisms. Several regulatory and legal obstacles must be tackled and new/revised legislation (primary and secondary) must be put in place in line with the Energy Community Treaty and the countries' obligations towards the EU. Substantial capacity-building and institutional development is also required.

Among the initiatives promoting the enlargement of the geographical scope of the EU internal electricity market, special attention is to be

paid to two market coupling projects: Albania-Italy-Serbia-Montenegro (AIMS) and Bulgaria-North Macedonia. Both of these initiatives will combine EU Member States with Energy Community Contracting Parties (CPs). Therefore, they are to be considered as initiatives moving in the right direction, despite the difficulties foreseen. There are many ways to give support to these initiatives, and one is to fill the knowledge gap of the project parties concerning EU market processes.

Furthermore, the recently opened Interconnection cable between Italy and Montenegro will represent an electric bridge between Europe and the Balkans, significantly contributing to the integration of Balkan energy markets with the EU internal energy market.

The capacity-building activity, funded by the Central Europe Initiative, aims at creating a common ground among the regulatory authorities of all countries involved in the project.

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\* This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

# BALKAN ELECTRICITY MARKETS

Wholesale electricity markets are less developed in the Balkan Region if compared to EU markets. Recently, thanks to the WB6 Process, many market coupling projects have been proposed, but so far none have been set underway. As a consequence, Balkan NRAs have limited experience in guiding and overseeing the process of market integration. Thus, Balkan NRAs need to overcome this by acquiring the necessary information and by improving their knowledge both in terms of content and process.

In the Western Balkans, cross-border capacity is allocated through yearly, monthly and daily explicit auctions run by the South East Europe (SEE) Centralized Auction Office (SEE CAO). The SEE CAO began operating in November 2014 and allocated the capacity for 2015 to the BiH-Montenegro border. As of May 2015, the border between Albania and Montenegro was included. However, no specific auction has so far been held in the SEE Region. The creation of the SEE CAO was the first step towards market integration. However, to achieve the EU target model,

a further major step is needed - that is, the establishing of national or regional power exchanges. At the moment, there is only one power exchange operational, which is in Serbia - the South East Europe Power Exchange (SEEPEX). In Montenegro and North Macedonia, the power exchanges - Belen and MEMO, respectively - have been established but as yet are still not operational, while in Albania, the setting up of a power exchange is envisaged.

In order to allow Balkans NRAs to oversee the creation of organised markets, a deep understanding of the main activities and processes carried out by power exchanges appears to be highly recommended. Furthermore, the CPs are committed to transposing and implementing EU Network Codes (NCs) and Guidelines (GLs) on electricity. Since CP NRAs have not been involved in the drafting phase of the NCs and GLs, they are less familiar with the underlying concepts if compared with EU NRAs. As well, in order to fill the gap regarding legal and regulatory issues on market integration, knowledge transfer is of paramount importance.

## MARKET COUPLING IN A NUTSHELL

Essentially, market coupling is an agreement between transmission system operators (TSOs) and nominated electricity market operators (NEMOs) of two or more countries to optimise cross-border capacity allocation. It requires NEMOs to share the data on bids and offers, TSOs to calculate and share interconnector capacities and the Market Coupling Operator to maximise the economic surplus, by using a single algorithm for all market areas. Thus,

market coupling avoids any artificial splitting of the markets, and sends the most relevant price signal for investment in cross-border transmission capacities. Market coupling is a complex process both from a technical point of view, requiring the exchange and elaboration of data on prices and capacities within tight timelines and standards, and from a regulatory point of view with harmonised primary and secondary legislation to be set-up.

# PROJECT OVERVIEW

## General objective

The project supports the integration between the European and the Balkan regional electricity markets by strengthening the capacities of the Energy Regulatory Authorities to manage the market coupling process among their national electricity markets with the neighbouring EU electricity markets in accordance with EU Regulations and best practices. In general terms, the project deals with the ambitious target of creating a level playing field between EU and non-EU NRAs by means of knowledge dissemination on specific topics of common interest.

## Leadership

The project is promoted by the Italian Regulatory Authority for Energy, Networks and Environment (ARERA). Since 2020, the Bulgarian Energy and Water Regulatory Commission (EWRC) has supported the project.

## Technical support

In the third phase, the project is to be implemented with the technical support of the Italian and Bulgarian Electricity Market Operators (GME and IBEX, respectively) and the Italian and Bulgarian Transmission System Operators (Terna and ESO, respectively), and the management support of the Istituto per la Competitività (I-Com, Italy).

## Beneficiaries

During the first and second phase of the project (2018 and 2019) the project addressed the National Energy Regulatory Authorities of Albania (ERE), the Energy Regulatory Agency of Montenegro (REGAGEN) the Energy Agency of the Republic of Serbia (ARES). With the third phase of the project, North Macedonia (ERC) is also to be included as a beneficiary. Transmission System Operators (TSOs) and the Electricity Market Operators of the target countries are invited to attend project seminars considering their role in the energy market integration process.

## Financial support

The project benefits from the financial support of the Know-how Exchange Programme (KEP) of the Central European Initiative (CEI) fund of the European Bank for Reconstruction and Development (EBRD).

## Methodology

The project is based on the principle of peer-to-peer know-how transfer and best practice exchanges through the organisation of ad hoc interactive workshops

## BENEFICIARIES' PROJECT EVALUATION RATING

Source: Project survey





# PROJECT PHASES

## PHASE I (2018)

All the project activities aim at developing beneficiary knowledge on market integration and the operational functioning of an integrated electricity market. The final goal is to enable beneficiary NRAs to properly assess the market integration design proposal that will be submitted by the TSOs and the PXs involved in the market coupling project. The value chain of an integrated market can be split into three main phases:

- i) pre-coupling activities
- ii) coupling activities
- iii) post-coupling activities.

Generally speaking, pre-coupling activities are those activities needed to provide relevant inputs to the market clearing procedure. On the one hand, bids and offers submitted by market participants need to be gathered by the electricity market operator, anonymously aggregated and transferred to the market coupling operator. On the other hand, cross-border capacities, jointly calculated by all TSOs involved in the process, need to be made available to the market coupling operator for allocation. The core activity of market coupling consists in calculating the market equilibrium. For each bidding zone and time unit the market coupling operator is requested to calculate the equilibrium price and the conditions to accept or reject bids and offers, along with the net position of each bidding zone (i.e. the amount of energy exchanged with the other bidding zones). Finally, post-coupling activities deal with contract execution - invoicing and payments. Each phase has been described in detail by know-how providers in one or more workshops. Terms and conditions and methodologies implemented in the EU (with specific reference to EU Regulation 2015/1222) have been presented and explained to participants. Case studies have been discussed in order to check the comprehension of the theoretical models.

## PHASE II (2019)

The goal of the project in 2019 remained the same as in the 2018 edition - that is, to contribute to strengthening the capacities of Regulators, Transmission System Operators and Power Exchanges of Albania, Montenegro and Serbia to manage the process of wholesale electricity market integration among their national markets and with the Italian electricity market in accordance with the EU framework. In the second edition of the project, beneficiaries had the opportunity to deepen their knowledge of EU Regulations dealing with transmission capacity allocation in the different time frames - Regulation 2015/1222 (CACM – Capacity Allocation and Congestion Management) and Regulation 2016/1719 (FCA – Forward Capacity Allocation).

Albania, Italy, Montenegro and Serbia are involved in a market coupling project and, for this reason, a quadrilateral working group has been established (so-called AIMS WG). The information provided to beneficiaries within the KEP project fed the discussions in the AIMS WG, fostering the fulfilment of the initial tasks of the group, in particular, the drafting of the pre-feasibility analysis for the market coupling project.

## PHASE III (2020 ongoing)

During phase 3 in 2020, participants will be involved in more practical activities, such as case studies and business games aiming at simulating negotiation and decision-making processes.

In particular, participants will be confronted with solving specific problems related to market integration projects, as, for example, how to remove the legal obstacles to market coupling, how to ensure project cost sustainability, how to put in place coordinated regulatory approval processes.

# PROJECT ACTIVITIES

2018

## **Kick-off meeting Rome - Italy, 25/1/2018**

Italian Ministry of Foreign Affairs and International Cooperation premises.

## **1st workshop Rome - Italy, 26/1/2018** - Italian Ministry of Foreign Affairs and International Cooperation premises

Title: Market Coupling Fundamentals

**Specific objective:** to create a common background knowledge on institutional, regulatory and technical issues related to market coupling mechanisms.

## **2nd workshop Tirana - Albania, 21/04/2018**

**Title:** Pre-coupling Activities: Contractual and Technical Aspects.

**Specific objective:** to improve knowledge on the legal, contractual and technical framework related to the day-ahead market coupling mechanisms.

## **3rd workshop Belgrade - Serbia, 18-19/06/2018**

**Title:** Adoption of Capacity Allocation Congestion Management (CACM) and Forward Capacity Allocation (FCA) Regulations in the Energy Community.

**Specific objective:** to analyse the impact of the AIMS (Albania, Italy, Montenegro and Serbia Working Group) project on the adoption of CACM and FCA Regulations in the legal framework of the Energy Community.

## **4th workshop Budva – Montenegro, 11/10/2018**

**Title:** Governance and Implementation Processes of Market Coupling. The Role of Supranational Entities.

**Specific objective:** to analyse the role of the European Regulatory Forum (ERF), ACER and ECRB in the approval of terms and conditions or methodologies.

## **Closing conference Budva – Montenegro, 12/10/2018**

**Title:** Fostering Energy Cooperation between the Balkan Region and the European Union: State of Art and Perspectives.

2019

## **1st workshop Trieste-Italy, 29/04/2019**, CEI Secretariat premises

**Title:** Contractual Framework for Day Ahead Market Coupling.  
**Specific objective:** to illustrate the current contractual framework adopted by NEMOs and TSOs in the EU DA market coupling project and to identify the potential main obstacles to the implementation of market coupling in the beneficiary countries.

## **2nd workshop Belgrade-Serbia, 10/06/2019**

**Title:** Single Day Ahead Market Coupling Costs

**Specific objective:** to describe the cost categories underlying the coupling project and to envisage the potential cost share to be borne by beneficiary countries.

## **3rd workshop Podgorica-Montenegro, 3/10/2019**

**Title:** Shipping and Clearing Activities in Day Ahead Market Coupling; Minimum EU Target for Cross-border Capacity.

**Specific objective:** to illustrate the solutions adopted in EU market coupling for the shipping and clearing activities and to analyse the alternatives available to beneficiary countries; to explain how EU Member States are expected to implement the provision of making at least 70% of the cross-zonal transmission capacity available to the market.

## **4th workshop Rome-Italy, 27/11/2019**

**Title:** Single Day Ahead Market Coupling Project Organisational Structure; Energy Regulatory Authorities Regional Approval Procedures.

**Specific objective:** to describe the main elements of market coupling project management; to illustrate the process adopted by Energy Regulatory Authorities at the regional level to approve the terms and conditions or methodologies submitted by NEMOs and TSOs pursuant to EU Regulations.

## **Closing conference Rome-Italy, 27/11/2019**

**Title:** Electricity Integration in the Balkan Region: Challenges and Opportunities

2020

In 2020, 5 workshops have been planned to be held on a rotation basis in the beneficiary countries.



# PROJECT OUTCOMES

At the end of each phase, attendees are able to perform the following activities:

## PHASE

### I

- Study the early implementation process of EU Regulation 2015/1222 (Capacity Allocation Congestion Management Guidelines) and EU Regulation 2016/1719 FCA (Forward Capacity Allocation) in their jurisdictions;
- Evaluate preliminary terms and conditions and methodologies required to complete the market integration legal framework;
- Understand basic principles on the implementation of pre-coupling, coupling and post-coupling mechanisms.

## PHASE

### II

- Draw up amendments to NEMOs and TSOs proposals, if needed, and approve them;
- Understand how to implement and enforce terms and conditions or methodologies foreseen by the CACM and FCA Regulations;
- Manage the early implementation process of CACM and FCA Regulations in their jurisdictions;

## PHASE

### III (to be achieved)

- Assess the proposals of precondition analysis, market integration design, cooperation agreements and operation agreements to be submitted by involved TSO and NEMO;
- Identify the main criticalities impacting market integration projects and provide adequate support to the process.

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