



## **POLICY GUIDELINES**

*by the Energy Community Secretariat*

### **on increasing Competition and Liquidity of Wholesale Electricity Markets, including Power Exchanges**

PG 01/2019 / 08 May 2019



## 1. Purpose

This document follows up on the *Policy Guidelines 03/15 on the Promotion of Organised Electricity Markets in the Contracting Parties* developed and published by the Energy Community Secretariat (hereinafter, the Secretariat – ECS) in 2015 (hereinafter, the 2015 Policy Guidelines), at a time when the adoption of the Regulation on Capacity Allocation and Congestion Management (hereinafter, CACM Regulation)<sup>1</sup> in the Energy Community was at an early stage. The 2015 Policy Guidelines covered two issues – the removal of the legal and factual barriers to electricity market integration and liberalization and the need for establishing electricity markets that would allow market coupling.

The present document provides recommendations on the **legal and regulatory measures that could be used to introduce competition at national level and enable cross-border trade** in situations where national incumbent undertakings still dominate the national wholesale markets resulting in a situation where competition is prevented at not just the national level but also the regional/cross-border level. In addition, the document outlines the **legal and regulatory measures that could be imposed in order to introduce and/or increase liquidity on organised markets, in particular day-ahead market i.e. power exchanges** (hereinafter, PX). While the 2015 Policy Guidelines recommended that the Contracting Parties should decide on the best way to promote liquidity in the short-term before the coupling of spot markets, the present document guides the countries with respect to the detailed measures that they can adopt to boost the liquidity and to enable competitive price formation also on forward markets.

---

<sup>1</sup> OJ L 197 of 27.7.2015.

## 2. Summary of the Recommendations

The present Policy Guidelines recommend to the Contracting Parties the following measures for increasing competition and liquidity on wholesale markets, including on power exchanges. Such measures are utilised in the EU markets and had positive impact in those markets.

- I. Measures that are designed to limit the influence of operators with significant market power and concentration in the industry chain or to reinforce small players with a view to enhance participation of smaller players or industrial users on the wholesale electricity markets:
  - (i) regulated access to historic nuclear as in France (ARENH);
  - (ii) access to lignite or big hydro as envisaged by the Greek regulator;
  - (iii) Virtual Power Plant (VPP) auctions;
  - (iv) direct-trading obligations.
  
- II. Measures that aim to eliminate cross-subsidies, margin squeezes or concerted actions within vertically integrated undertakings:
  - (i) self-supply restrictions;
  - (ii) non-discrimination obligations;
  - (iii) requirements for accounting separation;
  - (iv) termination of bulk supply agreements.
  
- III. Measures that directly enhance liquidity on organized markets:
  - (i) obligation to offer for sale certain volumes of electricity on organized markets;
  - (ii) obligation to trade certain volumes of electricity on organized markets;
  - (iii) market-maker obligation;
  - (iv) implementation of forward Financial Transmission Rights (FTRs) when day-ahead markets are coupled.
  
- IV. Measures aimed at preventing market power abuse on power exchanges:
  - (i) maximum number of coupled offers (price/quantity) that a certain undertaking may submit, or an obligation to trade on power exchanges with a maximum offer price;
  - (ii) transparency and integrity (price setting principle / pre-trade or post-trade transparency requirements);
  - (iii) supervision of power exchanges (by the PX market operator and the National Regulatory Authority (NRA)).
  
- V. Measures preventing market power abuse by the power exchange itself indirectly affecting access and liquidity.

### 3. Background information

Three decades ago, the electricity sector in the European Union (hereinafter, the EU) was organized as a regulated monopoly. The picture changed over the years with three packages of liberalization legislation adopted by the European institutions and applicable in the EU Member States. The electricity sector continues to change/evolve with the ongoing adoption of the Clean Energy Package and the energy transition which has an important impact on the functioning of the electricity markets due to increased penetration of renewable energy to support the decarbonisation agenda. The same legislation, adopted and adapted to the Energy Community institutional setting and the national specificities of the Contracting Parties, starting from the second European legislative package (dating from 2003), has been binding for the Contracting Parties under the Energy Community Treaty. The currently applicable Third Energy Package (hereinafter, TEP) was to be implemented and applied as of 1 January 2015. In the near future, the Clean Energy Package will also become Energy Community law.

At the same time, market integration is a central aim of the Energy Community, comprising both the Member States of the EU and the Contracting Parties. In order for a regional market to be established, it is necessary to make certain reforms at national level first, but not forgetting the regional objective at the same time. Already back in 2003, at the time when the Athens Process was only starting and the Energy Community Treaty was still not signed, the Council of European Energy Regulators (hereinafter, CEER) proposed a Standard Market Design for South East Europe (hereinafter, SEE)<sup>2</sup> which was endorsed by the European Commission in a Consultation Note.<sup>3</sup> In the later document, the European Commission developed a phased approach with respect to the national reforms that were to take place in each of the SEE countries. Later that year, CEER adopted a Discussion Paper<sup>4</sup> in which it incorporated both the phased approach developed by the Commission and the harmonized approach suggested earlier by CEER. According to CEER, *“the standard design was based on harmonized set of rules with regional market mechanisms that would operate as supplementary mechanisms of the national electricity markets, with suppliers and generators who could operate on an equal basis in a wider regional energy market instead of a narrow national market and where electricity will flow among the countries of the region as it was flowing within a single country.”*

Today, in mid-2019, no functioning regional market is in place in the Energy Community. Instead, markets are still mostly national and each country introduced its own national market design. Wholesale trading was expected to be fully open. A dry-run for an auction office allocating transmission capacities throughout the region was planned for 2006, as a precondition for first retail market opening for large customers in 2008 and then full market opening in 2015. However, as the situation presently stands, the Contracting Parties are lagging behind these plans. Even though the number of traders active in the Contracting Parties is not negligible, the national markets are still dominated by incumbent undertakings and organized markets barely exist. Bilateral contracts are the main market means and not all Contracting Parties are participating to a coordinated capacity allocation platform (notable is the case of Serbia which does not participate to SEE CAO, while Ukraine and Moldova are working towards putting in place joint auctions). Operational national day-ahead markets (hereinafter, DAM) for physical delivery of electricity for the next day are still work in progress apart from Serbia where a day ahead market is operated by SEEPEX. Wholesale trading is conducted primarily across borders, as vertical foreclosure between generators and supply companies through regulated agreements hinders any meaningful wholesale competitive price formation (such a regulated contract exists still today between Albania's two incumbents).<sup>5</sup> Trading typically involves the vertically integrated undertakings and TSOs, accept import and export schedules mostly from traders acting as

---

<sup>2</sup> CEER Position Paper, Standard Market Design of the SE Europe Electricity Market Basic Principle, 2003.

<sup>3</sup> European Commission, DG TREN, Discussion and Consultation Note, The Regional Energy Market in South East Europe and its Integration into the European Community's Internal Energy Market, the Athens Forum, 3-4.06.2004.

<sup>4</sup> CEER Working Group Southeast European Electricity Regulation: Discussion Paper on the Options for the Transition Phase of SEE Regional Electricity Market, 16.11.2004.

<sup>5</sup> For similar findings in 2007, see: *SEE Electricity Market Monitoring Project: Market monitoring pilot plan for SEE wholesale electricity market*, USAID, January 2007.

intermediaries. In Bosnia and Herzegovina, one of the few Contracting Parties where competition at national level could exist because of the operation of several incumbent companies, the lack of legislative framework prevents the further development of the wholesale market. In Ukraine, a non-compliant single buyer model is still in place and even bilateral contracts are not allowed.

Therefore, it is essential that the Contracting Parties reform their existing national market designs in such a way as to speed up the establishment of organised wholesale electricity markets as a precondition for regional and pan-European market coupling. Furthermore, cross-border competition is particularly important for creating a pan-European internal electricity market. Contracting Parties in the Western Balkans are well interconnected, therefore an efficient mechanism for utilisation of cross-border capacities would boost the liquidity on the national markets. Where market entrance in generation is difficult to be achieved in a particular country, cross-border competition can serve as a means of introducing competition on the relevant market in question. As the Secretariat recommended already in 2013 in its *Policy Guidelines 01/2013 on reform of the electricity market model, regulated electricity prices and electricity tariff reform in the Contracting Parties*, it is important to introduce measures to enable relevant price formation in each market and to abandon price regulation at wholesale level and bulk supply contracts, both of which are not in compliance with the Energy Community *acquis*. Not least because new entrants have difficulties to compete with regulated prices and because customers have no incentive to switch supplier. Market coupling bringing the bidding zones together through single trading mechanism creates regional welfare and allows electricity to flow following the market signals. Market coupling leads to price convergence between different bidding zones, subject to the interconnection capacity made available to the spot market.

## 4. Competences of national authorities

### 4.1. National Energy Regulatory Authorities

The TEP has extensively increased and strengthened the powers of the national regulatory authorities. Preamble 37 of the Electricity Directive<sup>6</sup> reads: ***“Energy regulators should also be granted the power to decide, irrespective of the application of competition rules, on appropriate measures ensuring customer benefits through the promotion of effective competition necessary for the proper functioning of the internal market in electricity. The establishment of virtual power plants - electricity release programmes whereby electricity undertakings are obliged to sell or to make available a certain volume of electricity or to grant access to part of their generation capacity to interested suppliers for a certain period of time - is one of the possible measures that can be used to promote effective competition and ensure the proper functioning of the market.”***

The powers of the national regulatory authorities are further enhanced through REMIT Regulation.<sup>7</sup> The TEP is applicable in the Energy Community as of 1 January 2015, while the implementation deadline for REMIT Regulation for Contracting Parties is 29 May 2020. The Secretariat thus considers that the national regulatory authorities of the Contracting Parties are empowered to take measures along those identified and proposed in the present Policy Guidelines and beyond to ensure market integrity. The Secretariat invites the NRAs and the NCAs to take such measures to promote competition and increase liquidity.

---

<sup>6</sup> Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal market in electricity, as incorporated and adapted for the Energy Community by Ministerial Council Decision 2011/02/MC-EnC of 6 October 2011, on the implementation of Directive 2009/72/EC, Directive 2009/73/EC, Regulation (EC) 714/2009 and Regulation (EC) 715/2009 and amending Articles 11 and 59 of the Energy Community Treaty.

<sup>7</sup> Regulation (EU) 1227/2011 of 25 October 2011 on wholesale market integrity and transparency as adopted by the Decision of the Ministerial Council D/2018/10/MC-EnC.

## **4.2. National Competition Authorities**

National competition authorities (hereinafter, NCAs) and the European Commission are vested with powers to impose different types of measures in proceedings under competition law, either *ex-ante* (under commitments in the context of merger control) or *ex-post* (in commitments decisions or behavioural measures imposed in the context of anti-competitive conduct cases).

Some of the measures, in particular VPP auctions, are actively used by competition authorities (both by NCAs and the European Commission). For example, the Belgian competition authority imposed VPPs and market making obligations through commitments related to a merger authorization. Finally, the measures discussed in the last section and cases related to abuse of dominance and cartels between market participants on a power exchange, or even abuse of dominance by the power exchanges themselves, are very relevant for the competition authorities.

## **5. National electricity market models in the context of market coupling**

The Contracting Parties remain free in their choice of the most suitable solution for the national wholesale electricity market design. They can either decide to establish a national PX, or require servicing of the national market by a foreign PX. Both options require the Contracting Parties to organise their wholesale markets by at least having an organised place for trade. The organized market could be designed in such a way as not to require national involvement and investment beyond appointing a national undertaking as a counterparty or allowing the operation and servicing of the national market by a foreign PX. In order to put in place the necessary preconditions for establishing a competitive electricity market and to comply with the EU target model, the Contracting Parties have to adopt a legal and regulatory framework that would:

- foster the establishment and operation of an organized market, i.e. day-ahead and intraday markets and develop rules for such operation;
- define whether the operation of an organized market is treated as a monopoly or a competitive business, and whether a merchant, cost of service or hybrid model PX is chosen, as well as identify conditions for obtaining the PX license, and decide whether the number of PX licenses is limited or not;
- abolish discriminatory barriers to market participation and market activity for an organized electricity market (when necessary, including those related to taxation, discriminatory and seat requirements);
- abandon potential barriers to the operation of clearing and settlement processes by foreign entities.

Whichever solution is taken, success requires both political will and the support of market participants. Based on the model chosen (merchant or cost-regulated), the incentives of the national PXs have to be considered in the context of market coupling. A merchant PX has a clear incentive to cooperate in the implementation of this model as it can generate significant additional trade volumes, and thus income for the PX. By definition, cost-of-service regulated PXs have fewer incentives to abuse market power than merchant ones, but they also have fewer incentives to provide an efficient trading service, or to innovate the trading system. Cooperation with another PX to eliminate cross-border trade inefficiencies could in principle be part of the regulated tasks of a cost-of-service regulated PX. However, when dealing with problems related to cross-border trade, the NRAs frequently do not have effective and independent powers to define and enforce the relevant rules. For the Contracting Parties, the issue is even more relevant, because they often lack (or are not willing to exercise) the enforcement powers at all. Thus, it might be best to adopt a hybrid model in order to avoid anti-competitive behaviors of PX market operators that may hinder the functionality of the PX, without necessarily having recourse to a full cost-of-service regulated PX.

Having in mind the size of the national markets of the Contracting Parties, the lack of resources for investment (including in infrastructure, such as platforms and IT solutions) as well as the lack of experience, it is not recommendable to choose options which are expensive and administratively burdensome whose effectiveness and liquidity is questionable.

In addition to all the regulatory and legislative design measures, competition rules shall be actively applied as a complementary tool to sector-specific rules, i.e. in remedying anti-competitive behaviour of market participants or even PX market operators, where *ex ante* regulation does not address all the concerns. The NRAs and the NCAs in cooperation with the Energy Community institutions shall monitor and promote/impose the most competitive and least disruptive solutions.

All of the above needs to be coordinated with the adoption of national frameworks in line with the CACM Regulation as early implementation and further upon incorporation into the Energy Community *acquis*. As part of early implementation, the Contracting Parties shall run the so-called NEMO nomination process as defined in the *Recommendation of the Energy Community Regulatory Board on regulatory measures supporting early implementation of day-ahead market coupling in the Energy Community Contracting Parties* of 24 April 2019.<sup>8</sup> This is very important when considering market coupling with EU Member States as part of early implementation process. Due to the requirements for designation as a NEMO, it would be wise if the Contracting Parties consider upfront whether their national and newly established market operators (or operators of organized markets) would fulfil such criteria and whether they would be suitable for performing NEMO functions. On the other hand, a key operational feature of the NEMO design is that a NEMO designated in one EU Member State/Contracting Party shall have (with limited exceptions) the right to offer day-ahead and intraday trading services with delivery in another EU Member State/Contracting Party under the condition that the NEMO does not have a monopoly status in the country where it was designated. The national trading rules in the Contracting Parties should provide for such right and applying only for a NEMO passport function would be necessary. Such considerations and establishment of rules are crucial for the NEMO to function, which is of fundamental importance in operating the single day-ahead and the single intraday market coupling.

To sum up, with a view to implementing market coupling between the Parties to the Treaty, the **Contracting Parties are not obliged to pre-establish local power exchanges to operate day-ahead market**. Instead, **they shall adopt the necessary legal and regulatory framework** for establishing a functional organized market and could provide for the possibility of another Member State/Contracting Party to provide day-ahead market operation services on their territory.

Finally, all of the above needs to be accompanied by the implementation of a price deregulation strategy; the introduction of a market-based balancing regime with a fair and comprehensive balance responsibility and settlement process; promotion of closer cooperation among TSOs for coordinated cross-border capacity calculation and the introduction of close to real-time processes; as well as the introduction of measures to promote liquidity on PXs in the short-term before the coupling of spot markets with the rest of the Energy Community. If the incumbent undertakings, which still dominate the national electricity markets, are not incentivised (or an obligation is not imposed on them) to participate and trade on the PX, liquidity (and even the necessity of existence and operation) of each PX in the Contracting Parties will be questionable.

The liquidity measures are the focus of the present Policy Guidelines (Section 6).

---

<sup>8</sup>[https://www.energy-community.org/dam/jcr:444c8aae-d606-4e13-a64f-ccc04914d92f/ECRB\\_042019\\_Recommendation\\_NEMO.pdf](https://www.energy-community.org/dam/jcr:444c8aae-d606-4e13-a64f-ccc04914d92f/ECRB_042019_Recommendation_NEMO.pdf)

## 6. Policy Guidelines – detailed measures proposed

Besides the application of competition law *ex post*, measures to promote liquidity may amount to *ex-ante* regulatory measures. These measures may be imposed on certain operators, particularly those with significant market power, with a view to promote effective competition at wholesale level in markets that are characterized by the presence of high and non-transitory barriers to entry.<sup>9</sup> In addition, *ex ante* regulatory measures could be imposed also for increasing the liquidity of newly established organised wholesale electricity markets, including power exchanges, beginning with the day-ahead market.

While the 2015 Policy Guidelines pointed out that the coupling of the day-ahead markets of the Contracting Parties will be the single best means to trigger liquidity into the SEE region and allow for competitive price formation, they also noted that before reaching this point, three strategies may prove successful in promoting liquidity at an early stage. These guidelines recommended: *firstly*, creating sufficient incentives to participate in the market through the complete withdrawal of distortions to competition and level playing field, reliable processes and participatory governance; *secondly*, imposing obligations to trade at the organized market in the form of quotas; and *thirdly*, putting in place a model combining bilateral physical contracts and a spot market (which was envisaged to be the market model for the Contracting Parties in the early days of the Energy Community's establishment).

The present paper follows up on this and develops recommendations exactly for these strategies and the different measures of intervention. The implementation of all the measures has to be backed up with monitoring and enforcement / sanctioning powers of national regulatory and competition authorities.

### 6.1. Measures to ensure effective competition on wholesale electricity markets and enhance end-user benefits

Measures to restrict significant market power are imposed in markets characterized by high and non-transitory barriers to entry ranging from (i) **structural barriers**, in particular where there are absolute cost advantages, substantial economies of scale, capacity constraints and high sunk costs, or where the provision of an output required an input component that cannot be technically duplicated or only duplicated at a cost that makes it uneconomic for competitors; or (ii) **legal or regulatory barriers**, that might result from legislative, administrative or other measures that have a direct effect on the conditions of entry and/or the positioning of operators in the relevant market, including price controls or other price-related measures, or measures restricting the number of undertakings that have access to a certain asset or resource, (iii) or a **combination** of both.

Such measures are imposed on operators that alone or together with others were considered as enjoying dominance or significant market power, individually or collectively, and which are considered as undertakings that benefit and cause market foreclosure.

They may be adopted by law (as in France), or by competition authorities as commitments or behavioural measures in merger-control or assessment of anti-competitive conducts (as in most VPPs), in which case competition authorities need to find anti-competitive effects. They may also be adopted by energy regulatory authorities *ex ante* for which the regulators have to have the competence and justified reasons for action. Selected examples are shown below.

---

<sup>9</sup> Following the experience in the telecom sector.



## (i) Regulated access to historic nuclear energy

### *The French example: Regulated access to historic nuclear energy (Accès régulé à l'énergie nucléaire historique – "ARENH")*

A mechanism that allows customers to benefit from the advantages of historic investments, which they had partially financed, while at the same time allowing for liberalization of the electricity markets by transferring the cost advantage of the incumbents to other suppliers/new entrants.

Introduced in France, the price and volume of the regulated products were set administratively: the incumbent *EDF* was obliged to sell up to 100 TWh of its nuclear production (amounting to around 25% of its general production) to its competitors, upon demand, at a regulated price on an annual basis. The access price was set at a level so as to ensure a fair compensation of the incumbent by a joint act of the ministers for economy and energy, upon proposal of the energy regulatory authority. Only suppliers supplying final customers in France are entitled to benefit under the ARENH mechanism, with volumes proportional to their customers' base in France, and network operators for covering network losses. The measures have to be limited in time (ex. ARENH was set for 15 years, i.e. until 31 December 2025) subject to regulatory monitoring and review. The measure was notified and cleared by the European Commission as a Public Service Obligation and under EU State aid rules.

This measure is suitable where there is a historical generator (nuclear or other source), that represents an essential facility, controlled by former monopoly - which competitors cannot duplicate but at the same time without access to that fuel, competition at retail level could not be developed. The regulated access to the historic domestic energy fuel aims at giving alternative suppliers access to the competitive advantage of the dominant undertaking under equivalent economic conditions as the incumbent. Such mechanisms are suitable in countries where retail tariffs (including for large customers) are regulated too low to be replicable by alternative suppliers, which is quite common for the Contracting Parties. If introduced, and in order to fulfil its purpose, it has to be accompanied with a strategy for the elimination of cross-subsidies and reaching cost-reflectivity of prices, as well as with other market mechanisms, such as Contract for Difference (CfD) related to the windfall profits of the incumbent power plants.

**For example, Albania** with (almost) all national hydro accessible and operated only by the incumbent KESH or the lignite in **Kosovo\*** accessible only to KEK, as well as lignite in Serbia accessible only to EPS could be such fuels where mechanisms similar to ARENH could be considered. However, the design of such measures should take into consideration the fact that most of the Contracting Parties (including Albania and Kosovo\*) are net importers as opposed to France which is a net exporter of electricity. **Ukraine** on the other hand is another Contracting Party that should consider a similar mechanism, so as to allow the development of competition at the wholesale level triggering directly the competition on the retail level, while at the same time maintaining the benefit of historic nuclear and/or hydro for the end-customers.

Such measures, however, are challenging to design, and authorities should take the following actions before adopting such a scheme:

- **establish that there is a cost advantage** due to access to a specific asset that is **non-replicable** by other suppliers;
- identify the concerned undertakings that control or benefit from the cost advantage and identify if they hold significant market power (which appears to be the easiest part as those are usually the incumbent undertakings);
- determine a **fair compensation for the historic operator** (which shall encompass full costs, reasonable rate of return and necessary long-term investments);
- establish an **adequate cost methodology**; address issues related to asymmetry of information and adopt tools to induce the historic operator to reveal information on the real costs (which is quite difficult when trading is done within a vertically integrated undertaking

- or a group of undertakings);
- assess and **ensure contestability of offers at retail level**, if possible for both the regulated and deregulated segments;
- set strict limits on the **volumes that each supplier can access** through the mechanism;
- prevent **speculative behaviours**, if necessary;
- take due account of **upcoming changes in the wholesale markets** (such as new capacity payment mechanisms);
- ensure that regulated prices of access to historic fuels under such a mechanism are **comparable in terms of competitiveness with forward prices**;
- ensure that a **third party manages financial risks** and preserves sensitive information;
- perform a **market assessment and a consultation process** as a precondition to the design;
- complement the measures with **review mechanisms**;
- **notify the Secretariat** for a compliance check.

## (ii) Virtual Power Plants (VPP) auctions

### **Examples with VPPs in the EU**

In the context of liberalization, VPPs serve as a mechanism to promote competition in wholesale electricity markets and, in particular, as a remedy to the market power of dominant undertakings.

VPP auctions were first introduced in **France** in 2001 by way of a merger case by the European Commission, as a competition remedy to EDF's acquisition of German utility EnBW. EDF committed to sell 5,400 MW of capacity in France (representing approx. 10% of EDF's overall generation capacity) under VPP auctions, comprising 4,400 MW of base-load and 1,000 of MW peak-load to be acquired by other generators, suppliers, traders or by potential new entrants, through quarterly electronic auctions. A trustee was designated in order to monitor the parties' compliance with the terms of the European Commission's decision.

Another case of VPP auctions was introduced in **Belgium**. In order to remedy competition concerns raised by various acquisitions of several inter-municipal distribution companies' customer bases by a subsidiary of Electrabel, the incumbent power producer, the Belgian Competition Authority granted its approval after Electrabel made certain commitments also with respect to market liquidity. Namely, it committed to offer each day 100 MW (sell / buy) on the Belgian power exchange, upon its establishment, and agreed to sell 1,200 MW of VPP capacity to actual or potential competitors between 2004 and 31 December 2008 through an auctioning mechanism.

VPP mechanisms have also been implemented in several other EU Member States (the **Netherlands, Denmark, Italy, Germany**).

VPPs are regulated volume-based mechanisms, which only set the volumes of the regulated product and allocate the product to those who value it most, thus allowing the discovery of the product's market value. VPP is a **requirement or a commitment imposed on generators (usually the ones with dominant position) to sell a proportion of their power plant's output through a specified auction**, as a result of which the operator shall conclude electricity supply contracts with other market participants, typically its competitors.<sup>10</sup> VPP auctions thus involve sales of capacity while allowing the owner of the plant to retain management and control of the plant. VPPs are meant as a "virtual" divestiture,<sup>11</sup> avoiding "physical" divestiture (sale) of assets by dominant undertakings.<sup>12</sup> The products to be offered – their size, type (peak/off-peak, shape and so on) and duration – are to be defined based on consultation with market participants and market needs for hedging. To be effective, VPP auctions have to be designed with a view to enable competitors to make replicable offers at retail level. They usually imply auctions for the forward sale of electricity. When coordinated with the organization of a DAM, they can contribute to

<sup>10</sup> Maurer, L., & Barroso, L. A. (2011), Electricity auctions: an overview of efficient practices, *World Bank Publications*.

<sup>11</sup> Ausubel, L. M., & Cramton, P. (2010), Virtual power plant auctions, *Utilities Policy*, 18(4), pp. 201-208.

<sup>12</sup> See: Commission de Régulation de l'électricité et du Gas, Etude (F) 040408-CDC-268 relative aux « mesures réglementaires nécessaires pour la création d'une bourse belge d'électricité », 8.04.2004, paras. 57-61. Feltkamp, R., Musialski, C., Electricity Markets and functioning of spot power exchanges, (A Belgian perspective), *TBM, RGB*, 2010-2.

improving liquidity also on the DAM.<sup>13</sup>

They could be considered in some of the Contracting Parties where the new market entrants on generation is limited due to resources or where the national incumbement is highly concentrated monopoly.

### (iii) Combination of access to historic fuel with VPP auctions

#### ***The Greek case: combination of ARENH and VPP auctions***

In Greece, base-load lignite and hydro assets are under the control of the incumbent company PPC, which confers to it a cost-advantage not replicable by other generators. Consequently, the retail market has remained highly concentrated and although alternative suppliers had gained market shares in small and medium industrial customer segments, PPC's market share in the retail market reached over 98% in 2013. Therefore, the Greek authorities introduced a regulatory mechanism allowing independent retail suppliers to access the base-load lignite and big hydro energy from the Greek incumbent PPC (similar to the ARENH mechanism) combined with VPP forward (price and deposit) auctions where a fixed price or a range of minimum/maximum prices was defined by the regulatory authority RAE.

Whichever model is considered by the Contracting Parties, it is recommendable that large, long duration release of output should be avoided, as it risks prolonging a type supply monopoly, albeit at a slightly different point in the supply chain.<sup>14</sup> As an example of such considerations, when designing the Spanish gas release programme in 2001, participation to the tender for the gas release was conditional and participants were required to demonstrate plans for securing gas in another way once the release programme would come to an end. The release was designed to give competitors access to 19% of the eligible customer base. Similar considerations were made for the mandatory national roaming in the telecoms sector, where the mechanism was made dependent on the capability of the new entrant to make the new investment.

### (iv) Direct trading obligation

Large generators with significant market power at certain supply periods may be subject to the imposition of ***an obligation to trade on equivalent or comparable fair terms with so-called eligible suppliers***. These are usually small suppliers meeting pre-determined transparently set criteria (e.g. having supplied less than a certain quantity over one year calculated on a group basis). The eligible supplier would be entitled to request the undertaking obliged to offer direct trading by starting negotiations for entering into a trading agreement. The latter would in turn be obliged to send an offer with all terms and conditions, which ought to be fair and comparable to those offered to other participants. The mechanism may however provide for certain additional collateral arrangements that the eligible supplier must provide for covering the risks from entering into an agreement with a small supplier. If the generator is unable to offer a trading agreement to the eligible supplier, it shall provide a justified explanation about its refusal. After sending the offer, the obligated party has an obligation to negotiate in a timely manner until both parties agree that negotiations should no longer continue.

<sup>13</sup> *Supra note 10.*

<sup>14</sup> See for a similar approach conclusions on gas release programmes, European Federation of Energy Traders, "Implementation of Gas Release Programmes for European Gas Market Development".

**Direct trading obligation: Supplier Market Access Obligations developed by Ofgem**

Would be effective in supporting the participation of smaller players in the market and facilitating competition by encouraging the relevant entities to deal with small suppliers more promptly and act as effective providers of competitively priced, structured hedging products; could provide confidence to potential new entrants to offer competitive wholesale products on a continuing basis, supported ultimately by regulatory sanctions.

Six big companies identified by Ofgem as large companies are required to enter into negotiations with a view to contract with eligible suppliers under previously set terms and conditions. Suppliers are eligible for treatment under the Supplier Market Access rules, if they meet the following criteria: (i) hold a valid electricity supply license in Great Britain; (ii) they and their affiliates have supplied less than 5 TWh in the 12 months ending the month before the last full calendar month (calculated on a group basis); and (iii) they and their affiliates have generated less than 1 TWh in the 12 months ending the month before the last full calendar month (calculated on a group basis). After being confirmed as eligible, the supplier sends a *written request for a trading agreement* to the obligated licensee. The written response must include: an offer to enter into a trading agreement, or an explanation of the reasons why the licensee has determined that it is unable to offer a trading agreement to the eligible supplier.

The obligated licensee shall take all reasonable steps to ensure that any subsequent *negotiations on the trading agreement* with the eligible supplier proceed in a timely manner.

Where a trading agreement is in force between a licensee and an eligible supplier, the eligible supplier may send a *request to trade*, which consists in a request to buy or sell any of the eligible products in a volume of 0.5 MW or any integral part thereof not exceeding 10 MW, at specified hours. In response to such a request, the licensee must provide a quote, stipulating the period within which such a quote may be accepted (such period shall be a reasonable one based on the licensee's view of prevailing market conditions). The licensee's *quote must be as good as the best price that is available to the licensee in the market for the relevant product at the relevant time*, provided that the quote may include (and where included, itemised separately): **a)** an objectively justifiable risk premium to reflect the risk to the licensee of trading in smaller volumes than those available in the market; and **b)** at cost any wholesale market trading fees incurred by the licensee in trading the relevant product (but may however not include any administrative or internal cost).

This mechanism has to be accompanied with extensive regulatory monitoring obligations. Direct trading obligation can be applied also through mandatory participation in the organised forward market, where the party subject to such measure offers electricity at certain trading platforms either as liquidity support or in the form of mandatory market making that may incentivise participation of small market players. It is therefore necessary to point out the potential **enforcement challenges**: as it would be **(i)** difficult to identify breaches, and it may be **(ii)** difficult to monitor compliance. This mechanism provides access to products, but **(iii)** it may not promote overall liquidity in the wholesale market (at least not on its own, or until it has led to a substantial growth in small supplier market share).

Such mechanisms would be beneficial for allowing small suppliers to access the incumbents' generation portfolio where the later "prefer" trading within their group or within the vertically integrated undertaking otherwise. Contracting Parties like **Serbia, Kosovo\*, Ukraine or Bosnia and Herzegovina** would benefit from considering such a mechanism within their market.

## 6.2. Measures for vertically integrated undertakings

In addition to the measures described in section 6.1 above, which could in most cases be suitable for vertically integrated undertakings or where bulk supply arrangements exist between incumbent undertakings, measures such as self-supply restrictions, obligations for non-discrimination or requirements for accounting separation are targeting specifically undertakings that are still integrated. The self-supply is the only measure in this group of measures that goes beyond the requirements explicitly to be found in Energy Community law.

### (i) (Partial) self-supply restrictions

Consists of imposing on (supply – generation) integrated undertakings an obligation to purchase a certain portion of their wholesale needs through the market, preventing that they are fully supplied by their own integrated firm and the volume is internalized within the group.

Even though a complete self-supply restriction would be the simplest option to implement, such an intrusive measure would not be proportionate to the objective of improving liquidity and access to wholesale market products. Rather, it could be set as a percentage of total sales on a monthly basis. The experience of the UK regulator, Ofgem, is however that this measure implies high compliance and monitoring costs. It however, has proven to work as basic first step for breaking the full supply within the (vertically integrated) incumbents and thus encouraging and allowing competition.

Such a measure could be suitable for Contracting Parties such as **Albania** or **Kosovo\***, where regulated agreements exist for many years between the incumbent generation and supply company, or in **Montenegro**, **Serbia** and **Bosnia and Herzegovina**, the latter of which has not even implemented TEP unbundling requirements.

### (ii) Non-discrimination obligation; (at least) accounting unbundling and termination of bulk supply agreements

These three measures do not need a specific introduction.

**Non-discrimination** is one of the basic European principles enshrined in the Energy Community Treaty, and could be coupled with more specific obligations on the dominant operator to provide equivalent services and information to undertakings (other than those from its vertically integrated undertaking or group) under the same conditions and of the same quality. It is frequently implemented in the telecom sector to operators designated as holding significant market power with a view, in particular, to avoid any margin squeezes.

**Accounting separation** is not only an obligation from the Electricity Directive, but it also serves as a measure useful for monitoring supply within the vertically integrated undertakings and the conditions under which that is done.

**Termination of bulk supply arrangements** between the incumbent generator and the incumbent supplier would open up the market and allow certain volume to go through transparent market mechanism. Even though in some cases the incumbent undertakings do not belong to same group or holding, the existence of the bulk supply arrangement between them has the same impact of market foreclosure as in the case of vertically integrated company.

### 6.3. Measures that directly enhance liquidity on organized electricity markets

#### (i) **Obligation to trade or to offer electricity on the power exchange or organised forward market**

Imposing mandatory participation on the DAM is considered as an indispensable measure to effectively launch a power exchange.<sup>15</sup> Depending on the results that obligated parties are required to achieve, this obligation may consist of a requirement to the undertakings:

- to **only offer** certain volumes on the power exchange (as an “obligation/duty to offer on PX” or “mandatory auction” or “mandatory participation”) or
- not only offer, but **effectively to trade** these volumes on the power exchange, i.e. ensure that the offers/bids are effectively matched/accepted by others on the PX (“obligation/duty to sell on PX” or “mandatory sale”). This implies that obligated parties shall adopt bidding strategies so as to maximize chances that their offers/bids are effectively matched by others.

A duty to offer or trade certain electricity volumes on the PX may be imposed **symmetrically** as a general obligation to a category of market participants, based on public interest objectives that justify restriction of their fundamental freedoms or **asymmetrically** to certain market participants with significant market power. These obligations may be imposed **on the seller’s side, on the buyers’ side or on both**.

A duty to sell and/or buy on the PX may be imposed on:

- **RES producers** as a pre-condition to benefit from a market premium, or another aid scheme, or get access to a certain service. Such obligations are implemented in **Germany, France and the United Kingdom**.
- generators that are to benefit from **compensation funds for their stranded costs** (very notable example being the **Polish** case following the termination of long-term PPAs). The undertakings were entitled to receive funds to cover stranded costs subject to the obligation to sell all electricity volumes released by the early termination of those long-term contracts through a transparent and competitive procedure on the power exchange. The duty to trade on the PX was imposed as a general character obligation, symmetrically on all generation operators (beyond those that had to recover the stranded costs), to sell at least 15% of the electricity generated in a particular year through the power exchange and which was, by amendments of 8 December 2017, increased to 30%.
- As a precondition to obtain **access to cross-border capacity** – all (as in the **Nordic** countries) or at least part of, cross-border available transmission capacity could be reserved for implicit auctions.

In most cases where countries have established a PX with **more than one functional platform** (e.g. for day-ahead and forward markets), obligations to trade are imposed for overall volumes traded on a PX without pre-determining specified volumes for specific segments/markets.<sup>16</sup> Obligation to trade on forward bases may not be limited to only centralised platforms, but it can be implemented also on organised bilateral markets and could even target specific product or market segment which are less liquid.<sup>17</sup> Network operators may be subject to similar obligations for procuring their electricity for network losses through organised markets, be it forward and/or day-ahead. This would bring additional volume to the market and enhance liquidity.

<sup>15</sup> See: Commission Decision of 10.12.2015, Case AT.39767 – BEH Electricity, paras. 120-122.

<sup>16</sup> This was the case in Poland, Romania and Bulgaria.

<sup>17</sup> For example, Ofgem in UK identified illiquidity over the forward curve and imposed obligatory market-making obligations only for forward products.

### **The case of Bulgarian PX - IBEX**

Obligations to offer / trade on the PX are imposed on market participants in countries where the PX was newly established or was operating ineffectively (without liquidity) for some years.

In **Bulgaria**, the amendments to the Energy Act of 2017 imposed with effect starting from 1 January 2018 that the following transactions shall be carried out solely on the organized market:

- all transactions concluded **by generators** with an installed capacity of more than 5 MW, including RES producers;
- all transactions concluded **by the public provider** for the sale of electricity that the latter has purchased: **(1)** from RES producers, and/or **(2)** from co-generation producers and/or **(3)** under a mandatory quota, from electricity producers utilizing primary local energy sources of up to 15 % of the whole primary energy required for yearly consumption needs, for security of supply purposes;
- transactions concluded with participants from other EU Member States under certain conditions.

It is possible to set the **bid/offer spread** in the case of market making on forward market or a **maximum offer price** at day-ahead auctions. The maximum offer price is usually set at a level that covers variable costs of the producers and it should be determined at a level attractive enough to encourage market participants to actually take the volumes offered.<sup>18</sup> The **volumes** to be offered by the obligated parties are equal to certain pre-determined percentages of overall volumes generated, traded or supplied, usually to be calculated over a one-year period. Where continuous trading is concerned, other rules apply (*i.e.* volumes fixed), such as in Great Britain. There is no pre-established criteria or consideration of how these volumes are to be set. But they are to be determined following a public consultation with market participants, based on a market test/assessment, and shall be subject to periodic review to take into account market developments. In the BEH Decision,<sup>19</sup> the European Commission quantified the amounts that the undertakings are obliged to offer on the day-ahead market against the shares that those amounts represent **on the market for the wholesale supply of electricity at freely negotiated prices** (*i.e.* in this case parties were obliged to offer on the PX 14% (in the first year) and 37% (in the fifth year), taking into account the need to ensure that these volumes were sufficient to provide liquidity on the day-ahead market and enable relevant price formation).

In the Market Model of **Albania** to be applied after a PX is established, Nord Pool advised to impose an obligation on the producers to bid at marginal costs, plus a reasonable return. Furthermore, such measures would be applicable in **Serbia** due to limited liquidity on SEEPEX and more or less in all other **Contracting Parties** once the day-ahead market is operational. The Energy Law of **North Macedonia** as well as the Electricity Market Law of **Ukraine** provide the legal basis for imposing measures for mandatory participation in the PX.

The proportionality principle requires that such mandatory auctions or trades be **limited in time**, for a period long enough so as to give the PX the opportunity to establish confidence in the price formation and become a liquid market. However, no limitation in time was set in Bulgaria, Romania or Poland. It is also necessary to provide for a flexible **review clause**, and to designate competent authorities that may adopt modifications or revoke the mandatory sales or auctions, as in the case of Hungary, or in the ex-ante regulation in the telecom sector.

<sup>18</sup> Case AT.39767 – BEH Electricity, paras. 133-135.

<sup>19</sup> Case AT.39767 – BEH Electricity, paras. 120-122.

**Impact on the development of the wholesale market:**

**In Poland:**

- while in 2009 the electricity trade on the PX was insignificant and in 2010 it was equal to 4.2%, in 2011 it reached 58.7% and in 2012 it amounted to 61.8%;
- OTC bilateral contracts amounted to 89.8% in 2010, while in 2011 they accounted for less than 40% of all wholesale trade;
- a significant decrease in OTC in-group electricity trade, which in 2010 represented 72,2% of overall sales, in 2011 dropped to 18,9%;
- since the PX imposed one clearing price regardless of the technology or fuel, it induced almost a convergence between hard and brown coal-fired generation prices.

In **Romania**, the volume of electricity traded on the DAM has grown by 52.51% compared to 2012 (i.e compared to the period before the general mandatory trading over the centralized markets was introduced). In 2013, 24.41% of the market participated in the DAM.

**(ii) Market making obligations**

An obligation to simultaneously submit a bid price (the price at which a buyer is willing to buy) and an offer price (the price at which a seller is willing to sell) for a given product at a predefined spread(s).

Exchanges may also require market makers to commit to a minimum volume that they are prepared to buy/sell. Market makers on voluntary basis are active on the **Nord Pool** and **EEX exchanges** and are credited with playing an important part in the growth of their liquidity. Mandatory market making can be introduced by the regulator to certain market participants that are continuously active in both sides of the market. This measure overlaps on some aspects or can be combined with the trade obligation.

The key issues when designing such measures relate to determining:

- **who bears the market maker exposure:** market makers in the electricity markets are typically well capitalised firms with a strong generation portfolio;<sup>20</sup>
- **the products to be provided** by the market maker: a standardized product, posting transparent prices on a trading platform or similar. Such products could be identified through a market test;<sup>21</sup>
- **the volumes to be made available**, which is the key issue concerning improvement of liquidity: either a limited volume addressing the needs of small/independent suppliers, with a focus on the specific products and volumes required by those market players, or a *larger volume requirement if objective is wider market liquidity*.

**(iii) Financial Transmission Rights**

Once market coupling is applied which involves one or more Contracting Parties, implementing forward Financial Transmission Rights options (FTRs) are an important mechanism to ensure that all physical cross-border exchanges go through market coupling algorithm. Considering the level of cross-border capacities between the Contracting Parties in the Western Balkans, a significant volume is brought to day-ahead markets through FTRs.

<sup>20</sup> The market makers on Nord Pool and EEX are usually the dominant utility in the region as they have the required balance sheet strength, trading experience and generation portfolio to manage the risks associated with market making more effectively than other market participants. See: Ofgem, Liquidity Proposals for the GB wholesale electricity market, Ref. 22/2010, p.23.

<sup>21</sup> *Ibid.* Ofgem considers it appropriate to limit the remit of the market maker to a few key products to start with, and then additional products may be developed afterwards.



This measure should be combined with mechanism to ensure that market participants are fully financially hedged in the cases of significant curtailment of physical cross-border capacity.

In the liquid markets where Physical Transmission Rights options (PTRs) are allocated, on most cases market participants seem to prefer the value from the day-ahead markets instead of using the physical rights. This is at least the experience from the CWE region where the FTRs are being used already in few borders. In less liquid coupled market it is advised to introduce FTRs as a mean that would make day-ahead market a mandatory market place for cross-border activity.

#### **6.4. Measures on surveillance of undertakings' conduct on a PX and preventing abuse of dominance**

Even if significant volumes are traded on the PX as a result of implementing measures listed in the previous sections, it does not mean that there is no risk of abuse of market power by dominant market participants through manipulating price formation by way of modifying (remaining) volumes or through false or excessive bidding pricing or of collusion between market participants on the PX.

Liquidity is difficult to achieve if one undertaking is capable of exerting a decisive influence on the market price.<sup>22</sup> The same undertakings with significant market power might at certain times have interest in increasing prices, while at other times in artificially decreasing them.<sup>23</sup> Customers tend to prefer to pay higher prices to avoid being exposed to uncertainty. Therefore, undertakings with market power would have an interest in increasing price volatility. Such a link between volatility and market power has a direct impact on day-ahead markets and financial markets. Various examples in the UK show that independent suppliers or traders are those that suffer from the negative consequences of market power.<sup>24</sup>

For a PX to be functional, market participants must have trust and confidence in its integrity and in particular the interplay between supply and demand on the PX. Therefore, it is crucial that prior to the PX becoming operational, rules governing participants' conduct and market monitoring have been adopted. Such rules shall prevent and address market manipulation by the exercise of market power (withholding capacity, strategic bidding at excessive prices compared to marginal costs), fraudulent transactions or insider's abuse of privileged information.<sup>25</sup> Some of the following market manipulation techniques should be considered: **market manipulation through modification of volumes** with a view to influence price formation; and **market manipulation through modification of prices** as the number of offers that one market operator may introduce in a PX may significantly influence the clearing price. In addition, producers may enter into **false transactions**, buying and offering at the same time at unrealistic prices to distort signals. Vertically integrated undertakings could offer electricity at **excessive prices**, which could be purchased by their own supply branch (as they would not register any loss at group level). This would instead distort price signals setting the clearing price at an excessively high level.

The following series of measures on transparency surveillance of practices of PX participants could be recommended:

- (i) **setting a maximum number of coupled offers** (price/quantity) that a certain undertaking may submit, or an obligation to trade on the PX with a **maximum offer price** (as in the BEH Electricity case).
- (ii) **transparency and integrity**.<sup>26</sup>

<sup>22</sup> See: *supra* note 9, p. 11.

<sup>23</sup> *Supra* note 9, p. 12.

<sup>24</sup> See : *supra* note 9, p. 11.

<sup>25</sup> See: the Belgian authority Report.

<sup>26</sup> *Supra* note 10.

- **The price setting principle** implies adopting clear principles and publishing information on how the price is determined on the PX for each concerned segment if various segments exist, namely for double-sided auctions or continuous trading.
- **Pre-trade or post-trade transparency requirements**<sup>27</sup> imply that the PX market operator has to send to the NRA prices and volumes in respect of each order and concluded transaction. Moreover, aggregated curves, clearing prices and volumes have to be published on a regular basis. The market operator shall publish daily prices and volumes on an anonymous basis also for continuous trading.<sup>28</sup> Post-trade information shall be available on a trade-by-trade basis for continuous trading and close to real time for auction trading. Aggregated data shall be published on a daily basis.

Given the vulnerability of prices on the PX depending on inside information on generation capacity or withholding of generation capacity, the PX market rules shall provide obligations for participants to disclose information on production facilities, data on consumption or transmission of electricity, planned outages, limitation, expansion or dismantling of capacity or any other information susceptible of having a significant impact on prices for products on the PX. Finally, transposition and implementation of the REMIT Regulation, which is already part of the Energy Community law, would allow harmonization of publication requirements among the different countries.

(iii) supervision of power exchanges may be organized on two levels:

- **the PX market operator** shall monitor participants' conduct and may be allowed to take specific actions whenever it detects an abuse or non-compliance (among which it may (i) request participants to put an end to the breaches, (ii) impose disciplinary measures (such as send notifications, temporarily suspend up to six months and/or terminate agreements with market participants).<sup>29</sup>
- **the regulatory authority** shall be vested with broad monitoring, investigative and sanctioning powers (details in the following section).

In conclusion, market conduct on spot markets is to be governed by general law, competition law, unfair trading rules and criminal law. In addition, PXs should provide for additional tailor-made provisions in their market rules and additional investigative and sanction powers.<sup>30</sup> In cases where a PX operates both a spot and a forward market, those rules should apply to both.

## 6.5. Market powers of PX operators

To designate a single PX in a country is considered by many as natural, because it is beneficial for keeping service fees low and for ensuring higher levels of liquidity. This is particularly true for small markets and in most European countries only one PX exists.

However, the power exchange has features of a natural monopoly<sup>31</sup> and it may abuse its market power.<sup>32</sup> Moreover, all the supportive measures listed above that aim to enhance liquidity translate into advantages for the PX operator in terms of reinforcing its position. This is more probable in cases (like in Romania or Bulgaria) where all mandatory trade shall be carried out on one designated centralized platform. Such an issue was much debated in these and other

<sup>27</sup> See for example, Article 13 of the Belgium Royal Decree of 20 October 2005.

<sup>28</sup> See for example, Article 42 of the market rules of the Belpex, and data on auctions on websites of Belpex, EPEX.

<sup>29</sup> See for example, Article 18 of the Belgium Royal Decree of 20 October 2005. These disciplinary measures are further detailed by Article 13(1) of the Belpex market rules.

<sup>30</sup> See for example, Market Conduct Rules of Nord Pool, or the EPEX Spot Code of Conduct as part of its market rules. See also: Boisselau, F., The Role of power exchanges for the creation of a single European electricity market: market design and market regulation, *Delft University Press*, 2004, and also the Belgian Authority Report of 2004.

<sup>31</sup> First, as liquidity attracts liquidity, trading platforms may benefit from a positive "network externality"; second, significant economies of scale have been demonstrated in empirical work on exchanges. See: Meeus, L., 2011, Why (and how) to regulate Power Exchanges in the EU market integration context, *Energy Policy*, 39(3), pp. 1470-1475.

<sup>32</sup> Taking inspiration from researches on financial exchanges, it was identified that the exchange may exploit its market power to act anti-competitively (cartelizing the supply of trading services, passing self-interested and inefficient rules, deterring access to the exchange, deterring competition, or practicing monopoly pricing).

countries. In Poland, for instance, competition between PXs was introduced in December 2017. In the UK, on the other hand, measures to support liquidity are not combined with measures designating exclusively one trading platform.

The role of the NCAs is hereby crucial, and the cooperation between them and the national regulatory authorities needs to be enhanced. While the NCAs are best placed to apply competition rules, the NRAs know their electricity markets best, have the technical knowledge and are also empowered with investigative and market monitoring powers (based on the Third Energy Package).

***Power exchanges exercising market power***

There have already been several cases of power exchanges exerting their market power in anti-competitive ways with indirect impact on liquidity.

The European Commission found that the **Romanian OPCOM**, by requiring EU-foreign traders to obtain a Romanian VAT registration for being admitted to spot markets on the PX (even though EU traders already had VAT registration in their home countries), had discriminated against wholesale electricity traders on the basis of their nationality/place of establishment, excluding foreign traders or making it more difficult for them to participate in Romanian electricity spot markets for over five years. This amounted to an abuse by OPCOM of its dominant position on the Romanian market for facilitating electricity spot trading.

The market operator of the **Dutch PX** has been investigated by the national regulator for charging high fees for services of the PX, which in turn could be seen as representing high transaction costs capable of raising barriers to market participants and constituting an abuse of dominant position. However, even though the fees were high, an abuse could not be proven.

Finally, the European Commission found that **EPEX Spot and Nord Pool Spot**, by allocating territories among them with a view to protect and not challenge one another's traditional markets, had agreed not to compete for their spot electricity trading services in the EEA. Such

## 7. Concluding remarks

In mid-2019, not a single functioning regional market is in place in the Energy Community. Electricity markets are still mostly national and wholesale trading is not fully open. The Athens Forum of 2018 invited the Secretariat to develop a guideline on wholesale market liquidity and, by adopting the present document, the Secretariat responds to this request. These Policy Guidelines provide recommendations on the legal and regulatory measures that could be used to introduce competition at national level and enable cross-border trade in situations where national incumbent undertakings still dominate the national wholesale markets. It also suggests legal and regulatory measures that could be imposed in order to introduce and/or increase liquidity on organised markets, in particular power exchanges.

The Secretariat considers that both the NRAs and the NCAs of the Contracting Parties have competences to adopt such measures. They are hereby invited to follow the EU experience, become proactive and start using their powers effectively.

By proposing these concrete measures, the Secretariat confirms its readiness to support the Contracting Parties in designing measures that would fit their national specificities and could be applied to their national electricity markets.

Vienna, 08 May 2019



Janez Kopač  
Director