Publishing date: 24/10/2014

Document title: 1st ERI Progress Report

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ACER Coordination Group for Electricity Regional Initiatives

ERI Progress Report #1

April 2014 – September 2014

A14-ERI-02

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Contents

1 Context

The entry into force of the Third Energy Package and the strong commitment of the Member States to complete the internal energy market by 2014 establishes a firm regulatory, institutional and political background for the completion of the internal energy market by 2014.

Nevertheless, 2014 remains an ambitious target date, which requires genuine commitment to the goal of integrating the regions into a single market area and the real mobilisation of stakeholders through the Regional Initiatives process which now falls under the responsibility of the Agency for the Cooperation of Energy Regulators (ACER).

To this end, the National Regulatory Authorities (NRAs) have produced, at the European Commission's request and coordinated by ACER, an **EU Energy Work Plan for 2011-2014** based on clear, commonly agreed objectives and milestones. This Work Plan was drafted on the basis of three important inputs:

- The AESAG (ACER Electricity Stakeholder Advisory Group) input prepared for the 20th Florence Forum in May 2011;
- The contributions of the seven electricity regions defined in Regulation (EC) No 714/2009;
- The draft Framework Guidelines on Capacity Allocation and Congestion Management (CACM).

The EU Energy Work Plan for 2011-2014 in Electricity **is constituted from four cross-regional roadmaps focusing on the implementation of the target models for CACM** across Europe and seven regional roadmaps[1] complementing and detailing the cross-regional roadmaps and focusing on other important dimensions for the completion of the Internal Electricity Market. Each cross-regional roadmap is **dedicated to one particular timeframe or topic**:

- Implementation of a **single European price market coupling** model[2];
- Implementation of a **cross-border continuous intraday trading system across Europe**[3];
- Implementation of **a single European set of rules and a single European allocation platform for long and medium-term transmission rights**[4];

[1] The seven regional roadmaps are available on: http://www.acer.europa.eu/Electricity/Regional_initiatives/Pages/Work-Programmes-2011-2014.aspx
[2] The ACER cross-regional roadmap for the Single European Price Market Coupling Model is available on: http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/1.-Market-Coupling.aspx
[3] The ACER cross-regional roadmap on continuous intraday trading is available at: http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/2.-Cross-border-Intraday.aspx

- Implementation of **fully coordinated capacity calculation** methodologies and particularly the flow-based allocation method in highly meshed networks[5].

Since the endorsement of the four Cross-Regional Roadmaps by the Florence Forum in December 2011, obstacles have delayed the different projects. Previous ERI Reports and Regional Initiatives Status Review Reports[6] provide further information on these obstacles and their impact on the different projects.

As an exception, in acknowledgement of the challenges in adapting the Single Electricity Market between Ireland and Northern Ireland to the Electricity Target Model, the deadline to implement the target model at the day ahead and intraday day stage in the Irish electricity wholesale market ('SEM') has been postponed to 31 December 2016. In this context, a Roadmap on Implementation of the European Electricity Target Model in the SEM[7] drafted by the Commission for Energy Regulation, the Utility Regulator of Northern Ireland and Ofgem was sent to the Agency on 23 May 2013. Since then the CER and UR, along with government ministries, have established a project to design new market arrangements for the island of Ireland that meet the requirements of the Target Model[8].

2 Objective of the Progress Report

The first objective of the Progress Report is to monitor progress in the implementation of each roadmap and to ensure that any obstacle is well identified and can be tackled in the most effective and efficient way.

The second objective of the Progress Report is to assess progress against the 2014 deadline and for markets which won't be able to meet this deadline to make sure that the delay will be as limited as possible.

[4] The ACER cross-regional roadmap for the European Platform for the Allocation of Long-Term Transmission Rights is available at: http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/3.-Long-Term-Transmission-Rights.aspx

[5] The ACER cross-regional roadmap for the Flow-Based Capacity Calculation Method for short-term capacity allocation is available at: http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/Capacity-Calculation.aspx

[6] Previous ERI QR reports and RISRR are available here: http://www.acer.europa.eu/Official_documents/Publications/Pages/Publication.aspx

[7] The Roadmap on Implementation of the European Electricity Target Model in the SEM is available at: http://www.allislandproject.org/GetAttachment.aspx?id=ec8eecd6-0e41-4659-8a1e-85c5efb0fe80

[8] For more information on this project see: http://www.allislandproject.org/en/TS_Current_Consultations.aspx?article=dac49400-fed7-41e7-ad9c-17c8ea4c65f4

3 Implementation of a single European price market coupling model

3.1 The project in a nutshell

The target model for the day-ahead timeframe is a European Price Coupling (EPC) model which will simultaneously determine volumes and prices for all price zones in Europe. This solution requires TSOs and PXs to develop common arrangements for each stage of the process, including pre-coupling aspects (such as how much transmission capacity to make available to the market), the coupling solution (the development and implementation of the algorithm) and post-coupling aspects (such as the financial settlement between PXs and between PXs and TSOs). The implementation of a single European price market coupling model follows a step-wise approach focusing first on the implementation of the North-West Europe (NWE) price coupling which, once in place, will be joined by other markets or regions as soon as ready.

3.2 Review of the progress

Overall assessment:

The implementation of day-ahead market coupling progressed well with the successful launch of the full coupling between the Iberian market (MIBEL) and the NWE region on May 13. In the CEE region, the developments of the 4 market coupling project went as planned and the Croatian power exchange was created.

However, in the CSE region, the Go-live date window has been postponed to February 2015 to take into account the potential launch of the Flow-Based method in the CWE region and the delay caused by several technical and contractual issues.

Regions	Progress achieved	Pending issues
NWE	Running since 4 February 2014	The following topics are to be monitored: - transparency of the coupling performances (reproducibility…) - update on loss factors - results of NWE MC - planning for the future expansions
SWE	**Full coupling between NWE region and MIBEL launched successfully on May 13**	Agreement on the day-ahead shadow auctions as another fall-back option. This will be implemented early 2015.
CSE	On June 9, AEEGSI published the resolution 265/2014/R/eel approving the changes to the Italian Grid Code proposed by Terna, including those needed to the postponement of the DA GCT to 12.00. The new GCT will be triggered a couple of weeks before the market coupling go-live.	The CSE Day-Ahead Operational Agreement (DAOA) and all the bilateral contracts have still to be finalized. Coordination with other projects, namely the Multi-Regional Coupling (MRC), may require some relevant changes in the

	The GCT in the Slovenian market will occur at the same time as Italy because of the already existing market coupling. On July 16, project parties organized a forum to inform the stakeholders about the main aspects of the project. **The go live date window was foreseen for February 2015 and must be confirmed in November 2014.**[9] On July 24, the Italian Regulator issued a consultation document concerning the implementation of market coupling in the Italian market. A solution to the settlement date shift was proposed to the Ministry. This proposal was also presented in the public consultation launched by the Italian regulator on the market coupling. The end of the consultation was September 30. A decision should be taken in the following weeks. On August 1, NRAs sent a letter to PPC parties asking for information about some possible criticalities (coordination with CWE FB project, impact of CSE coupling in algorithm performance). An approval package was requested as well. Integration tests have been performed since 4 August and simulation tests started on 15 September. All agreements necessary to the Market Coupling have been drafted	high level planning (e.g. adhesion to the MRC DAOA). Austrian parties have to be integrated into the test activity. The Austrian PX has not yet been designated. For the Greek electricity market, there will be a complete re-structuring of the internal wholesale market based on a bundle of both individual acts of the Regulator, the TSO (ADMIE) and the Market Operator (LAGIE) but also on a number of cooperative and synergistic steps on behalf of them, always aiming at the full implementation of the Target Model According to the Roadmap created: • Liquid forward contracts market to be created. • Existence of bilateral contracts between suppliers and producers, beyond the mandatory pool (NOME model). • Introduction of maximum share for the incumbent market supplier of bilateral or forward contracts, in order to foster liquidity. • New rules, concerning the bidding in the day-ahead market. • New methodology of determining the Day Ahead Schedule (DAS), free of transmission and generation (must run) constraints. • Intraday market with netting out possibilities for the participants. • Day-ahead ancillary services market. • Balancing market with real time balancing responsibilities of the participants. • RES producers with increased responsibility for deviation between forecasted and supplied energy.
CEE	See update for the Capacity Calculation	

[9] Borders with Switzerland: technical readiness of market coupling projects is expected early December 2014. Go live linked to LTC issues and European-Swiss negotiations

(the whole region)		
CEE (4 Markets Market Coupling Project)	TSOs and PXs started running internal integration test in Q3	Once the internal integration test is successfully finished, PXs' members will join for the full integration test planned to run between 13/10/2014 – 24/10/2014 **The Go-live date is still planned for 11 November 2014** subject to successfully performed member & acceptance test and final regulatory approval.
Croatia	**HOPS (TSO) and HROTE[10] (Market operator) established Croatian Power Exchange Ltd. (CROPEX) in May 2014** as a joint venture company responsible for setting up the day-ahead market and connecting it to the internal European market. There are ongoing discussions with Hungarian and Slovenian counterparts as to decide on which border the coupling is to be implemented first. However, no coupling could be implemented before mid-2015.	Lack of precise timing and sequence of market coupling with EU neighbours (Slovenia and Hungary).
Bulgaria		The project for market coupling with Romania is in an initial stage and is planned for go-live after 2015.
Ireland[11]	A draft decision paper on the new high level market design for Ireland and Northern Ireland, the I-SEM was published by NRAs (CER and UR) on 9 June. The final decision paper was published on 17 September 2014 along with a document on next steps. The new market, will have a strong focus on the day ahead market with no physical bilateral forward contracts permitted. A detailed implementation timeplan is due to be published in mid-October.	

[10] HROTE organises the only one electricity market in Croatia. In the initial phase of the market opening, the model of bilateral market has been chosen and the electricity trading has been carried out through bilateral contracts.
[11] The Single Electricity Market has been granted an exemption to comply with the CACM NC in 2016

4 Implementation of a cross-border continuous intraday trading system across Europe

4.1 The project in a nutshell

The overall objective of the Intraday Cross-Regional Roadmap is to implement the Intraday Target Model on all borders in Europe by the end of 2014. Due to several issues, the project has been delayed. The implementation of the Intraday European target model follows a phased approach starting with implicit continuous trading covering at least the NWE (plus Austria, Italy and Switzerland) region which will evolve to meet the requirements of the target model while being implemented at European level.

4.2 Review of the progress

Overall assessment:

The development of the Intraday European target model still experiences important delays. The period for the pre contractual negotiations has been extended from 4 to 12 months. The ESA Step 2 started on June 4 but outstanding issues remain between the PXs and the selected IT provider having a huge impact on project deliverables.

Regions	Progress achieved	Pending issues
NWE+	PXs and the selected IT provider entered into an Early Start Agreement (ESA) December 2013. **The ESA is split in 2 phases. The second one started on June 4.** In the original project schedule ESA steps 1 and 2 were to take 4 months. Due to protracted negotiations and unresolved issues this has now increased to 12 months overall. (December 2014).	The agreement of the ESA does not mean that the contract will definitely go ahead as the ESA is supposed to lay the foundations for a contract between the parties. Step 1 is now complete and the step 2 started on June 4. However the resolution of some outstanding issues under Step 1 has been moved into Step 2 and these are continuing to cause delays in the current negotiations between PXs and the selected IT provider.
SWE	The Iberian PX (OMIE) participates in the NWE+ project.	
CSE		The Italian TSO (Terna) and Market Operator (GME) have designed and proposed to foreign counterparties a market arrangement allowing the integration of cross-zonal implicit

		auctions with the NWE+ continuous trading session, assessed to be in line with the target model specifications. The availability of foreign counterparties and the details of the design will be now assessed in order to test the designed solution on selected borders.
CEE		No implementation roadmap
Croatia	Intraday rules for capacity allocation and technical implementation are in preparation with Hungarian TSO (MAVIR) HROTE (the Croatian Energy Market Operator) and HOPS (the Croatian power system) are planning to organize an intraday (and join cross-border ID) market with the development of a Croatian PX after implementation and coupling of its day-ahead market (not expected before mid-2015).	Only unilateral intraday allocation at the border with Bosnia-Herzegovina will remain by Q4 and implementation of coordinated daily auctions in SEE CAO. Only unilateral intraday capacity allocation at the border with Bosnia and Herzegovina and bilateral intraday capacity allocation with Slovenia and Serbia exist.
Romania		No implementation roadmap
Bulgaria	Currently an intraday trading platform is being tested and is expected to be operational at the end of 2015.	No implementation roadmap
Ireland[12]	A draft decision paper on the new high level market design was published by NRAs (CER and UR) on 9 June. The final decision paper was published on 17 September along with a document on next steps. Continuous intraday trading will be the exclusive route to intraday physical contract nominations which is in line with the European Target Model.	

[12] The Single Electricity Market has been granted an exemption to comply with the CACM NC in 2016

5 Implementation of a single European set of rules and a single European allocation platform for long and medium-term transmission rights

5.1 The project in a nutshell

The objective is to give participants an opportunity to hedge themselves against congestion costs and day-ahead congestion pricing, through one single access point and a harmonised set of rules for long-term transmission rights, where financial markets do not enable them to do so in an efficient manner. In order to achieve this objective, four areas of work have been identified:

1. Harmonisation of the allocation rules;
2. Harmonisation of the allocation platform;
3. Harmonisation of nomination procedures;
4. A potential move to Financial Transmission Rights (FTRs).

5.2 Review of the progress

Overall assessment: A new version of the rules applying to the platform CASC (CASC HAR 2.0) should apply from January 2015, pending on TSOs' request for approval and NRAs' following decision. This version will include the FR-ES border (currently under specific rules) and provisions allowing for the day-ahead market coupling on the FR-IT and the IT-AT borders.

At the European level, ENTSO-E has been following the roadmap presented in January in order to deliver a set of harmonised auction rules (EU HAR) applicable from early 2016 onwards. ENTSO-E has carried out an extensive gap analysis between the existing set of rules in Europe and has delivered a set of recommendations the harmonised EU rules should comply with. Drafting phase of the rules has recently started and is expected to be finalised by July 2015. By then, the Agency and NRAs will monitor ENTSO-E progress and provide any needed guidance. Involvement of stakeholders will be ensured through the creation of a stakeholder's advisory group in the autumn.
In July, TSOs from CASC and CAO have also presented a high level roadmap to merge these two regional platforms. The second half of 2014 should be devoted to the implementation leading in principle to a binding merger agreement in December 2014. Legal constitution and functional transition should be achieved by September 2015, enabling the resulting Joint Auction Office to perform the yearly auctions for 2016 and to apply the EU HAR.

Regions	Progress achieved	Pending issues
Baltic		On the Estonia-Latvia border, compliance of the auction features with the EU regulation is being checked. A new set of rules is under consultation for 2015 auctions. According to Baltic NRAs, the issuance of PTRs remains a temporary solution before the introduction of financial products by Nasdaq-OMX.

		A decision about TRs is still to be taken for the Latvian-Lithuanian border (i.e. introduction of TRs or introduction of CfDs or no product at all)
Northern		There are still no decisions on TRs and no dedicated products (such as CfDs) for NorNed, the Baltic cable and the SwePol link. PTRs between the two bidding Danish zones have been allocated through the CASC platform since June (for the month of July). TSOs and NRAs will start working in the last quarter of 2014 on a shift from PTRs to FTRs on the DK1-DE, DK2-DE, DK1-DK2 borders for 2016.
CWE	TSOs from CASC and CAO have presented a high level roadmap to merge these two regional platforms. They aim at delivering the Joint Auction Office by September 2015, which will perform the yearly auctions for 2016.	Ongoing work on harmonised auction rules (EU HAR) to be applied by the Joint Auction Office from 2016 onwards.
SWE	The CASC's HAR 2.0 rules were consulted by TSOs in July. The outcome of the public consultation and the final draft of these rules are expected to be submitted to NRAs by mid-October at the latest. This new version will include the FR-ES border and consider two specific go-lives: December 2014, for long term products with physical delivery from the 1st January 2015 onwards, and March 2015 for the implementation of the shadow auctions as fallback solution for the FR-ES border in case of decoupling of the SWE region. Firmness regime has been aligned with the one in force in CWE region (in particular,	Coordinated NRAs' decision on the approval of CASC's HAR 2.0 rules is expected by mid-November. See also above the paragraph on the EU HAR for the CWE update Still no roadmap for the interconnection between Portugal and Spain (IPE) to join CASC (need to be in a position to issue FTRs) or a set of harmonised rules, which should cover FTRs.

	price cap on the compensation was removed). See also above the paragraph on the merger of CASC and CAO for the CWE update The second and third joint auctions of electricity interconnection capacity (FTR option) between Spain and Portugal took place respectively on 18th June and 18th September under the interim coordinated mechanism of MIBEL. The June auction allocated two products (one for each direction) covering the 3rd quarter 2014 and two products (one for each direction) covering the 4th quarter 2014 The September auction allocated two products (one for each direction) covering the 4th quarter 2014 and two products (one for each direction) covering the year 2015.	
CSE	The CASC's HAR 2.0 rules were consulted by TSOs in July. The outcome of the public consultation and the final draft of these rules are expected to be submitted to NRAs by mid-October at the latest. This new version will take into account the evolution required in the context of the upcoming day-ahead market coupling on the FR-IT and IT-AT borders (evolution of the UIOSI requirements, removal of the DA explicit auctions, fallback in case of decoupling). These changes will be applicable only when DA market coupling goes live on those borders. See also above the paragraph on the merger of CASC and CAO for the CWE update	Coordinated NRAs' decision on the approval of CASC's HAR 2.0 rules is expected by mid-November. See also above the paragraph on the EU HAR for the CWE update

CEE	See also above the paragraph on the merger of CASC and CAO for the CWE update	See also above the paragraph on the EU HAR for the CWE update
Croatia	For borders with Slovenia and Hungary, the situation is similar as for the CEE region.	It is planned that separate rules for Croatian borders with Slovenia and Hungary and for CEE CAO will still exist in 2015. Merging of CEE and HR-SI/HR-HU Auction Rules to be elaborated in 2015
FUI		Still no roadmap to join a platform or a harmonised set of rules
Romania		Still no roadmap to join a platform or to harmonise set of rules
Bulgaria		Still no roadmap to join a platform or to harmonise set of rules
Ireland[13]	See update for Day Ahead Market Coupling. In their recent decision on the new market design, CER and UR have indicated that Financial Transmission Rights would apply on interconnectors in the new market, subject to agreement with Ofgem.	Still no roadmap to join a platform or to harmonise set of rules

[13] The Single Electricity Market has been granted an exemption to comply with the CACM NC by 2016

6 Implementation of fully coordinated capacity calculation methodologies and particularly the flow-based allocation method in highly meshed networks

6.1 The project in a nutshell

The target model, as defined by the CACM Framework Guidelines, specifies that TSOs need to apply an Available Transfer Capacity (ATC) or a Flow-Based (FB) method. The flow-based allocation method is preferable for short-term capacity calculation in highly meshed and highly interdependent grids. Whatever the method chosen, a common grid model must be used.

The South-West, CSE and FUI regions have decided to go on applying the ATC method.

In the Nordic region, NordREG (an organisation for the Nordic energy regulators) made a temporary decision not to introduce Flow Based method in 2012, whereas NordREG also decided to look further into the merit of Flow Based.

6.2 Review of the progress

Overall assessment:

During the CWE FB MC Forum of 26 June 2014, the Flow-Based Market Coupling project parties maintained the planning with target go live at the end of November 2014. Three months later, on September 24, the project partners informed all stakeholders about the postponement of the target go-live date for 31 March 2015. The technical readiness of the system is still foreseen for November 2014 but its implementation is to be effective in March only. One important reason for this postponement is the specific situation for Belgium this winter given the unexpected unavailability of a third of centralised generation capacity and the risk of load shedding.

CEE TSOs and PXs as the FB MC Project parties held several JSC (Joint Steering Committee) and JWG (Joint Working Group) meetings. First results of the FB SOO (Flow-Based Security Oriented Option) are available. TSOs are on one hand working on a thorough analysis needed for FB methodology and on the other – together with PXs - still on planning and organization (Project Management Officer, cost sharing principles, roadmap, etc) of the common project.

Regions	Progress achieved	Pending issues
Baltic		Still no decision about capacity calculation taken
CWE	A NRA-lead market consultation took place from 6 to 30 July 2014. The responses have been summarized by CWE NRAs. These led to requests for further details on many topics such as security of supply, the impact on intraday, inclusion of the long-term nomination, etc… to the project parties The CWE FB MC project parties have answered some of the requests made	On September 24, **the CWE project partners announced a postponement of the target go-live date for 31 March 2015** instead of November 2014. Parallel runs still ongoing. • Testing of the IT and operational side of FBMC (including fallback mechanism for FBMC) • Several reports (by the project parties) on issues raised by CWE

	by CWE NRAs on flow-based intuitive, the functioning of the algorithm,etc… The external parallel runs are ongoing. Results are available (http://www.casc.eu/en/Resource-center/CWE-Flow-Based-MC/General-Information),	NRAs are in the process of finalisation General approval packages sent to NRAs and under scrutiny. The exact process depends on national rules. Discussions (TSO-PX-NRA) on market consultation, transparency and monitoring, FBMC parameters and intuitiveness
CEE	1st step of SOO analysis completed Project organization and team structure established	Roadmap to move to the FB method has still to be reviewed and updated; Project Management Office to be selected Following the request from Romania, there are ongoing discussions as to decide whether to grant Romania a full member status in the CEE FB MC project. CEE TSOs and PXs are required to assess the impact of a possible accession into the project.
Croatia		Still no decision about capacity calculation taken
Bulgaria		Still no decision about capacity calculation taken
Ireland	See update for Day Ahead Market Coupling	
Nordic		Nordic TSOs are currently carrying out a comprehensive project on the Flow Based method. NordREG has organised a project to closely follow TSOs work on the Flow Based method.

7 Integration of Electricity Balancing markets

7.1 Description of the target model for Electricity Balancing in a nutshell

The target model for Electricity Balancing is two-fold.

First, strong coordination between TSOs is required to permit the optimised activation of balancing energy as well as the sizing and exchange of balancing reserves. According to the provisions of the Framework Guidelines on Electricity Balancing (EBFG), activation will be based on a multilateral TSO-TSO Common Merit Order (CMO) for the manually-activated frequency restoration and replacement reserves and an equivalent concept for the automatically-activated frequency restoration reserves.

Second, well-designed market incentives for market participants will support the development of a well-functioning balancing market and contribute to limiting residual balancing volumes. They will affect:

- Balance Service Providers (BSPs), through harmonisation of the pricing method to procure the balancing energy (towards pay-as-cleared-based) and through the requirements on terms and conditions to facilitate the participation of the RES and the demand response;
- Balance Responsible Parties (BRPs), through the definition of common features for an efficient settlement of energy imbalances.

To turn these ambitious requirements into concrete projects, the Agency invited ENTSO-E to select pilot projects[14].

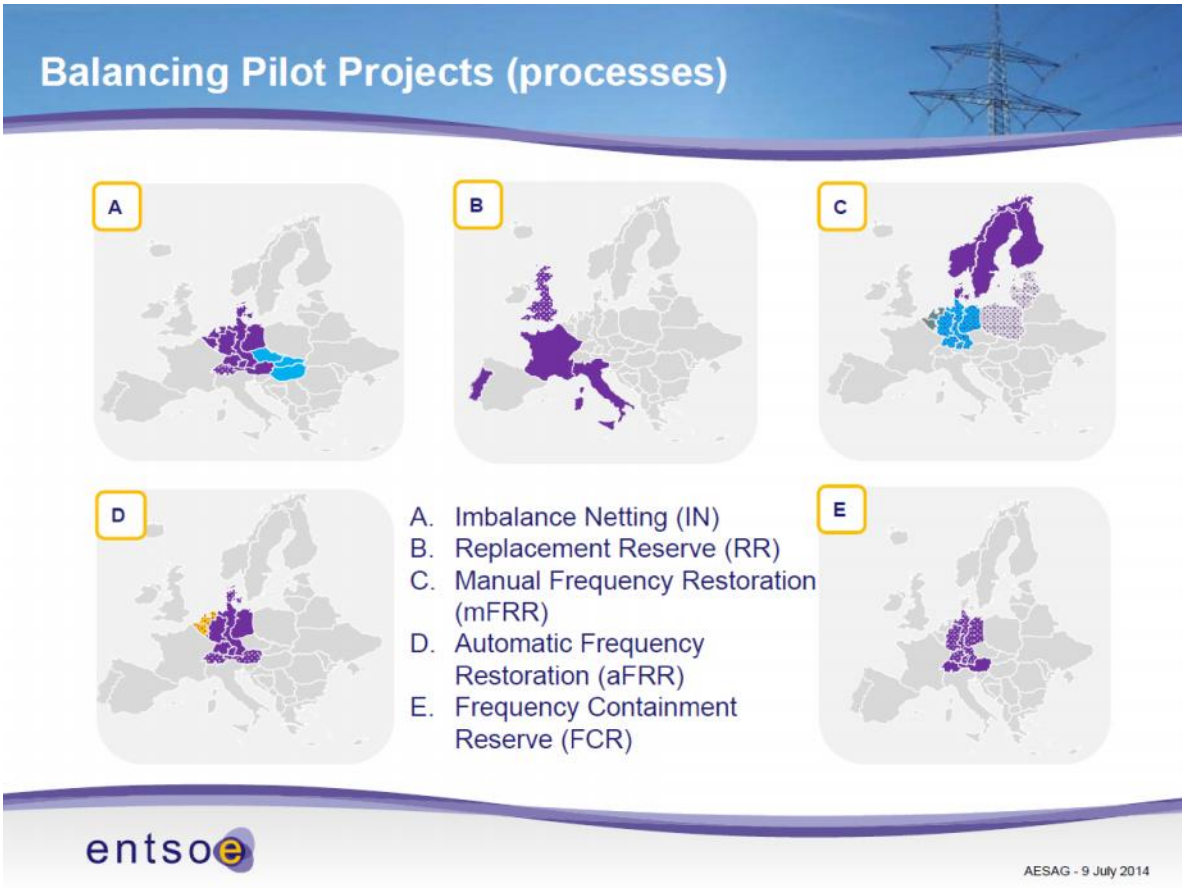
7.2 Review of the progress achieved by pilot projects

In the first quarter of 2014 a Terms of Reference for a Balancing Pilot Projects Stakeholder group was drafted by ENTSO-E and agreed upon. One main element of discussion is whether this group should only focus on progress of the different balancing projects or also participate on further development of a balancing target model. It was agreed that the group should focus on the different processes used in balancing across Europe. The first meeting in May 2014 focussed on the projects on imbalance netting. The meeting in September focussed on the projects on Manual Frequency Restoration Reserves.

Apart from the EU pilot projects it becomes clear that TSOs across Europe are engaging in other cross border balancing projects. These projects mainly focus on the Exchange (or reserve sharing) of FCR and RR and to a lesser extent on the exchange of mFRR[15].

[14] The list of selected pilot projects can be found here: http://acernet.acer.europa.eu/portal/page/portal/ACER_HOME/Stakeholder_involvement/AESAG/3rd_AESAG_Meeting/3.1%20ENTSO-E%20(Kekkonen)%20Balancing%20NC.pdf

[15] A list of other projects on Balancing can be found on slide 19 of the ENTSO-E presentation given at the 18th AESAG meeting on the 10th of January 2014



(In addition to the picture above for process B, the TERRE project has already been extended to Spain and Switzerland).

With regard to the current pilot projects, there are clear indications that some of them could merge in the future or are currently engaged in a merging process. These merges are most likely to occur along the lines of the processes. The picture above gives a first insight of possible combined project areas.

During the last AESAG and Balancing Pilot Project Stakeholder Group (BPPSG) meetings stakeholders expressed a general concern regarding the lack of transparency and the need for a clear structure to ensure participation from NRAs and stakeholders. NRAs requested all pilot projects to provide concerned NRAs with a detailed Project Plan including Major Milestones including go/no go decisions, plan for Stakeholder involvement and regulatory approvals. These plans are to be discussed for each pilot project in a NRA/TSO-meeting before the next BPPSG meeting in December.

	Project	Progress achieved	Pending issues
1	Germany	The operational concepts for real-time flow-based congestion management (Imbalance Netting and aFRR activation) have been adapted. A first operational test of the flow-based approach has been carried out. Feasibility studies concerning an mFRR exchange and Imbalance Netting with NORDIC and BE/NL have been launched.	The feasibility studies with NORDIC and BE/NL are ongoing. An extension of the flow-based approach on foreign TSOs is envisaged.
2	FCR AT/CH/DE/NL	Project successfully designed and implemented within one year (CH and AT) - go live date: July 2013 • Agreement with TSOs of Germany and the Netherlands for extension of collaboration • Concept phase of extension completed and detailed specifications currently being finalised, small project team will work on work packages, project leaders will report to the Steering Committee on progress, according to current project plan extended collaboration to start end 2014/ beginning 2015.	• Common publishing policy for both countries agreed, details under discussion • Monitoring: details under discussion • nternational stakeholder integration under discussion
3	E-GCC (CZ-SK-HU)	The project has been implemented and has been operational since mid-2012. No substantial changes to the project design have occurred in the past 6-9 months.	No pending issues.
4	TERRE	RTE, REN, National Grid and TERNA started the design phase of the TERRE project, focusing on balancing products, matching process, financial issues, timing and scheduling, ATC management and governance. REE and Swissgrid joined the	NRAs and the Agency experienced a lack of transparency regarding the development of the TERRE project so far. ENTSO-E committed to provide TERRE NRAs with a detailed project plan for the next steps, including technical discussions major milestones, stakeholder involvement and

		TERRE project later, during the summer period. The design phase is expected to be completed by the end of 2014.	regulatory approvals. The TSOs are also expected to provide preliminary assessments of the potential gains in implementing the TERRE project across 6 countries.
5	Nordic	The Nordic TSOs have identified a set of measures to improve the efficiency of the (already existing) Nordic mFRR market. Additionally, the Nordic TSOs are investigating possibilities to exchange mFRR with other regions and have started feasibility studies with: - Baltic TSOs - Polish TSO - German TSOs	The NRAs are expecting a first detailed feedback from the concerned TSOs in Q4 2014.This feedback will include findings from the feasibility studies.
7	NL-BE	During the recently completed market design phase TSOs agree on working assumptions for a common Balancing market design: • For aFRR and for mFRR regarding product definition, bidding process, • activation process, exchange process and settlement process • On how to use cross zonal capacity for different balancing processes • Regarding settlement of balancing energy and imbalance settlement A common Public workshop was organised on 13th of June and as a next step will be to do a Cost Benefit Analysis on the working assumptions	Implications for harmonisation of aFRR products (impact on liquidity of local markets and local TSO responsibility-ACE quality) between 2 different control blocks with consequences for local access tariffs Complexity of pricing methods as this is not only affecting market functioning but also cost recovery of balancing costs via imbalance settlement, local incentives to BRPs and possibilities to extend the BE-NL collaboration to other countries. A go-nogo decision for implementation is foreseen for the Q4 2014.
8	BritNed	The project was established between the GB and Dutch TSOs. The initial aim is to assess how two interconnected markets, with different balancing philosophies and	The feasibility study is ongoing. Once finalised, the conclusions of the feasibility study will be crucial to determine whether the design of a mutually beneficial balancing

		different balancing market design features (eg different settlement periods), can exchange a mutually beneficial balancing service. A feasibility study has been initiated to explore the potential options for exchanging balancing services and the potential consequences for each market's system operation and imbalance prices	service will be possible. Currently, it is not clear whether such a mutually beneficial solution will be found for this Pilot to progress beyond the feasibility study
9	IGCC	APG joined the IGCC in April 2014. A cooperation with project 1 has been established: usage of the same optimisation function and coordination of real-time congestion management.	A stakeholder workshop on IGCC is supposed to take place in Q4 2014. There are ongoing talks with further TSOs to join the IGCC.

8 Progress report from the 8th Region prepared by ECRB

Contents

1 Main Insights

The 8th Region is characterised by significant heterogeneity in both its market and regulatory set-up. The largest obstacle for the integration of electricity markets in this region is that its legal basis lacks harmonisation and implementation. Structural challenges in some of the jurisdictions of the region relate to governance issues like a lack of independence of regulators, non-existence of power exchanges, or ineffective unbundling of TSOs. Effective market opening is hindered by a number of legislative provisions in some countries, in particular related to public supply, single buyer models, regulated energy prices, market based procurement and trade of electricity and monopoly positions in electricity generation and supply. At the same time, additional commitment from various actors in the region is deemed to be a necessary precondition for further improvements. A central element for promoting the creation of a regional market, together with the final prospect of forming part of the IEM in a consecutive step, is the ***Regional Action Plan for Wholesale Market Opening in South East Europe*** ((SEE RAP)[16]. The SEE RAP has been developed in line with the elements of the European Electricity Target Model. Table 1 provides an overview of the progress made in the elements of the RAP. As compared to the 2014 target of finalising the EU´s IEM, the target for the 8th Region is 2015. Due to the fact that most intermediary deadlines of the SEE RAP were missed, and that the EU's implementation targets were adapted, too[17], the Electricity Working Group of the ECRB identified a need to update the SEE RAP. This common endeavour between the TSOs and the NRAs was kicked-off and is likely to be finalised in October 2014. Additional emphasis on regional cooperation in capacity allocation was placed by the 19th Athens Forum, taking place on 2 and 3 June 2014.

Table 1: Overview of the developments regarding the elements of the 8th Region´s Regional Action Plan

RAP element	Meeting the intermediary RAP deadlines	Prospects of meeting the 2015 deadline	Progress achieved / pending issues[18]
Capacity Calculation	Partly	unclear	Grid Model updated & LT Coordinated Capacity Calculation in place
Forward Markets	No	Very likely for some bidding zones	With the establishment of the SEE CAO progressing, it becomes likely that coordinated LT allocations can take place in the near future; still, the relations between SEE CAO participating and non participating TSOs in the region need further clarification. First allocations are expected in the end of 2014.
Day-ahead Market	No	unclear	In many countries of the region, Day-ahead market exists, and in most EU countries power exchanges are established. Market Coupling as target for this timeframe is still not implemented in the 8th region. The establishment of power exchanges as precondition for the market coupling was announced for Bulgaria, Croatia, Macedonia and Serbia. Still, regional cooperation remains unclear.
Intraday Market	No	unlikely	No measurable progress achieved
Abandoning of	Abolishment of barriers as		In the Region's EU member states and some of the Energy Community's

[16] http://www.energy-community.org/pls/portal/docs/1810178.PDF. The SEE RAP has been jointly developed by the Energy Community Regulatory Board and ENTSO-E RG SEE and received support of the Ministerial Council of the Energy Community. Ukraine has postponed the decision on approval of the RAP till the Study on Ukraine and Moldova energy systems synchronizing conditions with ENTSO-E is finished. It is expected that the Study could be finished not earlier than 2015.
[17] See the conclusions of the last Florence Forum, here: http://ec.europa.eu/energy/gas_electricity/doc/forum_florence_electricity/meeting_025_conclusions.pdf, as of 25 March 2014.
[18] For reasons of readability, the pending issues are not displayed here. Please consult the RAP for a detailed overview of the activities and deadlines foreseen, here: http://www.energy-community.org/pls/portal/docs/1114181.PDF

barriers in national Legislation	part of the legislative reviews to implement the Third Energy Package with deadline of 1 January 2015 likely	Contracting Parties appropriate measures and market rules have been transposed. Regarding the implementation more detailed setting and application of rules in a coordinated manner is required.

2 The 8th Region

The **8th Region**[19] covers the Energy Community[20] Contracting Parties[21] and the seven neighbouring EU Member States[22].

3 Context

On EU level, the entry into force of the Third Energy Package together with the target of completing the internal energy market by 2014 form the framework for electricity market development. The **Third Energy Package** was incorporated in the Energy Community in October 2011[23] with a transposition deadline by 1 January 2015. This also includes adopting the **European Network Codes**, once legally binding on European level[24], in the Energy Community.

The goal of integrating the seven European electricity regions into a single market area is addressed through the *Regional Initiatives* process which falls under ACER's responsibility and focuses on four **cross-regional roadmaps**:

- Capacity calculation
- Long term capacity allocation
- DA capacity allocation (Market coupling)
- Continuous mechanisms for implicit cross border intraday trading

The 8th Region participates in ACER's coordinated monitoring activity. The SEE RAP defines the steps for regional market integration in the 8th Region streamlined with the milestones and actions of the European *Electricity Target Model* and the four cross-regional roadmaps. The objective of this Quarterly Report is to monitor progress in the implementation of the different roadmaps and to ensure that any obstacle is well identified and tackled in the most effective and efficient way.

[19] The 8th Region was established following a decision by the Ministerial Council of the Energy Community on 27 June 2008 with a view to implement a common procedure for electricity congestion management and transmission capacity allocation on regional level.
[20] www.energy-community.org
[21] Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Kosovo*, Moldova, Montenegro, Serbia and Ukraine. [* *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*]
[22] Bulgaria, Croatia, Greece, Italy (limited to its interconnections with Contracting Parties), Hungary, Romania and Slovenia.
[23] **Decision 2011/02/MC-EnC of the Ministerial Council of 6 October 2011.** Ukraine has abstained from approval of the decision until the internal state procedures of ratification are performed.
[24] Network Codes will, finally, have the form of a directly binding Regulation. Different from the European Union, European Regulations do not develop direct applicability in the Energy Community but need to be transposed into national legislation. The Energy Community Council by Decision 2011/02/MC-EnC empowered the Energy Community Permanent High Level Group (PHLG) to decide on the applicability of the European Network Codes and Guidelines in the Energy Community. The PHLG has defined its procedures by Procedural Act 2012/01-EnC (http://www.energy-community.org/pls/portal/docs/1636177.PDF).

4 Review of progress with implementation in each of the cross-regional projects

4.1 Implementation of a single price market coupling model

4.1.1 Description of the project

Mirroring the European approach, the target model for the day-ahead timeframe in the Energy Community is a single Price Coupling (PC) model which simultaneously determines volumes and prices in all relevant zones, based on the marginal pricing principle. Among the different elements of PC, one of the most important is the choice of a single algorithm that optimises the value of admissible wholesale market trades both within and across bidding zones. At the same time TSOs' requirements in terms of operational network constraints have to be taken into account in order to ensure efficient and feasible allocation results.

4.1.2 Key milestones and accountabilities

The SEE RAP foresaw enhancing the common grid model for SEE and harmonising of the methodologies and procedures for the **calculation of yearly, monthly, and day-ahead capacities** by the end of 2011. Responsibility for these tasks rested with the region´s TSOs via the ENTSO-E Regional Group SEE.

Implementation of PC in the 8th Region entails a step-wise approach. Initially, the starting point for PC was foreseen to establish bilateral or trilateral market coupling by mid 2013 following a nucleus approach. Alternatively different initiatives merging into a single regional PC model by end of 2014 were envisaged. The RAP´s scope was then the integration of the then regional PC with the European PC zone by mid 2015. Delays in terms of implementation in the 8th region, but also within other ERI regions, outdated these prospects. The European Commission´s delay in developing the Governance Guidelines and the consequent delay in tabling a consolidated proposal for the CACM Network Code exacerbate the outlook for implementing a European Single Price Coupling solution by the end of 2014.

As crucial element of this process, the SEE RAP foresees the establishment of power exchanges (PX) or contracting services from existing PXs by end of 2012. This initial implementation date was not fulfilled. An update of the SEE RAP is envisaged.

4.1.3 Review of progress during this quarter

The latest endeavours to establish power exchanges constitute a move into the right direction towards the development of spot markets and the provision of a condition for future implicit allocations. The announced **establishment of a power exchange in Serbia by EMS and EPEX SPOT** is the front-runner in these developments in the Contracting Parties of the Energy Community. More details on how other bidding zones will be involved in this project are expected. Most EU countries of the 8th region have established trading hubs on a day-ahead level, namely in Greece, Italy, Slovenia, Romania and Hungary.

4.1.4 Action needed to overcome the identified constraint(s)

It has to be underlined that all elements of the SEE RAP can be implemented within the legal framework of the 2nd Energy Package. Necessary adjustments in national legislation, preparing the ground for regional implementation, have already been made. The **lack of *concrete* progress** is even more disappointing in this context. Certainly, stronger political support, promotion and commitment are necessary to proceed.

Effective market opening is also **hindered by a number of legislative provisions** in the Contracting Parties that need to be abolished, in particular related to public supply, single buyer models, regulated energy prices, market based procurement and trade of electricity and monopoly positions in electricity generation and supply.

Other requirements for the implementation of a PC in the 8th region are the establishment of PX functionalities in each bidding zone, the determination of Coordinated Capacity Calculator responsibilities and the development of attached methodologies, amongst other things for the distribution of congestion income or capacity calculation.

4.2 Implementation of a cross-border continuous intraday trading system across the 8th Region

Although being already required under the 2nd EU Energy Package, the introduction of a specific cross-border continuous intraday trading system at all borders of the 8th region has not started yet.

4.3 Improvement and harmonisation of the allocation and nomination rules for long and medium-term transmission rights

4.3.1 Description of the project

The SEE RAP provisions on the harmonisation of the allocation and nomination rules for long and medium-term transmission rights is streamlined with the related European cross-regional roadmap. The objective is to give market participants an opportunity to hedge themselves against day-ahead price differences, in a manner compatible with zone delimitation, through one single access point and a harmonised set of rules for long-term transmission rights, where financial markets do not enable them to do so in an efficient manner.

The **still existing lack of a regionally coordinated capacity allocation mechanisms** remains a key concern, both in terms of market liquidity as well as compliance with the Energy Community *acquis communautaire*. Insufficient transmission interconnection capacity with neighbouring systems remains a key barrier for limited cross-border trading and the establishment of a regional electricity market. Coordinated capacity allocation and congestion management schemes are therefore essential. Although the TSOs of all Energy Community Contracting Parties, except Moldova[25], have already introduced market-based capacity allocation mechanisms (based on NTC auctions) for congestion management at their borders, there is still insufficient harmonization in the 8th Region.

4.3.2 Key milestones and accountabilities

The SEE RAP foresaw a step-wise approach starting from centralised and multilaterally coordinated (NTC based in a first step but flow based remaining the final concept) auctions on relevant SEE borders performed by a **Coordinated Auction Office** as single point of contact in SEE by end of 2012. This initial implementation date was not fulfilled. An update of the SEE RAP is envisaged. The SEE RAP schedules the final target of multilateral coordinated auctions on all SEE borders as regional one-stop-solution for end of 2014. The development of the Draft Auction Rules of the SEE CAO and the coordinated approach regarding their future approval give promising signals for the successful harmonisation of the largest parts of the Region's allocation of forward capacities, if not for the entire Region.

[25] With regard to the Republic of Moldova, the draft regulation transposing Regulation (EC) 1223/2008 has been finalised with further amendments; approval is, however, pending and subject to adjustments in primary legislation.

4.3.3 Review of progress (during this quarter)

SEE Coordinated Auction Office

The establishment of a SEE Coordinated Auction Office (SEE CAO) targets harmonisation of the allocation and nomination rules for long and short term transmission rights in the 8th Region. The SEE CAO is envisaged to perform coordinated NTC-based capacity allocation as first step and, finally, switch to flow based capacity auctioning. The Energy Community Ministerial Council in December 2008 supported the location of the Coordinated Auction Office in Montenegro.

The so-called *Project Team Company in Charge of Establishing a SEE CAO* (PTC)[26] has been officially registered in Montenegro on 4 July 2012 with the scope of preparing the effective operation of the SEE CAO[27]. The finalisation of the preparatory activities of the PTC end of 2013 set the ground for effective start of the SEE CAO activities and signature of the SEE CAO Company shareholder agreement by the TSOs of Albania, Bosnia and Herzegovina, Croatia, Greece, Kosovo, Montenegro and Turkey in February 2014. Mr Aleksandar Mijuskovic has been appointed Executive Director of the SEE CAO. The **SEE CAO is expected to perform auctions of annual capacities starting by end of 2014**. This constitutes an initial step towards centrally coordinated forward capacity allocation.

4.3.4 Action needed to overcome the identified constraint(s)

It has to be underlined that all elements of the SEE RAP can be implemented within the legal framework of the 2nd Energy Package. The establishment of a regionally coordinated congestion management is explicitly required by Regulation (EC) 1228/2003. However, stronger political support, promotion and commitment are necessary to proceed.

While the signature of the SEE CAO shareholder agreement represents important progress, **a fully regionally coordinated allocation process for the entire 8th Region still lacks participation of Bulgaria, FYR of Macedonia, Romania and Serbia**. The Athens Forum taking place on 2 and 3 June highlighted the need for system operators of Bulgaria, Macedonia and Serbia, which so far have not participated in the CAO, to come up with concrete plans and timelines regarding their participation in a regional capacity allocation body. The Romanian stakeholders indicated clear commitment, once the neighbouring bidding zones' TSOs are cooperating within SEE CAO.

After Macedonia's failure to deliver the requested roadmap detailing how and when to fulfil the requirements for coordinated congestion management stemming from the congestion management guidelines, the Secretariat of the Energy Community has proceeded to the next step of the infringement against the Former Yugoslav Republic of Macedonia, by re-opening case ECS 04/11. The Republic of Serbia submitted a contribution to the Secretariat outlining a way forward in order to comply with the congestion management guidelines.

[26] www.seecao.com
[27] The PTC was co-funded by the network operators of Albania, Bosnia and Herzegovina, Croatia, FYR of Macedonia, Greece, Kosovo* [throughout the whole document reference to "Kosovo*"shall be understood with the following statement:" 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."] Montenegro, Romania, Slovenia and Turkey as shareholders and significant contributions from the International Financing Institutions EBRD, KfW and USAID.

4.4 Implementation of fully coordinated capacity calculation methodologies and particularly the flow-based allocation method in highly meshed networks[28]

4.4.1 Description of the project

Following the implementation of a coordinated NTC allocation mechanism, the implementation of a flow-based (FB) capacity calculation and allocation method within the SEE CAO remains the final target with a view to improve:

- Economic signals: for planning transmission network expansions (TSOs) and location of the new power plants/large consumption units (market participants),
- System security: the better identification of critical transmission network conditions on the regional level.

Prior to switching to the FB method, the following requirements are to be fulfilled:

- Full coordination of principles and data;
- No negative impact of the FB method on system security;
- Increased social welfare brought about by the application of the FB method;
- Sufficient time provided for market participants to adapt to the new method;
- Work on and implementation of FB capacity calculation and market coupling need to be closely coordinated.

4.4.2 Key milestones and accountabilities foreseen in the initial cross-regional roadmap

No concrete milestones for the implementation of the flow-based allocation have been defined so far. Still, the implementation of a flow based mechanism has been identified as final target.

4.4.3 Review of progress during this quarter

No concrete steps have been taken.

4.4.4 Action needed to overcome the identified constraint(s)

Concrete milestones for the implementation of FB allocations need to be defined.

5 Review of progress with implementation in other important areas

Development of cross-border balancing

During a Joint ENTSO-E & Energy Community Workshop on 3rd Package Network Codes, held in Vienna on 4 November 2013, representatives of the Energy Community Regulatory Board's (ECRB) Electricity

[28] The ACER cross-regional roadmap for the Flow-Based Capacity Calculation Method for short-term capacity allocation is available at: http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/Capacity-Calculation.aspx .

Working Group (EWG), ENTSO-E's Regional Group Southeast Europe (RG SEE), and the Energy Community Secretariat endorsed the launching of an Initiative aiming to develop a **Regional Balancing Concept for the 8th Region**. In the beginning of 2014, the Terms of Reference of this project were under discussion. The time horizon for realisation of the project is expected to take place between mid 2014 and 2015. The "negative" opinion of ACER on the Electricity Balancing Network Code could cause delay in defining the projects work packages that should be based on the Code's requirements.

In January 2014, the three TSOs of the SHB Control Block, ELES, HOPS and NOS BiH, concluded an agreement on the common procurement of balancing reserves. This announced cooperation aims at reducing the overall amounts of procured balancing capacity. It constitutes a good starting point for further initiatives that widen and deepen this cooperation.

Negotiations between the TSOs of the SMM Control Block, regarding the common procurement and sharing of balancing reserves have started and were reported during the last quarter.

Transparency

In order to increase market transparency most of the SEE TSOs are participating in the ENTSO-E transparency web platform.

Although, the quality of the SEE TSOs websites has increased, none of the CPs TSOs is in full compliance with the legal transparency obligations.

The ECRB has adopted a **recommendation on the adoption of Regulation 543/2013** on submission and publication of data in electricity markets in the Energy Community. Such recommendation is not binding, but endorses the endeavours of the 8th Region's TSOs and market participants to promote transparency and market development.

The Permanent High Level Group of the Energy Community discussed in its 32nd meeting the potential expansion of its *acquis* through the adoption of Regulation (EC) 543/2013.

The Regional Group South East Europe of ENTSO-E is currently drafting a report on the status quo of the compliance with the present publication requirements.

Management and use of interconnections

As regards the management and use of interconnections, harmonisation of the applied cross border capacity allocation mechanisms has been reached; the marginal price mechanism prevails in the region.

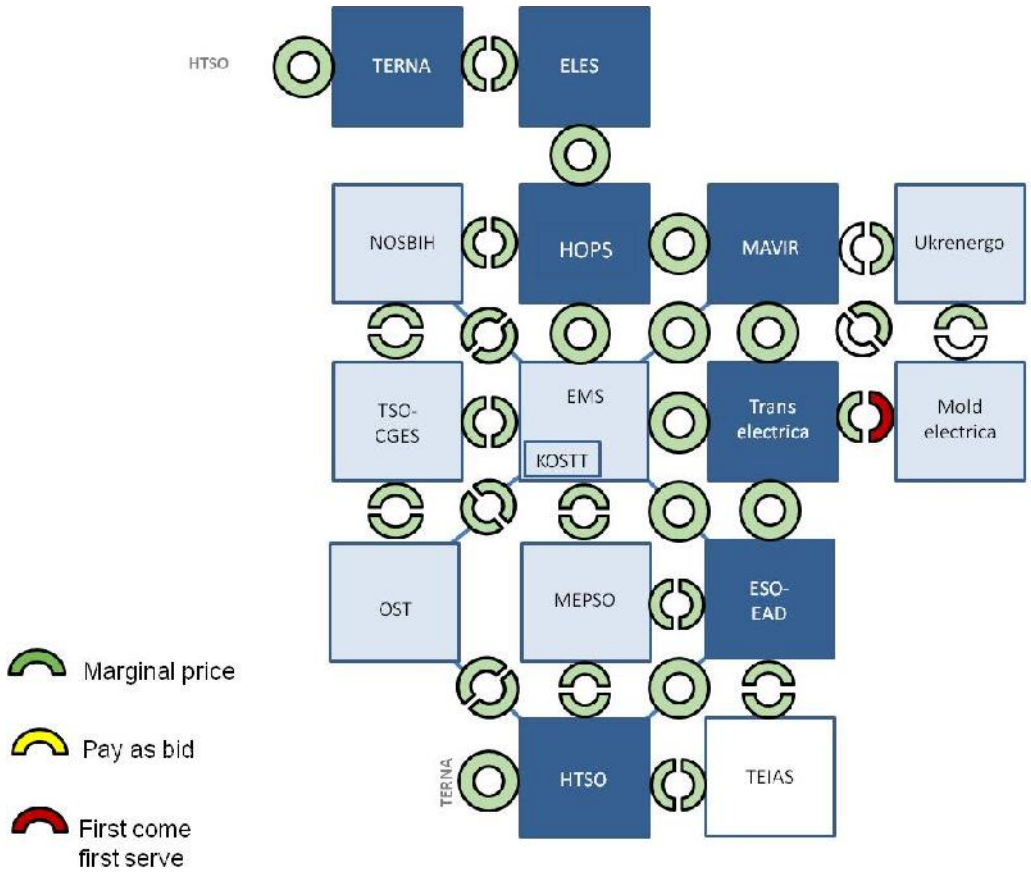


Figure 1: Mechanisms for Capacity Price determination in the 8th Region [29],[30]

Joint auctions

All Contracting Parties' TSOs, except the TSO of Moldova[31], have introduced market-based mechanisms for cross-border auctions, namely explicit NTC-based auctions. Auction rules for cross border capacity allocation for the borders of Ukraine have been adopted by the national regulator; these Auction Rules are, however, not in compliance with the Energy Community acquis. Yearly and monthly allocations are introduced at all electricity borders while weekly and daily allocations are introduced only at several borders. Intraday allocations are also available at several borders, but on non-market based solution (first come, first served).

Besides the EU member states in the 8th Region the Serbian TSO started implementing joint auctions with their neighbouring TSOs.[32]

For 2013 the Croatian borders to Slovenia and Hungary are for the first time involved in CEE Coordinated Auction Office (yearly, monthly and daily auctions).

[29] Please note that according to current Ukrainian Electricity Law only unilateral auctions (for export) are allowed.
[30] Currently, auctions for interconnection capacity allocation between Ukraine and Republic of Moldova are organized only by Ukrainian TSO.
[31] With regard to the Republic of Moldova, the draft regulation transposing Regulation (EC) 1223/2008 has been finalised with further amendments; approval is, however, pending and subject to adjustments in primary legislation.
[32] EMS (Serbia) started joint auctions with Transelectrica (Romania) on 1 January 2013. Joint auctions between Serbia and Hungary started for 2012 in Dec 2011 on yearly, monthly, daily and intra-day level. Joint Auctions between Serbia and Bulgaria and between Croatia and Serbia are held from 2014.

Romania has declared interest on joining the market coupling mechanism between Czech Republic, Slovakia and Hungary; steps have been made in declaring the common willingness for cooperation and mutual approach in this respect of all involved parties. The market design was agreed and published in May 2014. EPEX-Spot was selected as Service Provider by OPCOM/OKTE/HUPX and the implementation phase is on-going. The planned go-live is 11 November 2014, date to be confirmed in August.

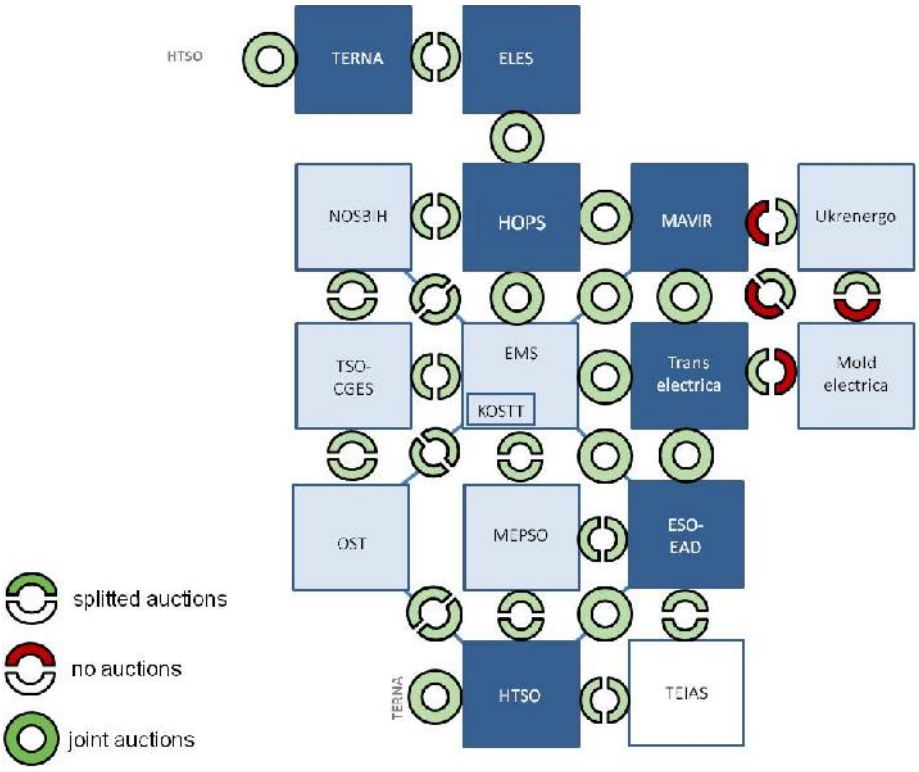


Figure 2: Cross Border Capacity Allocation Mechanisms in the 8th Region [33]

[33] Currently, auctions for interconnection capacity allocation between Ukraine and Republic of Moldova are organised only by the Ukrainian TSO.

Publishing date: 24/10/2014

Document title: 1st ERI Progress Report

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