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ACER Coordination Group for Electricity Regional Initiatives

ERI Progress Report #2

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Agency for the Cooperation of Energy Regulators Trg Republike 3 1000 Ljubljana, Slovenia



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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 was an ambitious target date, which required 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 falls under the responsibility of the Agency for the Cooperation of Energy Regulators (ACER).

The National Regulatory Authorities (NRAs) 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 roadmaps¹ 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** model²;
- Implementation of a cross-border continuous intraday trading system across Europe³;
- Implementation of a single European set of rules and a single European allocation platform for long and medium-term transmission rights⁴;

³ The ACER cross-regional roadmap on continuous intraday trading is available at: <u>http://www.acer.europa.eu/Electricity/Regional_initiatives/Cross_Regional_Roadmaps/Pages/2.-Cross-border-Intraday.aspx</u>

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



- Implementation of **fully coordinated capacity calculation** methodologies and particularly the flow-based allocation method in highly meshed networks⁵.

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 Reports⁶ 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 SEM⁷ 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 Model⁸.

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 deadlines set by project parties to make sure that the delay compared to the 2014 objective 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: <u>http://www.allislandproject.org/GetAttachment.aspx?id=ec8eecd6-0e41-4659-8a1e-85c5efb0fe80</u>

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 stepwise approach which went live first in the North-West Europe (NWE) region on 4 February 2014, quickly followed by its extension to the Iberian Peninsula on 13 May 2014. With this extension, the project has been renamed Multi-Regional Coupling (MRC). Other markets should join as soon as ready.

3.2 *Review of the progress*

Overall assessment:

The implementation of day-ahead market coupling made a tremendous step forward on the 24th of February 2015 when the Italian Northern Borders join the MRC. Before this achievement, within the Central East region, the 4 Market Coupling Project which aims at coupling the Czech, Slovak, Hungarian and Romanian with the MRC solution successfully went live on the 19th of November 2014. This milestone is an intermediate step until the North West Europe – Central East Europe Flow-Based Market Coupling project goes live. This area is not coupled with the MRC one due to a difference in the gate closure time.

The next important task is the transformation of the early implementation project(s) into formal CACM implementation. As a first question, the change of the current cost sharing to the one described in the CACM GL has to be answered. NRAs asked the MRC-Project to evaluate how this could be done.

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 since 13 th May 2014	
CSE	Full coupling between NWE region, MIBEL and CSE since 24 th February 2015	



CEE (the whole region)	See update for the Capacity Calculation	
CEE (the 4 Market Coupling Project)	Go-live 19 November 2014	
Croatia	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 can 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 ⁹	Following the publication of the High Level Design on 17 September 2014, the I-SEM (Single Electricity Market) project has entered into the last phase devoted to the detailed design and implementation work needed to go-live for Q4 2017. Among other progress, there is the launch of the public consultation on energy trading arrangements on 23 April 2015. This document consults on the substantive issues around the design of the energy trading arrangements in the different market timeframes with a particular focus on the Balancing Market design.	

⁹ 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 was 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 North West Europe (NWE) (plus Austria 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 project parties, spurred on by pressure from the Regulators and the Commission, have now come to a position where a contractual agreement with the solution provider can be signed. The Regulators have now provided a statement on future cost recovery and are awaiting the development phase of the XBID solution to begin.

Regions	Progress achieved	Pending issues
NWE+		
	Continuing delays in the completion of	The project parties' tentative timeline for
	ESA step 2 and the business blue print	the development of the XBID solution now
	(BBP) led to strong interventions by the	stretches to Q3 2017. There is a risk that
	EC and the Florence Forum, culminating	the project parties may not agree with the
	in a project lock in with DBAG in	results of the performance tests during
	February to finally resolve outstanding	the development phase and this may
	issues including agreements on long	impact on the sign off and acceptance of
	running issues around performance and	the XBID solution as well as costs and
	equal treatment (although these may re	timelines.
	appear in the future when performance	
	optimisation options and additional	The timeline for the development of the
	functional requirements needed to	XBID solution will overlap CACM entry
	comply with CACM are developed).	into force. The project parties have been
		tasked with ensuring that they have an
	The project parties requested cost	adequate framework in place which will
	recovery from the NWE+ NRAs in order	allow future NEMOs and Non NWE+
	to sign the contract with DBAG on 27	TSOs to join.
	Feb. The NWE+ NRAs replied with their	
	Statement of Principles agreed upon on	Local Implementation Projects (LIPs) are
	31 March and are now awaiting the	still being scoped out. Regulators are
	project's reply.	awaiting further information on go live
		scenarios.



SWE	The Iberian BY (OMIE) participates in	
SVVE	The Iberian PX (OMIE) participates in	
	the NWE+ project.	
CSE	Status review for Greece:	The results of the public consultation are
	Since April 2014, there is a general	being processed and the next steps will
	reorganisation of the Greek wholesale	be determined based also on political
	market.	decisions.
	A public consultation was organized in	
	the last quarter of 2014 where a possible	
	way forward is described.	
	The document for the ID market can be	
	found in the following link:	
	http://www.rae.gr/site/file/system/docs/co	
	nsultations/30092014/file5	
	In a nutshell, the proposal is to have two	
	phases of implementation: at the	
	beginning ID auction sessions (chapter	
	5) and then continuous ID	
	trading (chapter 6). The proposal also	
	accounts for a distinction among the	
	borders, with the border with Italy being	
	the first to apply the proposed set-up	
	(and also being used as a guide for the	
	design of the ID market) and the	
	northern borders following at a later	
	stage (3rd phase: application of	
	continuous ID trading at all borders).	
CEE	The NRAs agreed on new rules which	
	change the consequences in case of	
	users' misbehaviours.	
Croatia	No update	
Romania	No update	
Bulgaria	Currently an intraday trading platform is	
	being tested and is expected to be	
	operational in the first half of 2016.	
Ireland ¹⁰	See update for Day Ahead Market	
	Coupling	

¹⁰ 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) is in force since January 2015 following the concerned NRAs approval during the last quarter of 2014. This version includes the FR-ES border and provisions allowing 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 2014 in order to deliver a set of harmonised auction rules (EU HAR) applicable from early 2016 onwards. After an extensive gap analysis between the existing set of rules in Europe and a set of recommendations the harmonised EU rules should comply with, ENTSO-E shared a first version of the EU HAR in December 2014 with NRAs and with a set of market participants through the stakeholder advisory group. Following this first round of discussion, ENTSO-E launched a public consultation on the EU HAR and related annexes related to regional or border specificities in March 2015. ENTSO-E is reviewing the draft EU HAR and related annexes based on the received contributions and a new proposal is to be discussed on 28 May with NRAs and market participants during the last stakeholder advisory group meeting. The objective of finalising the rules by July 2015 for approbation during the summer and implementation from 1st January 2016 still holds.

Regarding the merger between the two allocation regional platforms CASC and CAO, an important milestone was reached in December 2014 when the shareholders of both platforms, 20 TSOs, voted on a framework merger agreement. The new entity, currently called the Joint Allocation Office (JAO), is still expected on time to run the 2016 auctions. 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 was checked. A new set of rules
		has entered into force for 2015 auctions.



Northern		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) There are still no decisions on TRs and no dedicated products (such as CfDs) for NorNed, the Baltic cable and the SwePol link.
CWE	TSOs from CASC and CAO voted on a framework merger agreement. 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 presented to NRAs for approval included the FR-ES border and considered two specific go-lives: December 2014, for long term products with physical delivery from the 1 st 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. This proposal includes Firmness regime aligned with the one in force in CWE region (in particular, market spread cap was removed). NRAs approved the TSOs' proposal on time and the first 2015 auctions took place as planned. 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 Still no roadmap for IPE to join CASC (need to be in a position to issue FTRs) or a set of harmonised rules, which should cover FTRs.



	1	
CSE	The CASC's HAR 2.0 presented to	See also above the paragraph on the EU
	NRAs for approbation took into	HAR
	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 have	
	applied since DA market coupling	
	goes live on those borders.	
	NRAs approved the TSOs' proposal	
	on time and the first 2015 auctions	
	took place as planned.	
	See also above the paragraph on the	
	merger of CASC and CAO for the	
	CWE update	
CEE	See also above the paragraph on the	See also above the paragraph on the EU
	merger of CASC and CAO for the	HAR
	CWE update	
Croatia	For borders with Slovenia and	
	Hungary, the situation is similar as	
	for the CEE region.	
FUI		See also above the paragraph on the EU HAR
Domonio		
Romania		See also above the paragraph on the EU
Dulgaria		HAR Still as readmen to join a platform or to
Bulgaria		Still no roadmap to join a platform or to harmonise set of rules
Ireland ¹¹	See undete for Day Abaad Market	
Telanu	See update for Day Ahead Market	
	Coupling	

¹¹ 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, Central-South and France- United Kingdom – Ireland regions have decided to go on applying the ATC method.

In the Nordic region, NordREG (an organisation for the Nordic energy regulators) took the decision in 2012 not to introduce Flow Based in the coming future while investigating further into the merit of this allocation method.

6.2 *Review of the progress*

Overall assessment:

The CWE FB MC Project went live on 21 May 2015. The successful launch of this new capacity allocation method represents an important step towards electricity Target Model. This completion is the result of the coordinated work of NRAs, TSOs, PXs and Ministries for several years. Before the go-live, a few keys progress occurred. The CWE FC MC Project organised a Market Forum on 6 March 2014, explaining the latest developments and the target planning for go-live. The CWE FB MC Project submitted the final documents to the CWE NRAs on 13 March 2015. CWE NRAs have committed to finalising their respective decisions by 23 April 2015. The CWE FB MC Project announced that the target go-live (delivery) date would be 21 May 2015. During March 2015, the CWE NRAs finalised their position paper on the CWE FB MC and concluded an agreement on the monitoring, possible solution for the issue of flow factor competition in CWE FB MC and a set of studies and possible evolutions to improve further the flow based method.

CEE TSOs and PXs as the FB MC Project parties held several JSC (Joint Steering Committee) and JWG (Joint Working Group) meetings. The first step of the FB SOO (Flow-Based Security Oriented Option, which includes redispatching) has been finalized end of November. The second was initiated with the one year data set (1.1.2014-31.12.2014) and – according to TSOs - *should* be finalized in September 2015. TSOs are on one hand working on a thorough analysis needed of the FB methodology (finalization of the concept is planned for end of Q2/beginning of Q3 2015) and on the other hand – together with PXs - on the common coupling project. PMO (Project Management Office) has been selected and several documents have been approved. Project parties have approached the NRAs with an overview of the project budget, asking for comfort. NRAs consider the cost overview as coherent and the budget as acceptable in principle, but are not able to provide comfort until a roadmap with main milestones and deadlines is delivered.

Following the request from Romania, at the IG meeting in December it was agreed to take pragmatic steps to include Romania gradually in the project. This includes invitations to all meetings and sharing of all information and documents. Nevertheless, the discussion on



Romanian participation in the project is still ongoing and despite the agreement, some PXs, TSOs and NRAs strongly insist on full member status for Romania. Thus these discussions and the potential consequences (project delays) prevent CEE TSOs and PXs to progress quicker.

Regions	Progress achieved	Pending issues
Baltic		Still no decision about capacity calculation taken
CWE	Successful go-live of the CWE FBMC on 21 May The CWE FB MC parties submitted the final documents as basis for the CWE NRAs' decisions on 13 March 2015. CWE NRAs approved the CWE FB MC by 23 April 2015 CWE NRAs finalised a Memorandum of Understanding on flow factor competition, as well as a common position paper on the CWE FB MC. The CWE FB MC project parties continued addressing the requests made by CWE NRAs on flow-based following the CWE NRA-lead public consultation in June 2014. These include monitoring and transparency requirements, a solution for the curtailment under FB MC, a clear path for intraday capacity calculation after the DA timeframe etc.	CWE NRAs drafted a list of improvements to be implemented. This will have to be dealt with after go-live of CWE FB MC.
	The public documents that serve as basis for the decisions by CWE NRAs have been published (<u>http://www.casc.eu/en/Resource-center/CWE-</u> Flow-Based-MC/Approval-Documents)	
CEE	1st step of SOO analysis completed (11/2014) Agreement on cooperation with Romanian parties (12/2914) Appointment of PMO (11/2014)	Roadmap to move to the FB method has still to be reviewed and updated; cost sharing key to be agreed, FB methodology to be finally elaborated outstanding documents to be delivered to NRAs Cooperation with CWE?
CSE – Northern Italian borders	A high level business process describing the way capacities are calculated in a coordinated way in D-2 was presented to NRAs. This calculation shall represent an	A clear and credible timeline has to be further established. Approval and beginning phases have in particular to be clarified. The results of the tests done so far by the



	improvement in terms of capacity and of security as the current NTC computed today is the one for the yearly timeframe.	TSOs have to be shared with the NRAs and thus with the market. Remaining open issues have to be tackled in terms of methodology.
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	No update	



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 requency 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 projects¹². To that end, for a Balancing Pilot Projects Stakeholder Group was set to involve stakeholders in the design, implementation and governance issues related to these pilot projects.

Furthermore, the Florence Forum requested in November 2014 ACER and ENTSO-to jointly cochair a Balancing Stakeholder Group focussed on the early implementation of the Electricity Balancing Regulation. Early 2015 ENTSO-E and ACER have worked to develop a Terms of Reference for this group which was endorsed by AESAG in April 2015.

The main objective of the Balancing Stakeholder Group (BSG) is to provide a European level forum where ACER and ENTSO-E will be able to discuss and consult with stakeholders the proposals for different development of implementation projects and draft terms and conditions or methodologies that shall be developed by TSOs pursuant to the EB Regulation. Among those, the proposals for the Implementation Framework for the regional implementation models are of significant importance. In addition, the BSG will allow ENTSO-E to report on the implementation projects and allow NRAs where applicable to report on regulatory progress of adaptation and preparation for the early implementation of the EB Regulation, and potential issues with existing (national) legislation. ACER, ENTSO-E and stakeholders shall learn from the implementation activities and gain important lessons needed for future development and detailing of the electricity balancing target model.

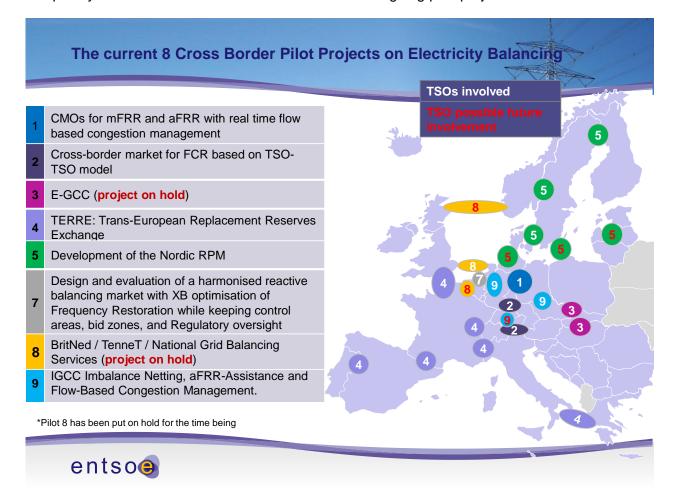
¹² The list of selected pilot projects can eb found here:

http://acernet.acer.europa.eu/portal/page/portal/ACER HOME/Stakeholder involvement/AESAG/3rd AESAG Mee ting/3.1%20ENTSO-E%20(Kekkonen)%20Balancing%20NC.pdf



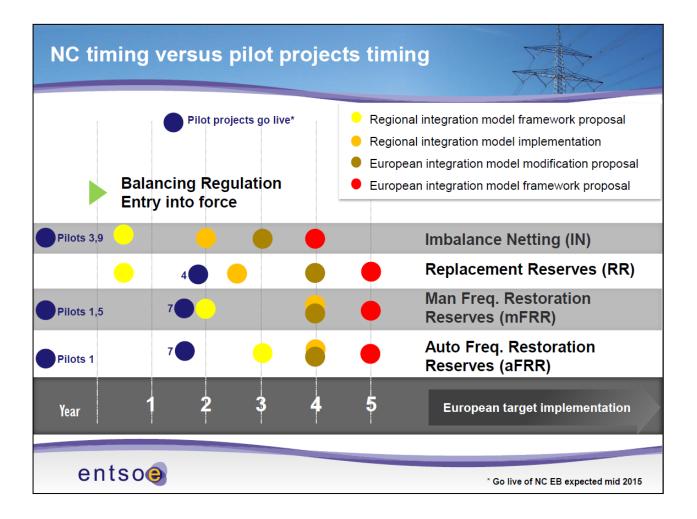
7.2 Review of the progress achieved by pilot projects

In December 2014 a meeting was held and focused on the pilots on Frequency Containment Reserves and on Replacement Reserves. In March 2015 another meeting focused on automatic Frequency Restoration Reserves. An overview of the ongoing pilot projects can be found below.



Following ACER's request expressed in a letter sent in December 2014, ENTSO-E shall also work on the early definition of the *Coordinated Balancing Areas* (CoBAs) for each process (aFRR, mFRR, RR and Imbalance Netting). This deliverable is expected by the end of 2015. During last AESAG meeting, ENTSO-E described the potential interaction between pilot projects and CoBAs as follow.





Follow-up on Pilot Projects

	Project	Progress achieved	Pending issues
	Germany	Following a common qualitative	The involved TSOs will seek to
		comparison study on the subject of a	reach a common view on:
		BE-NL-DE Coordinated Balancing	
		Area (CoBA), the German (50 Hertz,	 the products, technical
		Amprion, TenneT and TransnetBW),	implementation and
		Belgian (Elia), Dutch (TenneT) and	processes (bidding,
		Austrian (APG) TSOs have decided	activation, selection,
1		to proceed with the analysis of the	exchange) for the exchange
		potential design of a common FRR	of aFRR and mFRR,
		Balancing Market.	
			 interaction with intraday
		A newly set-up expert group is	markets,
		currently studying into detail the	
		technical and market aspects of	 the required level of
		such a cooperation.	harmonisation and the



			 proposed design for the settlement of balancing energy and imbalance settlement, the use of cross zonal capacity after intraday markets by different balancing processes.
2	FCR AT/CH/DE/NL	No update	
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.	The project parties (i.e. CEPS, SEPS, and MAVIR) are not considering a reduction of the settlement price (which is fixed and defined ex-ante) in response to the current electricity wholesale price trends.
4	TERRE	The Project now involves 7 TSOs : RTE, REE, REN, National Grid, TERNA, Swissgrid and ADMIE. The design phase of the TERRE project is still ongoing and focuses on balancing products, matching process, financial issues, timing and scheduling, ATC management and governance. This design phase has been extended and is now expected to be completed by the end of 2015.	Following the concerns expressed by NRAs and stakeholders regarding the lack of transparency and the need for a clear structure to ensure their participation, the first meetings of the relevant implementation group (TSOs & NRAs) and stakeholders group are scheduled respectively on 30 April and 11 May. ENTSO-E committed to provide TERRE NRAs with a detailed project plan for the next steps, including technical discussions major milestones, stakeholder involvement and 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	Feasibility studies on extending the Nordic RPM to the Baltic, Germany and Poland have been finalized. The	Nordic TSOs shall plan next steps with the Baltics, German and Polish TSOs based on findings



		studies show an overall positive benefit from exchange with TSOs in other synchronous areas. Differences in mFRR setup have been assessed, and the largest identified challenges are the need for harmonisation of procurement, standard products, settlement and IT-systems. The Nordic NRAs and TSOs held a meeting in December 2014, where the TSOs informed about the progress.	from the studies. Nordic TSO shall analyse exchange models for extending the Nordic RPM Nordic TSOs shall communicate the learning from the feasibility studies It will be organised a new Nordic NRA-TSO meeting in Q3 2015.
7	NL-BE	After finalization of the market design phase in September (report: 'Qualitative analysis of cross-border exchange of balancing energy and operational reserves between Netherlands and Belgium') ¹³ and the finalization of the feasibility study together with pilot 1 (report: 'Potential cross-border balancing cooperation between the Belgian, Dutch and German electricity Transmission System Operators') ¹⁴ the TSOs of pilot 1 and pilot 7 have further investigated the possibilities for cooperation. The CBA for project 7 is put on hold. The TSOs of NL, BE,DE, AT have announced a common initiative at the first BSG on 17 March 2015.	 The Belgian, Dutch, German and Austrian TSOs will meet on June 16th Within their proposed initiative TSOs will seek to reach a common view on: the products, technical implementation and processes (bidding, activation, selection, exchange) for the exchange of aFRR and mFRR. interaction with intraday markets the required level of harmonisation and the proposed design for the settlement of balancing energy and imbalance settlement the use of cross zonal capacity after intraday markets by different balancing processes

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 $http://www.tennet.eu/nl/fileadmin/downloads/About_Tennet/Publications/Technical_Publications/CF13VKH945.pdf_{14}$

 $https://cms.tennet.eu/nl/fileadmin/downloads/About_Tennet/Publications/Technical_Publications/balancing/141008_Final_report.pdf$



			NRAs expect a project plan with deliverables including stakeholder involvement and expect to organize a first IG meeting together with TSOs in Q2 or Q3 2015
8	BritNed	The TSOs' preliminary work concluded that the exchange of replacement reserves between GB and NL is not possible. This is primarily driven by the differences in each TSO's approach to system balancing and the NL TSO's lack of demand for replacement reserves. As a consequence, the pilot is now indefinitely on hold.	No further developments are currently planned within the pilot. However, the TSOs are due to discuss the possibilities for alternative exchanges of balancing services beyond the scope of the initial replacement reserve pilot.
9	IGCC	Due to the involvement of APG that joined IGCC in 2014, the project now consists of 10 TSOs from seven countries. Since its foundation in October 2011 the IGCC has produced cost savings of more than 100 million Euros. Currently, IGCC TSOs are still in the process of drafting a multilateral contract that shall include general principles for the imbalance netting co-operation.	As a next step, IGCC TSOs envisage to investigate enhancements of IGCC settlement. In addition, there are ongoing talks with further TSOs to join the IGCC.



8 Progress report from the 8th Region prepared by ECRB





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1 Overview of Regional Integration in the 8th Region¹⁵

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, nonmarket 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 Internal Energy Market in a consecutive step, is the Regional Action Plan for Wholesale Market Opening in South East Europe (SEE RAP). The SEE RAP has been jointly developed by the Energy Community Regulatory Board and ENTSO-E Regional Group SEE and received support of the Ministerial Council and Permanent High Level Group of the Energy Community. Ukraine and Moldova are not a part of the SEE Regional Action Plan due to the limited amount of synchronous interconnection capacity with the other bidding zones. It has been designed in line with the elements of the European Electricity Target Model, but also faced delay in its implementation. The need to update the deadlines foreseen led to an update, resulting in the ECRB approval in December 2014. It is available here: Adjusted SEE Regional Action Plan. The next chapter is reviewing the progress made based on the elements of the SEE RAP and neighbouring areas.

The Table below provides an overview of the state of play in the elements of the RAP:

¹⁵ The 8th Region covers the interconnectors between Energy Community and the seven neighbouring EU Member States: Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Kosovo*, Moldova, Montenegro, Serbia and Ukraine, Bulgaria, Croatia, Greece, Italy (limited to its interconnections with Contracting Parties), Hungary, Romania and Slovenia (Ministerial Council Decision 2008/02/MC-EnC); [* 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]



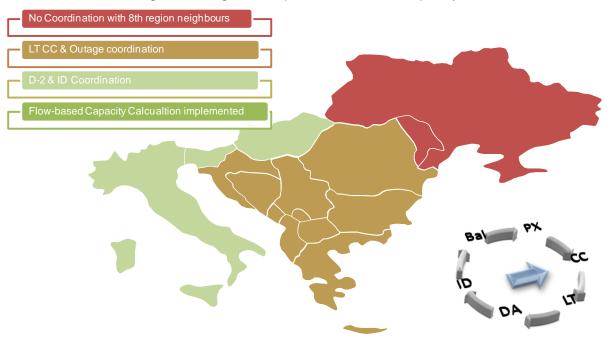
Activity		<u>State of</u> <u>Play</u>
Capacity calculation		
Revise and enhance a common grid model (CGM) for the SEE region		
Harmonize methodologies/ procedures for capacity calculation for yearly / monthly / day ahead time horizons	Q4 2014	
Forward markets		
Coordinated bilateral explicit auctions implemented on all borders within the SEE region	Q2 2015	
Centralized multilateral coordinated (NTC-based in a first step, flow based remaining the final concept) auctions on relevant SEE borders (auctions performed by CAO as the service provider, i.e. single point of contact within SEE region)	Q4 2014	
Multilateral coordinated auctions on all borders within the SEE region (regional one-stop- shop and, finally/or, EU solution)	Q3 2016	
Day-Ahead market		
Establishment of power exchanges in several SEE countries or contracting services from the existing PX	31/12/14	
Bilateral/ trilateral market coupling in the SEE region (nucleus approach or different regional initiatives) – tight volume coupling as a possible interim step	Q3 2015	
Implementation of price based market coupling (EU target model) in the entire SEE region	Q1 2017	
Pan-European market coupling including the SEE region operational	Q2 2018	
Intraday market		
Survey on existing intraday capacity markets in the SEE region	Q2 2011	
Establishment of cross-border intraday capacity FCFS solution on several borders in SEE	Q1 2013	
Establishment of cross-border intraday capacity market on several borders in SEE	Q1 2015	
Establishment of harmonized regional solution for intraday capacity allocation	Q2 2018	
Pan-European intraday solution (continuous trading) including the SEE region operational	Q2 2020	

Fully implemented	
Partly implemented	
Not implemented	



2 Progress in the Elements of the Regional Action Plan and Beyond

2.1 Capacity Calculation

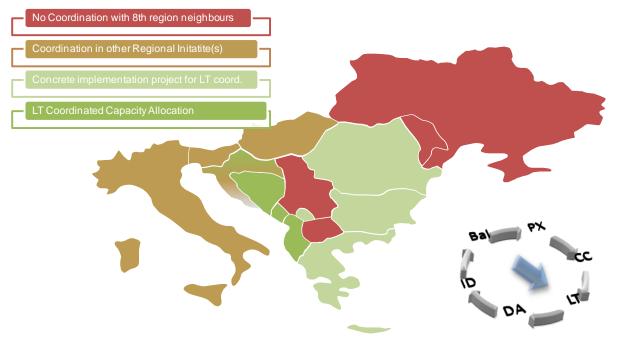


The 8th Region – Progress Map – Coordinated Capacity Calculation

With regard to capacity calculation, the SEE region's TSOs are already running a coordinated capacity calculation process based on a rotational sharing of model merging responsibility. With the adoption of the CACM Network Code in the European Union, a challenge with regard to the definition of the so-called Capacity Calculation Regions (CCR) arises. The factually existing SEE CCR for forward capacities will have to be acknowledged and a new D-2 process based on this region will have to be established in order to fulfil the Code's requirements, even though the majority of jurisdictions of the region does not fall under immediate applicability of the CACM Code. Consequently, this is important to allow the EU Member State TSOs to follow their obligations in a reasonable manner with its interconnected partners. The definition of the CCRs and the processes attached to it show that the discrepancies in legal framework of the Energy Community between the EU Member States and the other Parties will have to be bridged by early implementation on the one hand and the timely inclusion of relevant provision into the Energy Community acquis on the other hand.



2.2 Forward Markets



The 8th Region – Progress Map – Long-Term Capacity Allocation

The coordinated allocation of long-term cross-zonal transmission capacities is one of the cornerstones of early stage market integration. In Southeast Europe, the Coordinated Auction Office in Southeast Europe (SEECAO) has finally taken up its operation and is continuously growing with regard to the borders it services. In the end of 2014, the first products were auctioned for the borders between Bosnia and Herzegovina, Croatia and Montenegro. In a next stage, Albania, Greece, Turkey and Kosovo* are expected start allocation for the majority of their borders, allowing for a coordinated approach leading to reduced transaction costs, better competition, more transparent pricing and lower system cost. The system operators of Serbia, Macedonia, Hungary¹⁶ and Bulgaria showed some reluctance towards regional cooperation in this regard.

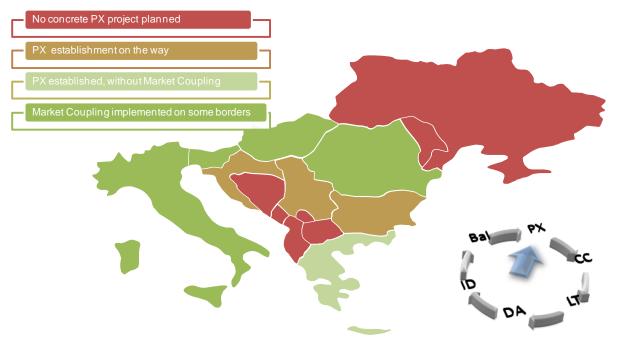
Two elements will shape the future development of the SEECAO. First, the outcomes of discussions with the system operators of Serbia, Romania, Hungary and Bulgaria will determine the establishment of comprehensively coordinated allocation of forward capacity. Second, the process for the creation of Harmonised Auction Rules (HAR) for all auction offices in Europe which was initiated by ENTSO-E will lead to the further integration and standardisation of forward capacity allocation in the entire Energy Community. In the mid-term future, with the application of the Forward Capacity Allocation Network Code, a Single Platform will replace interim solutions after a merger of all remaining auction offices.

¹⁶ Hungary is explicitly listed by Ministerial Council Decision 2008/02/MC-EnC as member of the 8th Region. The exemption granted to Hungary (and members of the 7 EU Regions in general) by chapter 3.2 of the Annex to Regulation 714/2009 cannot be interpretated to also apply to the SR-HU border.





2.3 Organised Markets and Market Coupling at Day-Ahead

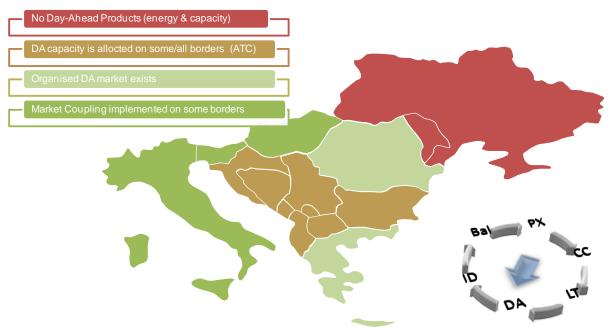


The 8th Region – Progress Map – PX establishment & Market Coupling

The establishment and existence of operational organised market structures are prerequisites for the RAP Targets for the day-ahead timeframe, implying the nomination and/or establishment of electricity market operators in one or the other way. This process is foreseen in the CACM Network Code which is expected to enter into force in the EU in 2015, and subsequently in the entire Energy Community. It sets out the methods for cross-border trading in day-ahead and intra-day timescales for all relevant operators in the SEE region. Putting in place harmonised cross border markets in timeframes closer to real-time (spot markets) will lead to a more efficient matching of demand and supply, promote the long-term sustainability of the industry and consequently benefit customers. For that it is important to avoid the creation of barriers to the establishment of a Single European Price Coupling. The rules contained in the CACM Network Code will have to provide the basis for the implementation of a single energy market across the Energy Community spanning the EU and the Energy Community's Contracting Parties. Its main provisions foresee the establishment of implicit trading mechanisms (market coupling) and more efficient inter-TSO processes, allowing for the optimisation of traders' and suppliers' portfolios with reduced uncertainties and electricity wholesale market price convergence on the entire continent. Any delay in implementing its provisions due to a potentially staggered inclusion into the Energy Community acquis must be avoided. Positive developments with regard to the establishment of organised market and the related governance structures where they have not existed yet come mainly from Croatia and Serbia.



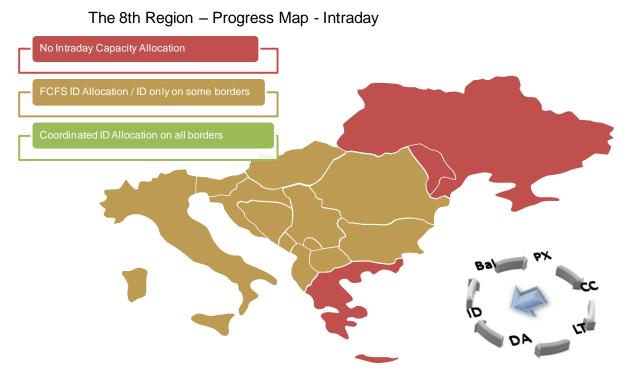
In February, the Italian Borders Market Coupling was launched, and with it the integration into the Multi-Regional Coupling (MRC) achieved. The MRC is progressing steadily and bringing well established market coupling solutions closer to the least developed markets in the 8th Region, where the development of trading on a day-ahead level is still a cumbersome endeavour. Another milestone was the integration of the Romanian bidding zone into the coupling initiative comprising Hungary, Slovakia and the Czech Republic, what become the so-called 4M Market Coupling.



The 8th Region – Progress Map – Day-Ahead Market Development



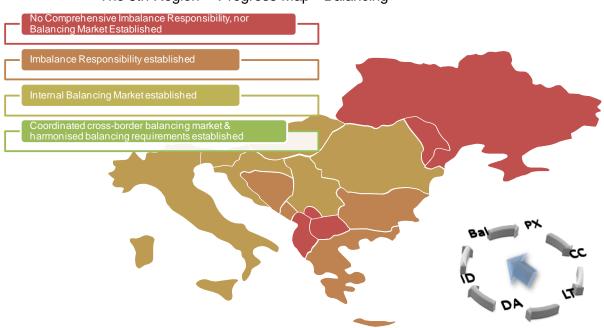
2.4 Intraday Market



Cross-Border Intraday Trading is largely of bilateral nature and based on a first-come-first-serve allocation principle. It is possible in the SEE Regions' interconnectors between the bidding zones operated by the following TSOs: CGES, HOPS, EMS/KOSTT, NOSBIH.



2.5 Cross-border Balancing



The 8th Region – Progress Map - Balancing

The development of the electricity balancing market in the SEE Region is in an early phase, characterised by the nationally-oriented approach to balancing in the Energy Community Contracting Parties, but also in some EU Member States. In the Contracting Parties, the implementation of the 2nd Energy Package requirements for market-based, non-discriminatory and transparent system balancing and imbalance settlement so far has been the exception rather than the rule. The obligation for establishing well-functioning balancing markets and their regional integration is strengthened by the 3rd Package which was to be implemented in the Contracting Parties as of 1 January 2015. At the drafting of this report, only Serbia has adopted a new law based on the 3rd package. Besides that, negotiations between the TSOs of the Control Blocks comprising the SEE Region are ongoing regarding the common procurement and sharing of balancing reserves.



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