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## REGIONAL INITIATIVES STATUS REVIEW REPORT 2014



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## FOREWORD

I am pleased to present this Status Review Report recording progress in the Electricity and Gas Regional Initiatives during 2014. The Report has been compiled by the Agency with the support of National Regulatory Authorities, especially those leading in the different Regions and/or projects, to whom my gratitude goes.

2014 was set as a milestone year for the integration of the European electricity and gas markets, with the Council of the EU targeting it for the completion of the Internal Energy Market.

Whatever "completion" might have meant, it is clear that much still remains to be done before the electricity and gas markets in Europe are fully integrated. But it is also undeniable that significant progress in this direction has already been achieved and that at least some of the benefits of a well-functioning IEM are being delivered to EU energy consumers, as it is evident from some of the results of the Agency's monitoring activity (as presented in its Market Monitoring Report). And 2014 witnessed a number of important successes which are recorded in this Status Review Report.

In fact, since their establishment in 2006, the Electricity and Gas Regional Initiatives have provided the framework¹ within which cooperation among the relevant stakeholders (National Regulatory Authorities, TSOs, trading venue operators and other market players) has developed to deliver the early implementation of the "target models" and, more recently, of the provisions contained in Network Codes ahead of them entering into force and becoming binding.

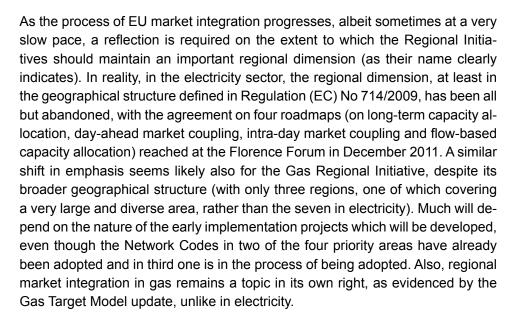
Therefore, in presenting this Report, I would like to thank all those who have devoted effort to the market integration process and congratulate them for the successes achieved so far. Particularly noticeable in 2014 was the extension of the single electricity day-ahead market coupling to an area from the Strait of Gibraltar to the Barents Sea, covering 17 jurisdictions and approximately 75% of the electricity delivered in the European Union. Still in electricity, the announced merger between CASC and CAO is paving the way for a single long-term capacity allocation platform. In the gas sector, capacity on an increasing number of interconnector points is being allocated through common platforms.

However, alongside such important achievements, there are embarrassingly long delays in a few other areas, notably in the integration of the electricity intra-day market. Here very little tangible progress has been achieved over the last two years and at the end of 2014 we have once again to report that there is not yet a credible timetable for the deployment of a single intra-day capacity allocation platform. This is particularly disappointing, given the increasing

<sup>1</sup> In the electricity sector, the Ad-hoc Electricity Stakeholder Advisory Group is also an important part of this framework.



importance of trading close to real time for the integration of renewable-based generation in the electricity sector. The project is clearly technically challenging, with important performance issues related to the continuous trading nature of the intra-day markets. However, the impression, which is growing stronger as the delay extends, is that the stalemate is caused by the conflicting interests of some of the parties involved and an inadequate governance of the process, which is still to benefit from the provisions of the Capacity Allocation and Congestion Management Network Code. Therefore, I cannot avoid calling on all relevant parties to "undertake all possible efforts in order to overcome the remaining issues", as already demanded by the 27th EU Electricity Regulatory (Florence) Forum in November 2014.



Once the Network Codes enter into force and the "early implementation" turns into "implementation of binding provisions", the original purpose of the Regional Initiatives may be surpassed, but the constructive spirit and effort which characterised them should be preserved and, in fact, redirected to the proper and timely implementation of the Network Codes.



Alberto Pototschnig
Director



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## EXECUTIVE SUMMARY





#### THE ELECTRICITY REGIONAL INITIATIVE (ERI)

2014 represents a key year for the implementation of the European Price Coupling with the golive of several market coupling projects. The go-live of the North-West Europe (NWE) Market Coupling project on 4 February was an important milestone in the implementation of the European Price Coupling (EPC). Its swift extension to the Iberian market on 13 May represented another important success for the implementation of the EPC. On 19 November, the project for coupling the markets of the Czech Republic, Slovakia, Hungary and Romania with the EPC solution went live successfully. These three consecutive go-lives prove that both the EPC solution and the governance arrangements put in place constitute a robust framework for further extension.

By early 2015, the EPC should also cover the northern Italian borders. This extension will mark another important achievement, with the whole of Western Europe coupled together and with an opening to the south-east region.

Despite the European Commission's involvement, the intraday project still experienced delays. Without solid progress in 2015, alternative initiatives may be launched.

In early 2014, Transmission System Operators (TSOs) and Power Exchanges (PXs) involved in the Cross-Border Intraday (XBID) project received the letter of comfort from National Regulatory Authorities (NRAs), enabling them to sign the Early Start Agreement (ESA) with the selected service provider. Several meetings between the project parties, the Agency and the Commission were organised to spur on progress. However, due to technical difficulties and a lack of consensus among project parties, the ESA stage was extended from 4 to 12 months.

Due to the ongoing delays and increasing disappointment from stakeholders, the European Commission set the end of February 2015 as a deadline for the potential launch of alternative initiatives.

Along with improvements at a local level, the creation of a wide allocation platform and the drafting of a European set of rules for allocating long-term transmission rights (TRs) progressed as planned at the start of the year.

At a local level, the start of the coordinated allocation of financial transmission rights (FTRs) options on the Portugal–Spain border, improvements in auction rules for the France-Spain border and the update of the northern Italian borders to take into account the upcoming day-ahead market coupling constitute important achievements for market participants who could access more or higher-quality products.

At European level, the Central Auction Office (CAO) and the Capacity Allocation Service Company (CASC) continued to work in line with their high-level plan to merge the two regional allocation platform operators. 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), should be ready in time to run the 2016 auctions.

Also at European level, the European Network of Transmission System Operators for Electricity (ENTSO-E) presented in early 2014 a roadmap to deliver a European set of rules applicable to all borders where long-term TRs are allocated from 2016 onwards. In line with this roadmap, an assessment of the rules in place was carried out, paving the way for a European set of harmonised auction rules to be drafted. ENTSO-E aims to finalise its proposal by mid-2015 after consulting the parties involved.



The Central-West
Europe (CWE) project
for the flow-based
capacity calculation
project was eventually
postponed from
November 2014
to March 2015
while encouraging
progress was noted
in the Central-East
Europe (CEE) region
following the signing
of the Memorandum of
Understanding (MoU).

In line with the objective of going live in November, all project parties involved in the CWE Flow-Based Market Coupling (FBMC) project achieved several milestones in 2014, including the launch of the daily parallel run, the definition of transparency requirements etc. However, on 25 September 2014, project parties reported that due to the specific situation in Belgium this winter, the go-live was postponed to 31 March 2015.

In the CEE region, after lengthy discussions TSOs, PXs and NRAs reached an agreement on the path to take towards the FBMC Target Model for the whole region. This agreement took the form of a MoU, which was signed in early 2014. Following this achievement, TSOs and PXs defined the project structure and worked on planning and other key project elements such as budgeting and cost sharing. They also restarted work on the Security-Oriented Option (SOO) designed to enable the new capacity calculation to take into account the influence from unplanned flows. NRAs expect TSOs and PXs to deliver the final project plan and organisation as well as the final results for the SOO study at the beginning of 2015.

All stakeholders support the selected cross-border balancing pilot projects as they enable experience to be gained and the requirements for a relevant target model to be further defined. However, transparency and project structure must be improved.

The eight remaining pilot projects cover most of Europe and the five topics identified for balancing: imbalance netting, replacement reserves, manual frequency restoration, automatic frequency restoration and frequency containment reserves. The Balancing Pilot Projects Stakeholder group set up by ENTSO-E in 2014 monitors progress and provides comments.

Given a general concern regarding the lack of transparency and the need for a clearer structure, NRAs requested a detailed project plan including major milestones for all pilot projects. Information on ongoing or potential mergers between pilot projects to constitute the first Coordinated Balancing Areas (CoBAs) was also requested.



#### THE GAS REGIONAL INITIATIVE (GRI)

The GRI remains focused on the areas where it brings relevant achievements in terms of progress towards the Internal Energy Market (IEM) The Agency believes that the GRI should play its part in the IEM completion by remaining focused on those activities where it has thus far delivered specific achievements and by continuing to support those projects that are most suitable to be undertaken at a regional level. The Agency's vision for the GRI is that it should continue to:

- promote and facilitate the early implementation of the Network Codes (NCs) by identifying pilot projects at a regional or cross-regional level, following up on the implementation of these projects – together with the European Network of Transmission System Operators for Gas (ENTSOG) where relevant – and taking stock of potential issues and implementation practices that can be shared among TSOs and NRAs participating in different projects;
- foster the integration of markets by monitoring and facilitating market integration projects at a bilateral, multilateral or regional level throughout the gas regions, in line with the models foreseen in the updated Gas Target Model (GTM); and
- carry out other projects and activities at a national and regional level where cross-border or regional coordination is necessary, in line with the activities planned in the new regional Work Plans for 2015 and beyond.

The GRI should also preserve its added value as a regional forum for discussing EU regulatory developments and sharing experiences and best practices. This added value is appreciated by stakeholders and should therefore be maintained in the South and South South-East (SSE) regions, and could be reinstated in the North-West (NW) region.

The early implementation of NCs is more important than ever in view of the first Codes becoming binding in 2015

The early implementation of NCs will help to achieve a more effective and timely market integration as we move towards the IEM. Although the early implementation of NCs is an endeavour that goes beyond the regional dimension, the GRI has so far been instrumental in identifying pilot projects at an early stage at a (sub)regional level and bringing together NRAs, TSOs and stakeholders to plan the steps needed to apply the NC provisions in the regions, thereby ensuring cross-border coordination.

Work on the early implementation of the CAM (Capacity Allocation Mechanism) NC has continued in 2014, facilitated by the Agency and ENTSOG through the CAM Roadmap, and work has also started with regard to balancing. Following these examples, it could be envisaged that early implementation work will also start on the forthcoming NC on Interoperability and Data Exchange and, once it is mature enough, on the NC on Tariffs. The Agency encourages TSOs and NRAs to further consider potential pilot projects for the early implementation of the NCs developed in the areas specified above.



Planning regional work for the future: the new South Work Plan 2011-2015 and South South-East Work Plan 2015-2018 In 2014, the South and SSE gas regions started to plan the upcoming work for the next few years in their respective regions. Lead NRAs from the South and SSE regions have drafted new regional Work Plans for the periods 2015-2016 (South) and 2015–2018 (SSE), respectively, identifying those priorities and areas where work is most appropriately undertaken at a regional level. The final Work Plan 2015–2016 for the South region was adopted on 3 November 2014 and the Work Plan 2015–2018 for the SSE region is expected to be adopted over the coming months. These Work Plans will become the new reference for regional work in 2015 and subsequent years.

Streamlining regional structures and enhancing cooperation with the Energy Community (EnC) Following a recommendation by the Agency, in early 2014 SSE co-Lead NRAs opened the debate over the idea of reshaping the SSE region, firstly among NRAs and subsequently involving stakeholders from the region. The majority of SSE NRAs do not seem to be in favour of reshaping the region, and have instead outlined new priority areas and activities in the new SSE Work Plan 2015–2018 and are introducing several changes to the organisational structure and working arrangements of the region which may bring more tangible progress on specific projects.

In October 2014, the Madrid Forum invited the European Commission and the Agency to ensure that a potential new geographical set-up of the gas regions, also including Energy Community (EnC) Contracting Parties, guarantees the necessary cooperation and flexibility for the regions. The Forum has also invited stakeholders to participate in the regional groupings structuring exercise.

In relation to cooperation with the EnC, the Agency took further steps in 2014 to strengthen this by having representatives from the EnC Secretariat participating in meetings of the GRI Coordination group and the GRI SSE region, and vice versa. This trend to reinforce the collaboration between the Agency and the EnC through the GRI will continue, and new enhanced means of cooperation will be pursued for the benefit of both organisations and the EU Member States' (MSs) and EnC Contracting Parties' NRAs.

# TAKING STOCK OF THE RI PROCESS





#### 1.1 The Regional Initiatives: background

The Regional Initiatives (RIs) were set up in 2006 by NRAs with the support of the European Commission to foster the integration of energy markets at a regional level as a step towards the completion of the IEM. The RIs are intended to complement the process of development and implementation of Framework Guidelines (FGs) and NCs by following a bottom-up approach that brings together NRAs, TSOs, the European Commission, MSs, power exchanges, gas and electricity market participants and other relevant stakeholders across seven electricity<sup>2</sup> and three gas<sup>3</sup> regions.

The RIs have so far delivered valuable achievements and tangible results both for electricity and gas, mainly through the (early) implementation of NCs and other EU rules via pilot projects and through the exchange of information and good practices. They have also contributed to the development of a common vision – a Target Model for the IEM – and have allowed greater cooperation between the Agency and the EnC.

The year 2014 was the deadline that the European Council initially set in 2011 for completing the IEM in electricity and gas<sup>4</sup>. The IEM has been taking shape over the last few years through the development of rules, the design of enhanced target models for electricity and gas markets and the upgrade of interconnections and security of supply through investments in new infrastructure and other measures taken at a national, regional and pan-European level. However, as reflected by the European Commission in its Communication of 13 October 2014 on 'Progress towards completing the IEM'<sup>5</sup>, there is still room for improvement, and a significant part of the work still needs to be done in various areas. Until the NCs have been fully implemented, the RIs will play their part in achieving progress towards the IEM completion.

<sup>2</sup> http://www.energy-regulators.eu/portal/page/portal/EER\_HOME/EER\_ACTIVITIES/EER\_ INITIATIVES/ERI

<sup>3</sup> http://www.energy-regulators.eu/portal/page/portal/EER\_HOME/EER\_ACTIVITIES/EER\_ INITIATIVES/GRI

<sup>4</sup> http://register.consilium.europa.eu/doc/srv?l=EN&t=PDF&gc=true&sc=false&f=ST%202%20 2011%20REV%201&r=http %3A%2F%2Fregister.consilium.europa.eu%2Fpd%2Fen%2F11%2 Fst00%2Fst00002-re01.en11.pdf

<sup>5</sup> http://ec.europa.eu/energy/gas\_electricity/doc/2014\_iem\_communication.pdf



### 1.2 The Regional Initiatives: achievements, limitations and lessons learnt

The early implementation process organised under the RI framework is expected to shift towards formal implementation monitoring in 2015 with the progressive entry into force and binding application dates of the first sets of rules in the NCs and guidelines in electricity and gas – respectively: Capacity Allocation and Congestion Management (CACM), Forward Capacity Allocation (FCA) and Electricity Balancing (EB) Guidelines, in electricity; and Congestion Management Procedures (CMP), CAM and Balancing, in gas. The NCs and rules described in Sections 2 and 3 of this report will become binding for all MSs with specific deadlines to comply with.

Having met the deadline that the European Council initially set for the completion of the IEM this year, this section looks back at the bottom-up approach followed under the RI framework in past years up to 2014 and takes stock, assessing whether the top-down approach now starting with the enforcement of NCs and guidelines could solve the issues noted, and identifying any potential challenges. A more detailed review of the main developments and achievements of 2014 in the electricity and gas sectors is then described in Sections 2 and 3 of the report.

#### **Electricity**

 Day-ahead market coupling: late but successful start of the pilot project and promising extension planning

The Target Model for day-ahead has benefited both from a general consensus about the objective, i.e. coupling markets via prices, and experience gained from successful solutions (NordPool, Tri-Lateral Market Coupling and European Market Coupling Company). These elements provided confidence in terms of the path to take even when difficulties arose. For example, when project parties struggled to design an algorithm able to compute both prices and volumes, there was no desire to move to volume coupling. In addition, the experience gained from solutions already in place has allowed project parties to have a good understanding of the difficulties ahead, both technical and contractual. This did not prevent the pilot project from suffering a few delays but these issues were fortunately resolved, thanks in part to the strong support from all stakeholders involved. With the launch of the pilot project in the NWE region in February and the extension to the Iberian market in May, good progress is being made towards completion of the Target Model for day-ahead, with its implementation through the 4Markets Market Coupling (4M MC) in November and the expected extension to the northern Italian borders in 2015. Some local conditions or political problems may slow down further extensions but the solution is ready.



 Intraday cross-border continuous trading: an important pilot project for the IEM weakened by a series of flaws that only an appropriate decision-making process could have resolved

The pilot project for intraday encountered a number of obstacles. First, the solution referred to during the creation of the Cross-Regional Roadmap<sup>6</sup> was queried only a few months later for different reasons (enquiry from Directorate-General for Competition, changes in costs and timing, concerns raised by market participants regarding the available products etc.) which resulted in a lengthy call for tender to select a new service provider. This created frustration and mistrust among both project parties and also stakeholders. In addition, the project parties had issues and various disputes that led some stakeholders to ask for alternative interim solutions. Furthermore, expectations vary in terms of the features of the solution to be implemented. For example, the possibility of having explicit capacity allocation on a first-come, first-served basis in parallel to the implicit continuous trading, the handling of certain grid constraints or products etc. are still cause for discussion. This has hampered progress, as finding appropriate solutions proved a challenge, with issues such as those specified still outstanding. Together with other flaws such as a potential underestimation of the technical and contractual difficulties, the overall governance, in particular the decision-making process based on consensus, implied by the voluntary nature of the ERI process, has proved to be inadequate when it comes to resolving the issues at stake.

 A single platform allocating long-term TRs under a single set of rules: from slow progress to promising implementation planning

The objectives of the Target Model for the forward time frame look to be a natural continuation of the solutions implemented by TSOs on most European borders. Still, progress proved slow, first with the delay experienced by NRAs in delivering their wish list and later on by TSOs in taking over the process to deliver a European set of rules. This slow progress may be due to resources constraints and the focus of the main project parties involved in this process (NRAs, TSOs and market participants) on other timeframes. However, since mid-2013, TSOs have increasingly worked towards the objectives, and proposed ambitious projects such as for the merger of the two main allocation platforms to be up and running in time for the 2016 auctions and, in parallel, the drafting of EU Harmonised Auction Rules (HAR) supervised by ENTSO-E. As these two projects raise important regulatory questions, NRAs have also increased their awareness. The year 2015 looks to be particularly promising, with the possible launch of a continental allocation platform and the approval of auction rules potentially covering all borders where TRs are allocated.

Information about the Intraday Cross-Regional Roadmap is available on the following ACER webpage: http://www.acer.europa.eu/Electricity/Regional\_initiatives/Cross\_Regional\_Roadmaps/Pages/2.-Cross-border-Intraday.aspx



 Implementing the flow-based capacity calculation method where relevant: a task more complex than expected where other polemical topics interfere

The objective of implementing a new capacity calculation method which takes into account information from the market to best allocate the capacity between borders represents a challenge that may have been underestimated. This objective requires a considerable detailed coordination and cooperation among TSOs, the involvement of PXs, the support of NRAs and MSs and the market participants' trust. Data exchange, setting up of the robust system, agreement on the changes involved in this new method etc. are already challenging elements. On top of these, questions about loop flows, grid development, bidding zones, security of supply etc. have affected the progress of the projects. The Agency has deliberately always pushed to keep the development of the Flow-Based (FB) method separate from these other fundamental questions, as analyses of the implementation of this more dynamic and transparent capacity calculation method demonstrated the benefits of the projects. They would of course deliver better results were the definition of bidding zones improved, but the latter should not be a pre-requisite. The Agency calls on all stakeholders to go ahead with the current projects irrespective of national issues.

#### Gas

 Harmonisation of CAM: an endeavour that required significant effort to take off but subsequently gained momentum and is now entering its key stage

The main objective of the Roadmap for the early implementation of the CAM NC (CAM Roadmap) fostered by the Agency in cooperation with ENTSOG is to facilitate the implementation of pilot projects testing the CAM NC provisions, identifying potential issues and solutions adopted and providing transparency for stakeholders.

This objective is on track to be achieved. At first, the early implementation of the CAM NC was an objective that took some time and effort to kick off. The Agency instigated discussions with NRAs and TSOs back in 2011 to make it happen. However, the early implementation of the CAM NC did not gain sufficient momentum until the launch of the PRISMA initiative in April 2012. Once the CAM NC was mature enough and entered comitology, the importance of starting to implement it was increasingly clear. The CAM Roadmap process was then launched and has allowed progress to be made in a more streamlined and structured way across Europe. It has enabled pilot project participants to share experiences and identify potential issues or obstacles for the implementation of the CAM NC at an early stage; and is expected to continue doing so in 2015 in view of the full implementation of the NC.



 Streamlining gas balancing regimes in Europe: a necessary step towards the IEM in gas which requires enhanced cooperation and commitment from all parties

The successful experience in CAM led the Madrid Forum to address an invitation to TSOs and NRAs to start the early implementation of the Balancing NC, and to the Agency and ENTSOG to facilitate and monitor the process. The nature of this NC – mostly based on national measures, and not so much of cross-border relevance as is the case with CAM – has placed the focus on identifying the steps and measures laid down in the national implementation plans for this topic. However, the need for cross-border cooperation in certain areas of the NC – such as the definition of short-term standardised products, the procedures for (re)nominations at interconnection points (IPs) and potential within-day obligations – makes it necessary to pay attention to cross-border cooperation practices when implementing this NC. The Agency and ENTSOG will continue to monitoring progress in this area, and will also reach out to market participants to encourage their increased involvement and help check that the implementation of the NC responds to their needs and enables the more efficient and streamlined trading of natural gas in Europe.

 Progress in regional projects: the GRI supporting work in areas of relevance at a regional and sub-regional level

Since the GRI was set up and, in particular, over the last few years, projects in various areas were planned in the regional Work Plans 2011-2014 and have been carried out throughout the three gas regions, delivering tangible benefits and achievements. The regional dimension has proven eminently suitable for work on specific projects in areas such as market integration, harmonisation of rules, infrastructure planning, and development and transparency. Examples of specific achievements are provided in the following paragraphs.

The NW region has allowed NRAs, TSOs, national ministries and other stake-holders to come together to discuss issues of general interest and to work on common projects at a regional or sub-regional level. Examples of areas and activities delivering specific achievements include: transparency assessments on transmission and storage; infrastructure development through Open Seasons (e.g. France-Belgium); the development of secondary capacity trading platforms; studies on market integration; and pre-comitology meetings to improve the understanding of FGs and NCs. In 2014, there was no NRA to lead the work in the GRI NW region. Stakeholders have expressed on several occasions their desire for the region to be reactivated again in some form and the Agency would support that, provided that an/some NRA(s) volunteer(s) takes the lead.



The South region has benefited from only a small number of countries and thus NRAs and TSOs participating, and has developed a culture of cooperation and mutual understanding that has generated achievements for gas markets in the region. Examples include: the development of new infrastructures via Open Seasons between France and Spain; transparency assessments in transmission and LNG; harmonised CAM procedures and CMPs; and market integration initiatives (e.g. Spain-Portugal). The Agency supports this region in its continued work in the priority areas as specified in the new South Work Plan 2015-2016.

Finally, the SSE region has faced significant challenges due to its large size and the heterogeneity and diversity in the status of the gas markets involved. However, it is possible to identify several achievements made in the region, in the form of market integration (studies in the CEE and Visegrad Four [V4] regions), infrastructure plans (Gas Regional Investment Plans [GRIPs] in CEE and in the Southern Corridor) and the sharing of experiences relating to security of supply . Renewed efforts are being made by the co-Lead NRAs in this region to improve the participation and involvement of all regional actors in specific projects via Implementation Groups (IG) in the new SSE Work Plan 2015-2018.

#### Importance of stakeholders' involvement

The RI process is mainly based on the goodwill of project participants (TSOs, NRAs and PXs in electricity) but also on the stakeholders' trust in and continued support of the process. The early implementation process itself and its achievements to date would not have been possible without a strong push from stakeholders.

While this stakeholder support cannot always be a guarantee of success (e.g. see the intraday time frame, in the case of electricity), the Agency will continue, through structures enabling stakeholder participation – such as the Agency Electricity Stakeholders Advisory Group (AESAG) framework or an equivalent structure in electricity; or the CAM Roadmap Stakeholders group in gas – to involve stakeholders in the move towards the binding implementation of rules and projects as much as possible so as to ensure smooth and consistent implementation across Europe.

# THE ELECTRICITY REGIONAL INITIATIVE





#### 2.1. From a common vision to specific projects

The Target Model developed through the ERI has gained further credibility and strength through its transposition into the CACM FG for electricity adopted by the Agency in July 2011. In line with the new vision for RIs promoted by the Agency, the Target Model has been later transposed into four Cross-Regional Roadmaps applicable to the whole of Europe<sup>7</sup>, each one being devoted to a particular aspect of the common vision. The adoption of the Framework Guidelines on EB in September 2012 triggered in 2013 the selection of pilot projects for implementing the described vision. Through the ERI and AESAG framework, the Agency ensures further coordination.

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 parties involved were given until 31 December 2016 to implement the Target Model and agreed on a dedicated roadmap sent to the Agency on 23 May 2013. More information on this project is available here: <a href="http://www.allislandproject.org/en/TS\_Current\_Consultations.aspx?article=dac49400-fed7-41e7-ad9c-17c8ea4c65f4">http://www.allislandproject.org/en/TS\_Current\_Consultations.aspx?article=dac49400-fed7-41e7-ad9c-17c8ea4c65f4</a>



#### 2.2. Review of progress made to date in the ERI

#### 2.2.1. The Cross-Regional Roadmap on Day-Ahead Market Coupling

The Target Model for the day-ahead time frame is EPC that simultaneously determines volumes and prices, based on the marginal pricing principle. This solution implies common arrangements between TSOs and PXs on pre-coupling aspects (such as the capacity calculation), the coupling solution (such as the algorithm and its constraints) and post-coupling aspects (such as the financial settlement between PXs and between PXs and TSOs).

The Target Model in a nutshell

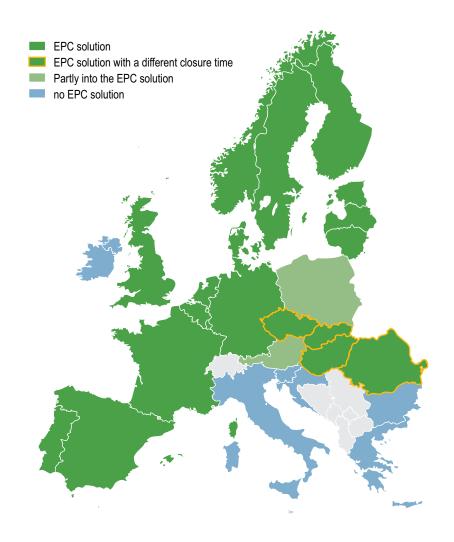
#### Reminder: why this Target Model?

Market coupling is a method for integrating electricity markets in different areas. With price coupling, the daily cross-border transmission capacity between the various areas is not explicitly auctioned among the market parties, but is implicitly made available via energy transactions on the PXs on either side of the border (hence the term 'implicit auction'). It means that the buyers and sellers on a PX benefit automatically from cross-border exchanges without the need to explicitly acquire the corresponding transmission capacity. The main purpose of this mechanism is to maximise the total economic surplus of all participants: cheaper electricity generation in one country can meet demand and reduce prices in another country. Prices will equalise across adjacent countries where there is sufficient transmission capacity.



The map below presents the current status of the EPC implementation. The countries in green are those that managed to meet the 2014 deadline set by the European Council.

State of play



After several postponements, the successful go-live of the NWE Market Coupling project, identified as the pilot project, on 4 February was a big step towards the implementation of the EPC in the whole of Europe. On 13 May, the project was successfully extended to the South-West Europe (SWE) region<sup>8</sup>.

Nevertheless, the implementation of the target fall-back solution in case of decoupling in the French-Spanish interconnection (explicit shadow auctions) is still pending.



Once the full participation of the SWE region had been achieved, the project changed its name to Multi-Regional-Coupling (MRC) to reflect the scope of the day-ahead market coupling after the first merger of two regions. By the end of 2014, the MRC covered 17 countries<sup>9</sup> and around 75% of Europe's electricity demand.

On 19 November, the project for coupling the markets of the Czech Republic, Slovakia, Hungary and Romania went live. This project, also called 4M MC, aimed to implement the EPC and to extend market coupling to Romania. Due to slow progress in the implementation of the Flow-Based Market Coupling (FBMC) in the entire CEE region, the Gate Closure Time<sup>10</sup> (GCT) has been kept at 11:00 the day before delivery. As the MRC project is based on the agreed GCT for Europe, i.e. 12:00 the day before delivery, the allocation of cross-border capacity between the two areas is still performed through explicit auctions.

For the areas where the EPC has not yet been implemented, work towards this objective has progressed.

In the Central-South Europe (CSE) region, TSOs and PXs, organised in the Italian Borders Working Table (IBWT) project, resolved several issues:

- Agreement on the financial arrangements for the Italian electricity market.
   The Italian NRA prepared a proposal for mitigating the financial impact of moving the settlement date<sup>11</sup> currently applied in Italy (two months after delivery) to the one applied in the MRC project (two days after delivery).
   The proposal for managing daily payments on all Italian borders where market coupling is in place was submitted for public consultation and later brought forward to the Ministry.
- Agreement on the GCT postponement to 12:00. On 9 June, the Italian Regulatory Authority for Electricity Gas and Water (AEEGSI) published the resolution 265/2014/R/eel approving the changes to the Italian grid code proposed by Terna, including those needed for the postponement of the day-ahead GCT to 12:00. The new GCT will be triggered no more than one month before the market coupling go-live. Since Slovenia is coupled with Italy, Slovene parties confirmed the simultaneous postponement of their GCT.
- Start of the testing on the border with Austria. Although a power exchange for managing the market coupling in Austria has not yet been selected,

<sup>9</sup> Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Great Britain, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland (via the SwePol Link), Portugal, Spain and Sweden.

<sup>10</sup> Deadline for submitting bids into PXs' order books

<sup>11</sup> The settlement date is the date on which transfer of cash or assets is completed.



tests have started with one power exchange to help project parties to progress on the implementation.

- Improvement of the EPC algorithm for computing the Italian reference price. Due to the higher use of complex trading products by market participants and the special feature of the Italian market, concerns have been raised as to the ability of the EPC algorithm, called Euphemia, to deliver results especially the Italian reference price, the PUN within the given time frame once the EPC has been extended to the Italian borders. Following further research on this issue, improvements have been introduced in a new version of the algorithm that is still undergoing testing. This improved version has produced promising results and could be implemented for the expected February go-live.
- Approbation of the allocation rules enabling the introduction of shadow auctions. Following a public consultation, TSOs submitted for approval the new version of the CASC HAR (CASC HAR v2.0). NRAs approved these rules, which set out the implementation of explicit shadow auctions on the coupled Italian borders as the target fall-back solution in case of decoupling (this achievement is referred to in the section focusing on the Target Model for long-term TRs).
- Multi-Regional Coupling Day-Ahead Operational Agreement. This contract deals with the roles and responsibilities of the operational, governance and decision-making procedures and offers the necessary flexibility to be extended to other regions. Along with this contract, regional and local agreements on operational issues, such as shipping, are also being finalised. It is anticipated that these contracts will have been signed by all project parties by the end of January.

#### Progress has also been made in Croatia:

Establishment of the Croatian PX, CROPEX. In May 2014, HOPS, the Croatian TSO and HROTE<sup>12</sup>, the Croatian market operator established Croatian Power Exchange Ltd., also named CROPEX, as a joint venture company responsible for setting up the day-ahead market and connecting it to the internal European market. Discussions are ongoing with Hungarian and Slovenian counterparts which are both part of different coupled market areas to decide on which border the coupling is to be implemented first.

<sup>12</sup> HROTE organises the only electricity market in Croatia. In the initial phase of the market opening, the model of a bilateral market has been chosen and electricity trading has been carried out through bilateral contracts.



The Single Electricity Market<sup>13</sup> Committee for Ireland and Northern Ireland continued to make progress towards the implementation of the European Target Model and reached this major milestone:

- Decision on the High Level Design (HLD) of the Integrated Single Energy Market (I–SEM). On 17 September, the Department of Enterprise, Trade and Investment and the Department of Communications, Energy and Natural Resources endorsed and published the final decision paper detailing a HLD for the I-SEM. This decision, which covers all time frames, defines the scope of the last phase of the project, called the 'Detailed Design and Implementation' phase, and is the key control and reference document for guiding development of the detailed market design. The 'Detailed Design and Implementation' phase is a large and complex work programme that will span more than two years, with the ultimate aim of successfully delivering the new I-SEM in an effective and efficient manner.
- Publication of the project plan. Following the decision on the HLD of the I-SEM, the implementation plan was published on 10 October. This document presents the high-level timelines and milestones for the following five areas: energy trading arrangements; capacity remuneration mechanism, market power, forwards and liquidity, and governance and licensing.

<sup>13</sup> The Single Electricity Market has been granted an exemption to comply with the CACM GL in 2016



This section presents the remaining steps for the ongoing projects to implement the Target Model, with the key milestones and the associated timeline and concerns as well as the issues to be resolved in the area where the EPC is implemented.

Challenges ahead

In the CSE region, the IBWT parties have worked intensively to meet the planned go-live window in February but a few obstacles remain:

- Choice of a PX in Austria. Although testing has started with one PX, a final decision on the PX in charge of the market coupling for Austria is a pre-requisite.
- Positive results from the testing phase. Several elements including the new version of the algorithm must deliver reassuring results for a go-live in February.

Within this region, particular difficulties – political for Switzerland and organisational for Greece –may prevent the extension of the EPC on these borders in 2015.

For the other projects aiming at implementing the EPC, the main challenges will be to stick to the published plan (I-SEM) or to develop a plan (Croatia, Greece and Bulgaria).

In the NWE and SWE regions, some elements are still to be investigated:

- Monitoring of the EPC. On 12 June, the NRAs discussed with the project parties the future monitoring of the EPC. NRAs expressed their requirements for ensuring good reporting on performance, changes and significant events related to the current solution. This should also help prevent any deterioration stemming from the future extensions.
- Harmonisation of floor and ceiling prices. Within the NWE area, prices
  can fluctuate between + EUR 3 000 and EUR 500, while on the Iberian
  market they vary between EUR 0 and EUR 180. NRAs will further investigate the consequences of this difference.
- Lack of coordination regarding the handling of losses on DC cables. The table below shows the status of the introduction of a loss factor on the different borders.



Cable	Loss factor foreseen	Comments
IFA (UK-FR)	Yes	Application to Ofgem and CRE. Implemented.
Britned (UK-NL)	Yes	Application to Ofgem and ACM. Implemented
NorNed (NO-NL)	Yes	Application to NVE and ACM. Pending approval
Baltic Cable (DE-SE)	Yes	Procedure unclear
Kontek (DK2-DE)	To be investigated	
Skagerak (NO-DK1)	To be investigated	TSOs discussing the possibility
Kontiscan (DK1-SE3)	Not foreseen	For the time being
SE-FI	Not foreseen	For the time being
Estlink (FI-EE)	Not foreseen	For the time being
SwePol (SE4-PL)	Not foreseen	For the time being

As described in an impact assessment prepared by TSOs in 2013, the inclusion of a loss factor for Direct Current (DC) cables within the market coupling algorithm could lead to higher social welfare, as the algorithm would exclude trade that generates more costs than added value. As there was no consensus around these conclusions, the inclusion of a loss factor has been decided at local level.

For all areas, one additional challenge will be the impact of the adoption of the CACM Guideline (CACM GL)<sup>14</sup> by the European Commission. Indeed, both the contractual arrangements such as the governance or the cost sharing in place in NWE and SWE regions and the implementation projects for the other areas may need reviewing to ensure perfect compliance with the binding requirements set by this new regulation. The Agency expects this challenge to have a minor impact, as the objective of early implementation was to comply with the principles set in CACM FG, further detailed in the GL, before they are finalised. The CACM GL also highlights the importance of the harmonisation of the loss factor. The text includes the obligation of harmonising the capacity calculation and considers the allocation constraints such as ramping or losses. These elements must further be taken into account by the algorithm when computing volumes and prices. Therefore, once the CACM GL enters into force, NRAs, TSOs and PXs will have limited time to reach an agreement.

<sup>14</sup> On 5 December, the Commission adopted the CACM Network Code developed by ENTSO-E entitled a Guideline instead of a Network Code. It is expected that the Forward Capacity Allocation Network Code developed by ENTSO-E will also be renamed a Guideline by the Commission.



#### 2.2.2. The Cross-Regional Roadmap on Continuous Intraday Trading

The Target Model for the intraday time frame is designed to allow trade on a continuous basis across markets as close as possible to the delivery time. The related Cross-Regional Roadmap envisages a phased approach to implementation, starting with implicit continuous trading covering at least the NWE region (plus Austria, Switzerland, Portugal and Spain). This interim solution will then evolve to include intraday capacity recalculation, capacity pricing and the ability to trade sophisticated products (the Target Model).

The Target Model in a nutshell

#### Reminder: why this Target Model?

Continuous trading enables market participants to constantly adjust their position to any event impacting the production or the demand side. Implicit cross-border trading, sometimes referred to as market coupling, will enable market participants to access the liquidity of all different markets. This ensures that the highest bid matches the best available offer at any time. Trading close to the delivery time allows market participants to adjust their position in the best possible way, which facilitates the TSOs' task of balancing the system. This time frame is of increasing importance in the context of growing intermittent generation.

This section presents the progress and obstacles experienced in 2014 during development of the pilot project, the XBID project, for implementing implicit continuous trading at a European level as defined in the Target Model. Due to several issues, the XBID project suffered numerous delays and did not meet the 2014 deadline.

**Progress to date** 

As a reminder, PXs in charge of the XBID project requested the Agency's guidance on the service provider to select. Following the Agency's reply dated 17 June 2013, the PXs agreed on the detailed requirements the solution should comply with and started negotiating with the selected provider in October 2013. To allow the successful vendor to begin work on the design of the XBID platform while finalising the contract, the PXs negotiated an Early Start Agreement (ESA) which covers the pre-contractual phase of the project whereby all parameters of the solution are agreed upon. The contractual negotiations regarding the ESA – between the PXs and the successful XBID vendor, Deutsche Börse – were scheduled to be concluded before the Florence Forum on 12/13 November 2013. These negotiations were only completed at the end of December. In parallel, the Italian PX, GME, joined the XBID project in Q1 2014 as a full member.



While project parties worked on the completion of the relevant project documentation, the NRAs in the participating NWE region as well as Austria, Switzerland and Spain completed the letter of comfort covering the design and development of the XBID solution for the participating PXs on 16 January 2014.

The ESA is divided in two steps. Step 1 deals with the resolution of all outstanding major issues and defines the content of the solution to be developed and provides the foundation for commencing the Business Blueprint to be tackled during Step 2. The completion of Step 1 in May had been delayed due to a number of technical issues with the chosen solution. This extra time and the review of the timing for Step 2 increased the original project schedule for the ESA stage from 4 to 12 months. The ESA is now due to be completed in December 2014. The agreement of the ESA is a pre-requisite to the signing of the contract that will allow the development of the XBID solution to take place.

Due to the continuing delays experienced in the project, the Florence Forum on 20/21 May 2014 invited the Commission to analyse options for interim solutions that allow for short-term improvements to the status quo, notably on borders where intraday trade is currently underdeveloped, provided these interim solutions do not jeopardise or slow down the pilot project. Through various discussions with the PXs, NRAs and TSOs involved, it has now been determined that this may not be possible as there is no consensus among the parties concerned and because this action may also impact the delivery of the pilot project.

Due to these delays and the lack of consensus regarding possible steps towards interim solutions, there has been no new implementation of intraday trading on a border in the NWE region in 2014.



As described above, progress within the pilot project is difficult for various reasons and important challenges still lie ahead:

Challenges ahead

• Completion of ESA Step 2. The projected deadline for the completion of the design phase, i.e. ESA Step 2, was 9 December 2014. Due to the gaps in testing and the technical issues identified during the Business Blueprint phase, the project parties announced at the Florence Forum held on 27 and 28 November that the deadline could not be met. In response, the Forum urged all project parties to resolve the remaining issues and to proceed with the signing of the procurement contract accompanied by a clear and ambitious timeline for the Local Implementation Projects (LIPs) by the end of February 2015 at the latest. Should this not be achieved, the Forum called upon the Commission to establish a structure in which alternative solutions can be discussed and developed; the results are to be reported back to the next Forum.

If the project parties eventually manage to overcome their differences of opinion, the following three challenges will need to be tackled:

- NRAs' acceptance of the project plan and costs. Following completion of ESA Step 2, the project parties should provide the NRAs with a fixed cost and timeline for the XBID solution for acceptance. NRAs must review these documents in the light of the letter of comfort dated 16 January 2014 as well as the new information arising from the negotiation process and the market participants' and the Commission's feedback. The NRAs' acceptance of the project plan and costs may contain reservations, as the postponements and the lack of consensus on major issues have led to cost increases and extended timelines for completing the project. With the NRAs' acceptance and the potential reservations, project parties could sign the contract with Deutsche Börse. Development and testing of the solution would then proceed, and, based on current expectations, the solution could be completed and ready for go-live by Q4 2015 (this timeline does not include a contingency).
- Development of the LIPs. With the completion of ESA Step 2, TSOs and PXs should prepare for each border the timelines and milestones for implementing the XBID solution locally. Early indications from the project parties show that the go-live for intraday is not seen as a one-date, all-live scenario, but as a staggered process on individual borders potentially from Q4 2015 onwards.



Impact of the CACM GL. As for the day-ahead time frame, the adoption of the CACM GL by the Commission will lead to a review of the negotiated arrangements to comply with these new binding requirements. This could prove complicated when looking at the difficulties project parties experience agreeing with one another or with the service provider. However, the entry into force of the CACM GL may also improve the decision-making process as the unanimity rule among PXs and TSOs should no longer apply. As experienced so far, the Agency's involvement through its letter and the Commission's involvement through high-level meetings with the XBID project parties underline the governance issue PXs have reported several times. PXs are competitors, use different systems and have different interests and different views about how the intraday market will evolve. This difficulty in reaching a common position amongst project parties has also influenced the discussion at regulatory level. The removal of the unanimity rule in the final version of the CACM GL would definitely represent a step in the right direction to improve the decision-making process and the efficiency of the XBID project.



#### 2.2.3. The Cross-Regional Roadmap on Long-Term Transmission Rights

The Target Model in the forward time frame, also called the long-term time frame, aims to give market participants an opportunity to hedge themselves against congestion costs and day-ahead congestion pricing through a single access point and a harmonised set of rules for long-term TRs where financial markets do not enable them to do so in an efficient manner. To achieve this objective, four areas of work have been identified:

The Target Model in a nutshell

- 1. Harmonisation of the allocation rules;
- 2. Establishment of a single allocation platform;
- 3. Harmonisation of nomination procedures:
- 4. A potential move to FTRs.

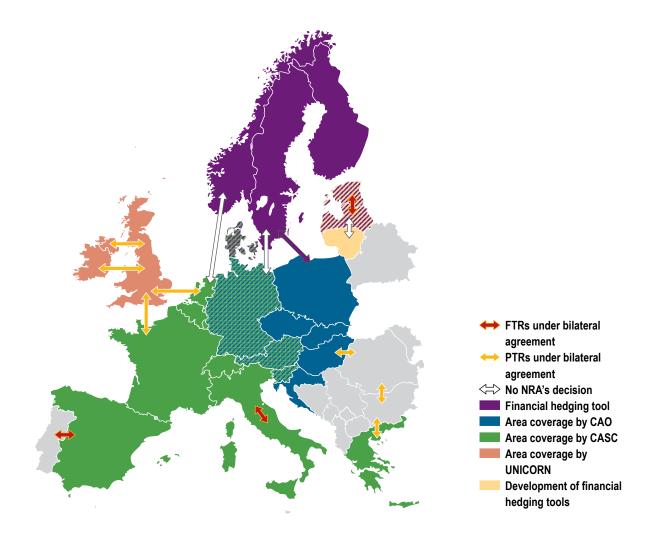
#### Reminder: why this Target Model?

In an unbundled electricity industry, i.e. where companies are not vertically integrated from production to retail, generators sell into a wholesale market, and suppliers as well as larger customers buy in that market. All market participants are therefore exposed to the wholesale price, experiencing opposite consequences: when the wholesale price is high (or low), generators make high profits (or low profits) while the buyers experience high costs (or low costs). To avoid being exposed to uncontrollable wholesale prices, generators and buyers may contract with each other at a certain price and for a specific period of time. Long-term TRs for cross-border transmission aim to facilitate competition between generators and buyers across markets. Indeed, these rights enable generators and buyers to manage the transmission risk across markets over the longer term, thus allowing them to enter into long-term supply contracts just as they would if they were on the same market. The allocation of these rights is particularly necessary where local financial markets are not liquid or do not offer appropriate hedging products.



The map below presents the current status in the implementation of a single 

Progress to date allocation platform.





Although a single access point and a harmonised set of rules for long-term TRs are still to be defined, the handling of allocation through regional platforms and the harmonisation of rules within regions represent clear improvements compared with the situation in early 2012. The 2014 deadline has not been met but the ongoing work will enable further progress to be made towards the Target Model.

The following section presents the progress and obstacles experienced during 2014 with regard to the implementation of the different targets identified in the CACM FG and in the Cross-Regional Roadmap for long-term products. The section focuses in particular on the type of long-term hedging instruments made available to the market, the change in auction rules and the extension of existing allocation platforms.

Regional decisions from some NRAs were recorded in 2014.

- Following the agreement reached in December 2013 between the parties involved, progress on the SWE regional roadmap was quickly made. In mid-March, the French Energy Regulatory Commission (CRE) and the Spanish National Commission for Markets and Competition (CNMC) both approved specific France-Spain allocation rules (as a transitory solution), thus enabling CASC to allocate long-term capacity on the France-Spain border from March 2014 onwards.
- In the second half of 2014, the TSOs concerned launched the process to update the CASC HAR, which were approved by the relevant NRAs in Q4 2014. This new version (2.0) encompasses the following changes.
  - First, it includes the France-Spain border (replacing the specific rules described above) for the allocation of long-term products with physical delivery from 1 January 2015 onwards, and for the shadow auctions as a fall-back solution in case of day-ahead market decoupling (planned go-live date: March 2015). TSOs took this opportunity to align the firmness regime with the one applied in the CWE region.
  - Furthermore, CASC HAR 2.0 takes into account the provisions required in the context of the upcoming day-ahead market coupling on the France-Italy and Italy-Austria borders, namely the changes to the 'Use-It-Or-Sell-It' requirements, the removal of the day-ahead explicit auctions and the fall-back procedure (explicit shadow auctions) in case of decoupling. These changes will be applicable only when the day-ahead market coupling goes live on those borders.



- The agreement between the Portuguese and Spanish NRAs for the coordinated allocation of FTRs corresponding to the PT-ES interconnection capacity was put into practice following the approval of the relevant regulation in Spain. The product auctioned is a fully firm FTR option. The auction platform is OMIP, a company that belongs to the Iberian market operator. At this stage, it is still unclear whether CASC or JAO will be able to auction a purely financial product (such as FTRs).
- The first joint auction of long-term capacity between Spain and Portugal, corresponding to Q2 2014, took place on 25 March 2014 under the coordinated mechanism established in the MIBEL Council of Regulators. Throughout 2014, three more coordinated auctions of FTRs took place: in June, September and December. Previously, a non-coordinated FTR auction had been organised in December 2013 under the same set of rules but applying only to the Portuguese system.
- For cross-border hedging between the new market in Ireland/Northern Ireland (the I–SEM) and Great Britain, the Commission for Energy Regulation and the Utility Regulator decided in September 2014 that FTRs would be implemented from 2017 onwards, subject to agreement with Ofgem<sup>15</sup>. Consultation will take place during 2015 regarding the form that these FTRs will take, notably whether they will be FTR options or obligations.

Progress has also been made at a cross-regional level.

- In January 2014, ENTSO-E presented a roadmap delivering a set of HAR (EU HAR) applicable from early 2016 onwards. In the first half of 2014, ENTSO-E completed an extensive gap analysis between the existing set of rules in Europe and delivered a set of recommendations the EU HAR should comply with. The drafting phase for the rules started in mid-2014 and they are expected to be finalised by July 2015. Stakeholders have been involved through the creation of a dedicated stakeholder's advisory group in the autumn. The Agency continues to monitor ENTSO-E progress and provide feedback on ENTSO-E's proposals on a regular basis.
- In August, the shareholders of CAO and CASC, 20 TSOs', also presented
  a high-level roadmap to merge these two regional platforms. The resulting entity will allocate long-term TRs on 26 borders. The second half of
  2014 was devoted to the implementation, leading to a framework merger
  agreement in December 2014.

<sup>15</sup> Details of the high level design of the I-SEM can be found here: http://www.allislandproject.org/ en/wholesale\_overview.aspx?article=d3cf03a9-b4ab-44af-8cc0-ee1b4e251d0f



This section presents for the various projects the key milestones on the path towards the harmonisation of the auction rules or the implementation of the common allocation platform, together with the associated timeline and concerns.

Challenges ahead

The joint initiative by the CASC's and CAO's shareholders to merge their regional platforms, as well as the development by ENTSO-E of the EU HAR applicable to all borders where long-term TRs are allocated, pave the way for the implementation of the Target Model in the long-term time frame. To achieve this double objective by early 2016, milestones set in the roadmap should be met:

- Timely submission and further approval of the EU HAR. The EU HAR should be submitted for public consultation and updated accordingly by ENTSO-E and TSOs in the first half of 2015, before a request for formal approval is submitted to the relevant NRAs in July 2015. The target date for the approval decision is the end of Q3 2015.
- Setting up of the JAO. Legal constitution and functional transition following the merger of both regional platforms CASC and CAO should be achieved by September 2015, enabling the resulting JAO to perform the yearly auctions for 2016 and to apply the EU HAR.

The option to extend this Joint Auction Office to the Spain-Portugal border for the allocation of FTRs and to shift from PTRs to FTRs on DE-DK and DK1-DK2 still needs to be explored.

The setting-up of the JAO should be considered as an interim step before the implementation of the single allocation platform, as requested by the CACM FG. To that end, a roadmap still needs to be defined.

With regard to the introduction of hedging instruments on Baltic Cable, BNetzA and Ei are awaiting the outcome of the introduction of TRs on DE-DK and the possible transfer to FTRs. At present, Baltic Cable disputes that it is a TSO, so it is therefore not yet certified as such.



With regard to the introduction of hedging instruments on SwePol Link, the two NRAs involved claimed that the market need for this kind of product is still unclear and the possibility of introducing anything cannot be considered until the overall integration of Poland into the market coupling of regions is complete.

As for the day-ahead and the intraday time frames, all developments described above are subject to review once the Forward Capacity Allocation Guideline (FCA GL) enters into force. Its impact could be of particular importance for the firmness regime, i.e. the compensation TR holders should receive if their rights are curtailed, as this will end the long discussion between NRAs and TSOs. Another important element from the FCA GL is the description of the process NRAs must follow when deciding whether an exemption from the issuance of TRs is granted. NRAs will have to demonstrate, supported by clear criteria to be defined in the FCA GL, that TRs are not required thanks to efficient and liquid forward financial electricity markets on both sides of a given bidding zone's border. This should clarify the situation for several borders where such a demonstration is missing.



#### 2.2.4. The Cross-Regional Roadmap on Capacity Calculation Method

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

The Target Model in a nutshell

#### Reminder: why this Target Model?

The FB capacity calculation method allocates capacity by optimising trade across the different coupled markets based on the information provided through the order books, while ensuring that the physical limits of the grid are respected. The FB method represents an improvement compared with the ATC method as the FB method increases the capacity offered to the market. For a given security of supply domain, the ATC method only delivers one possibility (because TSOs must arbitrarily decide on the capacity splitting between borders) which constitutes just one part of the feasibility domain, while the FB method covers the full feasibility domain. As such, the FB mechanism will offer more trading opportunities to the market in allocating capacity where it is the most valuable. The improvement of the FB method over the ATC method is particularly significant for highly meshed and highly interdependent grids, because the TSOs' capacity splitting between borders is nowhere near as good as that calculated using the FB method. For simpler grids, the difference between both methods may be rather small and the costs of implementing the complex FB method might offset the potential benefits.



Several issues have arisen during the implementation of the FB method for both the CWE and CEE regions. In 2014, some milestones were still achieved within the CEE region while the go-live within the CWE region was eventually postponed from November 2014 to March 2015 due to the specific situation in Belgium this winter (unexpected unavailability of a third of centralised generation capacity and significant risk of load shedding). Although the 2014 deadline was not met, there is a positive trend in both regions.

State of play

In the CWE region, discussions between FBMC project parties and CWE NRAs progressed in 2014 on issues to be approved before go-live, such as market consultation, transparency and monitoring, the fall-back principles, FBMC parameters and intuitiveness. The main developments are as follows:

- Daily parallel run. Project parties successfully launched the daily parallel run publication on 24 February 2014 (in addition to the parallel run initiated one year earlier with weekly data publication). The results of these runs have been published and discussed amongst the TSOs, PXs and NRAs involved. The parallel runs are still ongoing and will continue until the launch of FBMC. The external parallel runs show an overall increase in social welfare for the day-ahead time frame compared with the ATC-based capacity calculations, although differences in welfare gain or loss occur per country or in the producer or consumer surplus. Since FBMC has been optimising the use of the grid, there has been a reduction in congestion and therefore congestion rents. The external parallel runs had some difficulties at the beginning of the year in delivering results every day. However, no results were missing during the second half of the year although a couple of delays in their publication were noted.
- Definition of the transparency requirements. At the start of 2014, bilateral
  meetings were organised by the CWE project parties with market parties
  to discuss their needs in terms of transparency and data publication. Together with the responses from the market consultation and discussions
  between the CWE FBMC project parties and the CWE NRAs, the latter
  defined some transparency requirements in relation to the project parties.
- Agreement on intuitiveness<sup>16</sup> for the go-live. CWE FBMC project parties and NRAs discussed the advantages and disadvantages of both options (FBMC with intuitiveness or not). The option of following the market consultation and launching FBMC with intuitiveness has been agreed upon. Nonetheless, FB plain (i.e. allowing non-intuitive situations to happen) will be simulated in parallel with FB intuitive once the latter has gone live to allow a possible shift in the coming years if it turns out to be positive.

<sup>16</sup> With the FB method, some energy flows from the high price area(s) to the low price area(s) could take place to alleviate any physical constraints, allowing more trade from the low price area(s) to the high price area(s). Intuitiveness means that the expected flows between markets should always go from the low price area(s) to the high price area(s).



- TSOs' agreement on sharing the congestion rent. CWE NRAs will make a
  decision on the congestion rent sharing key that the CWE FBMC project
  parties proposed as part of the approval package. The proposed sharing
  key is based on the additional physical flow principle.
- Submission of an updated approval package. In August, CWE NRAs received an updated approval package from the CWE FB project partners, taking into account the changes that had occurred since summer 2013. The coordinated NRA approval is expected before the go-live of FBMC after receipt of all necessary clarifications and after successful testing of the final CWE FBMC platform. Individual national approval packages were sent to the respective NRAs afterwards and are under scrutiny. The exact approval process depends on national rules.
- Start of the testing phase. The CWE FBMC project parties started testing
  the IT and operational side of FBMC, including the fall-back mechanism
  for FBMC. This means that the TSOs and PXs involved tested the daily
  routines, such as the flow of information between their IT systems and
  the FBMC solution, including the processes to follow in case of problems.

Despite these positive results, the go-live planned at the end of November 2014 was again postponed as to avoid the launch of a new market mechanism which may need usual fine-tunings while a hard winter could lead to a severe situation in some countries. On 24 September 2014, CWE FBMC project parties announced the postponement of the target go-live date to 31 March 2015. The link between system adequacy (at day-ahead market stage) and FBMC is currently being investigated further by the CWE FBMC project parties and CWE NRAs.

In 2014, the following developments occurred in the CEE FBMC project.

- Signing of a MoU. At the beginning of 2014, CEE TSOs, PXs and NRAs
  as the FBMC project parties managed to solve the main challenge of
  reaching a common agreement on the path towards the goal set, i.e. the
  FBMC Target Model for the whole region. An MoU was signed in February.
  A short while after that, CEE TSOs and PXs also agreed on two Terms of
  Reference (ToR) documents, and established a Joint Steering Committee
  and Joint Working Group consisting of the TSOs and PXs concerned.
- Investigation of the FB SOO. The CEE TSOs re-started work on the FB capacity calculation by investigating the FB SOO, which is an adjusted FB technical solution for the CEE region based on today's bidding zones to take into account the influence arising from unplanned flows. In the first deliverable, TSOs investigated for a selected set of timestamps from 2013 the influence of several parameters on pre-congestions presently included in the set and the impact of exchange limitations on pre-coupling and coupling indicators. The first results were available in September 2014. Despite several flaws, CEE TSOs decided to go ahead with the



investigation to correct the errors and perform a more in-depth analysis, which prolonged this work until the end of December 2014. The SOO addresses the key issue of maintaining system security and is thus considered a priority, whereas the possibility for TSOs to investigate options for financial compensation of social welfare losses stemming from the loop flows is still open and may need further consideration.

• Project planning and organisation. Following the agreement on the ToR, CEE TSOs and PXs worked together on project planning and project organisation. This part of the project involves a draft budget plan, an agreement on cost sharing and other project-related principles and an update of the roadmap. This work particularly that on cost-sharing principles, was more challenging than expected. In October, TSOs and PXs notified an agreement on key principles for cost sharing but added that the remaining part is not to be underestimated. In December, TSOs and PXs reported on the selection of the PMO (Project Management Office) following a tender process. The contract is to be signed in January.

Also related to organisation: Romania, as part of the 4M MC project, informed the project parties of its interest in joining the project. During the IG meeting in December, members agreed to provide the Romanian parties with access to all information so that they are able to participate in meetings and raise issues relevant for them.

In the CSE region, TSOs involved in the northern part of Italy have been developing a D–2 coordinated capacity calculation methodology. The goal is to have a more accurate hypothesis to perform this calculation and improve the total amount of capacity made available to the market, while at the same time ensuring the security of the grid. The calculation will be performed on two timestamps per day (compared with today's situation where the yearly ATC is used as the basis for the D–2 ATC), and this will be progressively extended to 24 timestamps per day. This methodology is based on a central calculation of the total northern borders' Italian import capacity (run in parallel by two central entities: Coreso and CAO), which is afterwards split between the different borders. The first step greatly relies on a coordinated approach taking into account remedial actions. The main development this year is:

High-level description of the methodology. An initial description of the new capacity calculation method was communicated to NRAs on 1 October. This represents a useful step towards the NRAs' approval. In addition, and in order to better understand the impact of this new method, the NRAs are required to compare the capacity of this new methodology with the current one. An external dry-run period is therefore planned to begin in early 2015 to allow a go-live a few months afterwards.



This section presents the key milestones for the different projects on the path towards the implementation of the FB method.

h Challenges ahead

For the CWE region, the main elements are:

- Positive feedback from the market participants. In early 2015, project parties have planned a testing period for market participants. This testing period should inspire confidence in how well the solution functions before the go-live date, as well as give market participants time to get accustomed to it.
- NRAs' approval of the second documentation package. In addition to the
  reasons for the delay, CWE NRAs have expressed some concerns, for
  example regarding the link between system adequacy and the FB method
  that should be clarified before its launch. TSOs, PXs and NRAs maintain
  their support for FBMC and are doing their best to resolve any doubts
  about the proposed method and, if necessary, to find a solution quickly to
  ensure that the March 2015 target date can be met. Some changes could
  be introduced in a second step, through Flow Based 2.0.

For the CEE region, several milestones lie ahead:

- Finalisation of the project structure, roadmap and budget. There are several elements that NRAs have requested from project parties, including the presentation of a project plan and the budget. These elements should provide evidence that the project is going in the right direction and correctly taking into account the budget and timing constraints to allow NRAs to continue supporting it.
- Finalisation of the investigation of the FB SOO. Preliminary results high-lighted concerns about the level of pre-congestion cases. The impact of flow limitation on one border on the social welfare and the system security is yet to be fully assessed. TSOs must work to correct the flaws in the FB methodology identified by the preliminary study and investigate the preliminary results further. Conclusions from this study may constitute the basic features that the FB method for this region should respect to enable all markets to experience both a fairer sharing of cross-border capacity and greater system security.



In the CSE region, the key challenge is:

 Start of the external dry-run. TSOs involved in capacity calculation for the northern Italian borders should start computing capacity using the new method to demonstrate its technical readiness and the expected benefits.

Another challenge that concerns all regions relates to the entry into force of the CACM GL, which also specifies requirements for capacity calculation. These requirements include a definition of capacity calculation regions under which TSOs shall develop common methods. Although TSOs are used to working together on this topic, the coordination process and the tools used will have to be improved further. The Agency believes that this will help things to move in the right direction, although some elements such as the handling of ramping constraints and the influence of flows on one border on neighbouring ones may prove difficult to agree upon.



#### 2.2.5. Integration of electricity balancing markets

Historically, there is great diversity in the design of national electricity markets, mostly due to the resources available or guided by political choices. This diversity is particularly noticeable in the different balancing mechanisms that have been developed to cope with specific national features. Although progress has been made in the different time frames despite a certain degree of variety, the balancing mechanism is particularly difficult to change as it performs the vital task of managing the frequency in real time, which implies very specific products and rules. Few initiatives have emerged so far to develop cross-border balancing, with a relatively limited geographical scope and a low level of coordination to ensure compatibility of different practices, providing very limited experience on the integration of electricity balancing markets.

**Background** 

Two complementary types of integration tools are to be considered in 2014:

- Establishing, through the EB NC, a legal framework promoting the development of methodologies and/or term and conditions for an efficient integration of balancing markets;
- Implementing specific initiatives with balancing pilot projects in Europe.

The Target Model related to electricity balancing can be described with three key principles:

The Target Model in a nutshell

- 1. Reduce balancing needs with adequate incentives on Balancing Responsible Parties (BRP)
  - Only imbalances remaining after intraday should be balanced by TSOs;
  - The definition of common features for an efficient settlement of energy imbalances;
  - Adequate and timely information to BRPs for them to be balanced or to help the power system to be balanced;
  - Implementation of imbalance netting when efficient by all TSOs.
- 2. Efficient balancing actions to be performed by TSOs
  - A central role played by TSOs in integrating balancing markets and strong coordination between them to optimise the activation of energy from balancing resources, on the basis of the Common Merit Order (CMO) concept for the manually activated reserves (mFRR and RR) and an equivalent concept for the automatically activated reserves (aFRR);
  - Clear common principles for activation and commitment to optimise the use of different processes;
  - Necessary harmonisation of relevant requirements to ensure efficient balancing exchanges between self and central dispatch systems.



- 3. Foster competition between Balance Service Providers (BSPs)
  - A high level of standardisation of products, CMOs and GCTs;
  - Balancing arrangements that facilitate participation of demand flexibility and intermittent generation;
  - A step-by-step implementation of a common pricing method (pay-ascleared-based);
  - Transparent and detailed common principles for the establishment of the methodologies and the terms and conditions.

#### Reminder: why this Target Model?

With these requirements, the activation of balancing energy will be optimised across Europe. Moreover, TSOs will benefit from greater robustness in the event of unforeseen circumstances (renewable energy sources forecast errors, unplanned outages etc.). Improving the functioning of existing national balancing markets and developing cross-border balancing are considered essential in accommodating an increasing amount of intermittent generation. Finally, liquidity will be enhanced and market distortions mitigated, so that it will be easier for new entrants to gain a foothold in balancing markets.

In conclusion, this integration process should enhance – or at least maintain – the level of security of supply enjoyed to date, reduce the high level of concentration currently observed in the national balancing markets and provide market participants with more efficient price signals and incentives, which should then improve the overall market efficiency and reduce the overall cost of balancing the system.



# REGIONAL INITIATIVES STATUS REVIEW REPORT 2014

The table below provides a brief review of the pilot projects, detailing the latest State of play developments

	TSOs and topic(s) covered <sup>17</sup>	Main objective(s)	Progress achieved	Pending issues
			The operational concepts for real- time FB congestion management (imbalance netting and aFRR activation) have been adapted.	
1	50Hertz, Amprion , Tennet TSO, TransnetBW IN, aFRR, mFRR	Creation of CMOs for mFRR and aFRR with real-time FB congestion management	Go-live of FB congestions management for aFRR operation in July 2014	An extension of the FB approach on foreign TSOs is envisaged.
			Feasibility studies concerning an mFRR exchange and IN with NORDIC and BE/NL pilot projects have been finalised.	
	APG, Swiss Grid, 50Hertz, Amprion , Tennet TSO, TransnetBW and Tennet NL. FCR	Creation of a cross-border market for FCR based on a TSO-TSO model	Project successfully designed and implemented within one year (CH and AT) – go-live date: July 2013	
			Agreement with TSOs in Germany and the Netherlands for merging with the Austria- Swiss project in 2015	<ul> <li>Common publishing policy for both countries agreed; details under discussion</li> <li>Monitoring: details under discussion</li> <li>International stakeholder integration under discussion</li> <li>Participation of Denmark in the common project pending due to BnetzA approval</li> </ul>
2			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 beginning 2015.	
3	CEPS, SEPS, MAVIR (e-Grid Control Coordination or E-GCC) IN	Prevent secondary control reserves in various control areas from being activated at the same time in the same direction.	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.	Main pending issue for merging pilot 3 and pilot 9 is the TSO-TSO settlement method
4	National Grid, RTE, TERNA, REN, REE and National Grid International Limited. (Trans-European Replacement Reserves Exchange or TERRE) RR	Design and test the feasibility of a multi-TSO coordinated exchange of RR	RTE, REN, National Grid and TERNA started the design phase of the TERRE project, focusing on balancing products, the matching process, financial issues, timing and scheduling, ATC management and governance.	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, key milestones, stakeholder involvement and regulatory approvals.  The TSOs are also expected to provide preliminary assessments of the potential progress in implementing the TERRE project across six countries.
			REE and Swissgrid joined the TERRE project at a later stage, during the summer period. ADMIE,	
			the Greek TSO joined late 2014  The design phase is expected to be completed by mid-2015.	
	Statnett, Fingrid, Svenska Kraftnät and Energinet.dk (Nordic) mFRR	Demonstrate and describe an existing multinational mFRR market with CMO	The Nordic TSOs have identified a set of measures to improve the efficiency of the (existing)	The NRAs are expecting the first detailed set of feedback from the TSOs concerned in Q4 2014. This feedback will include findings from the feasibility studies.
5		Increase the efficiency and liquidity of the Nordic multinational mFRR market by capturing the full potential of the Nordic resources for regulation. This includes increased harmonisation and participation of the demand side and RES. The results of the improvements will be reported.	Nordic mFRR market.  Additionally, the Nordic TSOs are investigating possibilities for exchanging mFRR with other regions and have completed feasibility studies with:	
			- Baltic TSOs - Polish TSO	
		Work and testing for an extension of the current Nordic balancing market to neighbouring countries and pilots.	- German TSOs  The studies are published or will be published beginning of 2015	



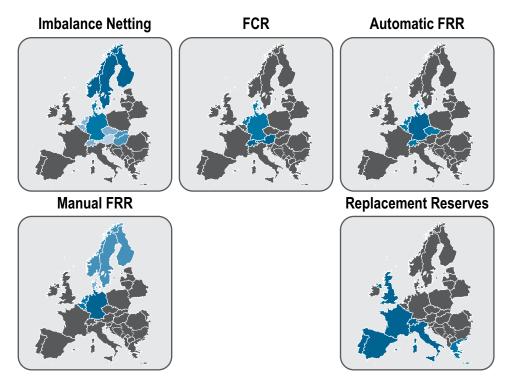
## REGIONAL INITIATIVES STATUS REVIEW REPORT 2014

	TSOs and topic(s) covered <sup>17</sup>	Main objective(s)	Progress achieved	Pending issues
6	Tennet NL and ELIA aFRR and mFRR	Design and evaluation of a harmonised reactive balancing market with cross-border optimisation of frequency restoration while keeping control areas, bid zones and regulatory oversight	During the recently completed market design phase, TSOs agree on working assumptions for a common balancing market design:	Implications for harmonisation of aFRR products (impact on liquidity of local markets and
			<ul> <li>For aFRR and for mFRR regarding product definition, bidding process,</li> </ul>	local TSO responsibility/ACE quality) between two different control blocks with consequences
			<ul> <li>activation process, exchange process and settlement process;</li> <li>On how to use crosszonal capacity for different balancing processes;</li> <li>Regarding settlement of balancing energy and imbalance settlement.</li> <li>A common public workshop was organised on 13 June and the next step will be to perform a cost-benefit analysis based on the working assumptions</li> </ul>	for local access tariffs
				Complexity of pricing methods as this not only affects market functioning but also the 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/no-go decision for implementation is foreseen for Q1 2015.
7	BritNed, TenneT NL and National Grid RR	Enhance European market integration principles of transparency, optimisation and efficiency, and seek to provide both TSOs with options for restoring the supply-demand balance in their control area and managing domestic constraints where needed.	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 different balancing market design features (e.g. 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.	The feasibility study is ongoing. Once finalised, the conclusions of the feasibility study will be crucial in determining whether the design of a mutually beneficial balancing service will be possible. End 2014 pilot 8 has been put on hold; reason behind is that, due to incompatibility of present market designs in UK and the Netherlands
	50Hertz, Amprion , Tennet TSO, TransnetBW, CEPS, ELIA,	Further develop technical and organisational cooperation in the field of balancing using as the basis the existing scalable and reliable framework, and positive experiences from more than two years of operation	APG joined the I-GCC in April 2014.	
•	ENERGINET, TENNET NL		Cooperation with project 1 has been established: use of the same optimisation function and coordination of real-time congestion management	A stakeholder workshop on I-GCC should take place in Q4 2014.
8	(International Grid Control Cooperation or I-GCC)			There are ongoing talks with
	IN, aFRR Assistance and Flow- Based Congestion Management			further TSOs to join the I-GCC.

<sup>17</sup> IN: Imbalance Netting; RR: Replacement Reserves; mFRR: Manual Frequency Restoration; aFRR: Automatic Frequency Restoration; FCR: Frequency Containment Reserve



The maps below represent the different pilot projects, categorised by topic.



#### In brief:

- Imbalance Netting concerns projects 3 and 9
- · Replacement Reserves concerns projects 4 and 8
- Manual Frequency Restoration concerns projects 1, 5 and 7
- Automatic Frequency Restoration concerns projects 1 and 9
- Frequency Containment Reserve concerns project 2.

At a European level, during 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 the progress of the various balancing projects or whether it should also be involved in the 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 focused on the projects on imbalance netting. The meeting in September focused on the projects on mFRR. The last meeting of 2014 in December focussed on both the Frequency Containment and Replacement Reserve process.



As well as the EU pilot projects, it has become 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 mFRR and, to a lesser extent, on the exchange of aFRRand RR<sup>18</sup>.

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 mergers are most likely to occur along with achieved progress. The figure above gives an initial insight into the possible combined project areas.

During the last AESAG and Balancing Pilot Project Stakeholder Group (BPPSG) meetings, stakeholders expressed general concern regarding the lack of transparency and the need for a clear structure to ensure participation from NRAs and stakeholders. NRAs asked all pilot projects to provide the NRAs concerned with a detailed project plan, complete with key milestones including go/no-go decisions, a 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.

<sup>18</sup> 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 10 January 2014 as well as in the presentation on the 3rd BPPSG-meeting



This section presents the additional work that TSOs should undertake with the help of NRAs and the involvement of BRPs and BSPs. As all stakeholders agree that the experience gained from pilot projects is more important than long debates when it comes to the speedy development of cross-border balancing, several tasks have been identified:

Challenges ahead

- Review of the existing pilot projects, complementing them where appropriate (e.g. with additional projects) to ensure that existing and future pilot projects will integrate into regional targets. As they have already begun, existing pilot projects focusing on similar topics should further improve their coordination to deliver solutions that can be easily extended to other balancing areas and to help produce rules and principles applicable for the whole of Europe. At the same time, all TSOs should participate in pilot projects focusing on different subjects (i.e. IN, mFRR, aFRR or RR). Due to the wide variety of existing balancing markets, the more experience TSOs, NRAs, BRPS and BSPs gain, the better the solutions for Europe will be defined.
- Definition of the Coordinated Balancing Areas. As CoBAs set the geographical areas in which TSOs shall jointly develop their balancing tools, the definition of these areas has an impact on the existing pilot projects as well as future projects. It is of utmost importance to agree on the efficient configuration of the areas that are required to implement the regional integration models.
- Proposal for standard products and the joint development of a list regarding the activation purposes of mFRR, aFRR and RR. As has already been done in some pilot projects, the definition of these elements is of key importance for an efficient exchange of balancing energy first at a local level and then at a European level.
- Pricing methodology and high-level principles for the algorithms applied for IN, aFRR, mFRR and RR. Along with the previous point, the pricing methodology and principles for matching bids and offers constitute challenging elements that enable the best use of the balancing resources and of the grid.

The early development of these elements as well as their inclusion in the EB NC before its adoption should create a more solid basis and further facilitate the faster development of implementation projects.

# 3.

# GAS REGIONAL INITIATIVE





## 3.1 Context and current priorities for the GRI

Following the publication of the Third Energy Package in 2009, the first two NCs for the natural gas sector have already been adopted. The CAM NC was published in October 2013<sup>19</sup> and the NC on Gas Balancing was published in March 2014<sup>20</sup>. A new NC on Interoperability and Data Exchange received the favourable opinion of the Gas Committee on 4 November 2014 and another NC on harmonised transmission tariff structures is expected to be adopted in 2015.

A robust set of rules is therefore being developed in several key areas for the gas sector. However, it is equally, or more, important to ensure that these rules are implemented effectively and applied in a timely, consistent and effective manner. This year, the Agency started to monitor the implementation of the rules on congestion management procedures (CMP Guidelines<sup>21</sup>) and the existence of contractual congestion<sup>22</sup> at IPs between MSs. The NCs on Gas Balancing and CAM have currently been (early) implemented by TSOs in a number of MSs and will be fully applicable by 1 October<sup>23</sup> and 1 November 2015, respectively. From that date onwards, the Agency and ENTSOG will start to formally monitor the effective implementation of those NCs.

Alongside the NC development and implementation process, the Agency has updated its vision for the future of the gas markets in Europe (the GTM). The updated GTM, which takes into account the recent and future expected change in gas markets and modifies the criteria to measure fully functioning wholesale markets, was presented to stakeholders in January 2015. Among other elements, the refined GTM brings further clarity regarding possible models for market integration that may be envisaged between adjacent market areas and how these integration models are working in practice in several real case studies.

The third ACER/CEER Market Monitoring report<sup>24</sup> on electricity and gas markets for 2013 has revealed areas where improvement is required to meet the objec-

<sup>19</sup> Commission Regulation (EU) No 984/2013 of 14 October 2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:273:0005: 0017:EN:PDF

<sup>20</sup> Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks: http://www.acer.europa.eu/Gas/Framework%20guidelines\_and\_network%20codes/Documents/EC%20reg%20NO%20312-2014%20BAL%20NC.pdf

<sup>21</sup> http://www.acer.europa.eu/Official\_documents/Acts\_of\_the\_Agency/Publication/ACER%20 CMP%20Implementation%20Monitoring%20Report%202014.pdf

<sup>22</sup> http://www.acer.europa.eu/Official\_documents/Acts\_of\_the\_Agency/Publication/ACER%20 Gas%20Contractual%20Congestion%20Report%202014.pdf

<sup>23</sup> However, the Network Code on Gas Balancing of Transmission Networks allows for an extended implementation date by 1 October 2016 (if the TSO applies for it and the NRA authorises this) or for adoption of interim measures until full application of the NC by 2019.

<sup>24</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2013: http://www.acer.europa.eu/Official\_documents/Acts\_of\_the\_Agency/Publication/ ACER\_Market\_Monitoring\_Report\_2014.pdf



tive of a fully integrated IEM. The 'Bridge to 2025' Conclusions paper<sup>25</sup> released by the Agency in September 2014 describes the realisation of the GTM as a major step towards the achievement of the IEM and considers it as a top priority for the Agency in the short term.

The importance of the regional integration in the IEM process was reiterated by the European Commission in its Communication on Progress towards completing the IEM of 13 October 2014<sup>26</sup>. This communication highlighted the value of pilot projects for the early implementation of NCs at a regional level and the need to enhance coordination of the different regional processes to ensure their convergence and integration.

In this context, the Agency believes that the GRI should play its part in the IEM completion by remaining focused on those activities where it has led to specific achievements and by continuing to support those projects which are most suitable to be undertaken at a regional level. The Agency's vision for the GRI is that it should continue:

- to promote and facilitate the early implementation of the NCs by identifying pilot projects at a regional or cross-regional level, following up on their
  realisation together with ENTSOG where relevant and taking stock of
  potential issues and implementation practices that can be shared among
  TSOs and NRAs participating in different projects;
- to foster the integration of markets by monitoring and facilitating market integration projects at a bilateral, multilateral or regional level throughout the gas regions, following the models foreseen in the refined GTM; and
- to carry out other projects and activities at a national and regional level where cross-border or regional coordination is necessary, in line with the activities planned in the new regional Work Plans under preparation for 2015 and beyond.

Finally, the GRI should preserve its added value as a regional forum for discussing EU regulatory developments and sharing experiences and best practices, as has been the case thus far. This added value of the GRI as a regional forum is appreciated by stakeholders and should thus be maintained in the South and SSE regions, and possibly be reinstated in the North-West region. Stakeholders from the NW region have expressed several times that they would like stakeholder meetings in the GRI NW region to re-start. The Agency has resumed conversations with NRAs in the region to consider this possibility. If there are any new developments, these will be announced to stakeholders in due time.

<sup>25</sup> http://www.acer.europa.eu/Official\_documents/Acts\_of\_the\_Agency/SD052005/Supporting%20 document%20to%20ACER%20Recommendation%2005-2014%20-%20%20Energy%20Regulation%20A%20Bridge%20to%202025%20Conclusions%20Paper.pdf

<sup>26</sup> http://ec.europa.eu/energy/sites/ener/files/documents/2014\_iem\_communication\_0.pdf



## 3.2 Early implementation of NCs

#### 3.2.1. Main aims of NC early implementation

As stated in the previous edition of this report, the early implementation of NCs brings a number of benefits to the IEM development process. First of all, it helps to meet the tight implementation deadlines set out in the codes and anticipates any issues, complexities or ambiguities in their provisions. It also stimulates the sharing of experience and the exchange of best practices among pilot projects on the same topic in different regions, promoting – where appropriate – their convergence in favour of integrated solutions. The early implementation of NCs also raises awareness among market participants about the implications of the rules in the codes for their activities and promotes transparency in the implementation process, involving stakeholders at an early stage. Finally, it also allows possible inconsistencies or interactions between different NCs to be detected, ensuring that the lessons learned throughout the early implementation process are duly taken into account in any future amendments to the codes.

Although the early implementation of the NCs is an endeavour that goes beyond the regional dimension, the GRI has so far been instrumental in identifying potential pilot projects at an early stage at a bilateral or regional level and bringing together NRAs, TSOs and stakeholders from the same region to plan the steps needed to apply the NC provisions and ensure that cross-border coordination is safeguarded.

In practice, the importance of the cross-border coordination element varies depending on the nature of the NC at hand. In the case of the CAM NC, the need for cross-border coordination has been found to be more important than, for instance, for the Balancing NC, where most provisions are to be implemented mainly at a national level. In spite of that, the benefits of cross-border coordination should not be underestimated, as it should enable NCs to be implemented consistently across Europe. Regional discussions can enhance and facilitate the implementation of NCs at a national level, as they allow the parties involved to learn from the experience gained in other countries, anticipating difficulties already experienced by counterparts in other MSs and identifying potential best practices.



# 3.2.2. The CAM Roadmap process and pilot projects for the CAM NC early implementation

CAM Roadmap update

– October 2014

Following an invitation from the Madrid Forum, the Agency and ENTSOG started cooperating in early 2012 with the aim of promoting the early implementation of the provisions in the CAM NC. They have since done so through the CAM Roadmap process. The CAM Roadmap creates a framework that facilitates the implementation of pilot projects and tests the NC provisions, identifying potential issues and solutions adopted and providing transparency with respect to stakeholders.

Since the first version of the CAM Roadmap was published on 1 March 2013, it has been updated twice, in October 2013 and again in October 2014<sup>27</sup>, to take into account the experience gained in the pilot projects during 2013 and 2014. The latest version of the CAM Roadmap shows the updated state of play in the CAM NC early implementation per project and per IP, the main issues and implementation practices identified and the upcoming activities in 2015. The updated CAM Roadmap was presented at the 26th Madrid Forum<sup>28</sup> in October 2014 and is scheduled to be updated again ahead of the binding application date of the CAM NC of 1 November 2015.

<sup>27</sup> http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/CAM\_roadmap/Pages/default.aspx

<sup>28</sup> http://www.ceer.eu/portal/page/portal/EER\_HOME/EER\_WORKSHOP/Stakeholder%20Fora/Madrid%20Fora/26supthsup%20Madrid%20Forum



Table 1 shows the ongoing pilot projects for coordinated capacity allocation as at December 2014.

Table 1 – Overview of CAM ongoing pilot projects as at December 2014

Project name	Short description	Member States with TSOs involved	Progress achieved by December 2014
PRISMA	Common platform for the allocation of capacity pursuant to the CAM NC rules	Austria, Belgium, Denmark, France, Germany, Italy, the Netherlands, Slovenia Ireland and UK (as of 2015) Spain and Portugal via a pilot project in 2014	Project launched on 1 April 2012. PRISMA company set up on 1 January 2013.  Daily and monthly auctions started in April 2013, first yearly auctions in May 2013.  Yearly, quarterly, monthly and daily auctions in line with CAM NC calendar in 2014. Secondary trading launched in January 2014 and multi-currency functionality provided since October 2014.
Gaz-System - Auctions (GSA) platform	Capacity booking platform developed in accordance with the requirements of the CAM NC	Poland, the Czech Republic	Establishment of multi- operator platform in July 2014. Auctions of unbundled and bundled yearly, quarterly and monthly products at PL-CZ border planned to be started in 2015.
Bundled Product -Hungary/ Romania on a <b>Regional</b> <b>Booking Platform (RBP)</b>	Allocation of firm rolling monthly bundled capacity as a first step on the HU-RO interconnector via the RBP pursuant to the CAM NC	Hungary, Romania	Concept developed in 2012, preparatory work completed by TSOs and NRAs during 2013 and 2014.  Auctions of bundled capacity started in December 2014.
South CAM Roadmap (coordinated implementation of the CAM NC at all interconnections in the South Region between France, Portugal and Spain)	Allocation of firm standard yearly, quarterly and monthly bundled and unbundled products in virtual interconnection points (VIPs) via auctions developed in accordance with the calendar and algorithm defined in the NC. The allocation is performed on the PRISMA platform	France, Portugal, Spain	Coordinated auctions developed at VIP IBERICO (ES-PT) in 2012 (yearly and monthly products) and 2013 (yearly and quarterly products), extended to VIP PIRINEOS (ES-FR) in 2014. Monthly products have been auctioned since September 2014. Day-ahead auctions are expected to be introduced in 2015.



The CAM NC early implementation picture in Europe has evolved over the course of 2014, and there have been noticeable developments in the pilot projects listed. One of the main developments to be noted is the suspension of one of the projects initially launched in 2013 (pilot project between Ontras and GAZ-SYSTEM at the Lasów IP) by the project promoters due to diverging views of the TSOs involved regarding which platform to use for the bundled auctions. In this regard, there is now an additional project for the establishment of an allocation platform in Poland (GSA platform) promoted by the Polish TSO, which also involves the Czech Republic and is open for other TSOs to join.

In terms of specific results in the projects, by November 2014 the **PRISMA**<sup>29</sup> platform had reached 23 shareholders, with 31 TSOs offering capacity from 12 different countries (including the TSOs starting to do so from January 2015), 400+ companies participating with more than 1 300 registered users, and overall around 97 000 auctions held with more than 8 600 GWh/h of primary capacity allocated. Secondary trading also started this year, with an overall volume of secondary capacity traded of nearly 200 GWh/h since January 2014. In 2015, within-day allocation is scheduled to start and more TSOs could join the platform following the new cost allocation scheme presented by PRISMA to be adopted as of 1 January 2015.

Auctions in the **South region** have allocated capacity for the first time at all interconnections between entry-exit systems in the whole region, via VIPs between Portugal, Spain and France. Capacity at these VIPs was allocated via PRISMA in 2014.

The new **GSA**<sup>30</sup> platform has been launched by the Polish TSO GAZ-SYSTEM and is so far running auctions of bundled and unbundled capacity at entry and exit points in Poland. The first auctions of cross-border bundled capacity with the Czech Republic are expected to start in 2015.

Finally, the **RBP**<sup>31</sup> between Hungary and Romania seems to be overcoming its past difficulties and regulatory obstacles and organised its first auctions of bundled products in December 2014.

More information about the features of these pilot projects, as well as the implementation of selected CAM NC provisions per IP, is provided in the CAM Roadmap update of October 2014 published on the Agency's<sup>32</sup> and ENTSOG's websites.

<sup>29</sup> More information on this platform can be found at: https://platform.prisma-capacity.eu/

<sup>30</sup> More information on this platform can be found at: https://auctions.gaz-system.pl/

<sup>31</sup> More information available at: https://fgsz.hu/en/newsletter

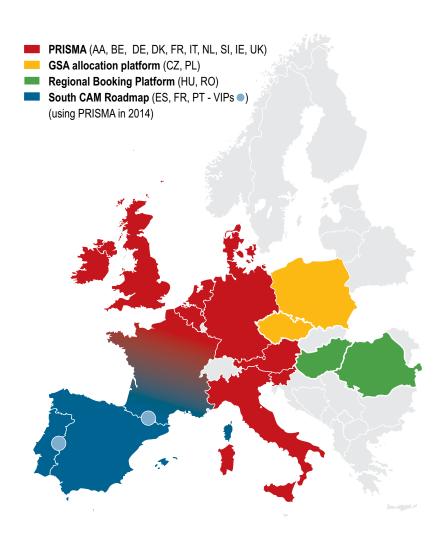
<sup>32</sup> http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/CAM\_roadmap/Pages/default.aspx



The following map shows the geographical extension of the CAM pilot projects with an indication of the countries with TSOs already involved in the projects as at 1 January 2015.

Geographical scope of CAM projects

Figure 1 – EU Member States involved in CAM pilot projects as at 1 January 2015



The years 2013 and 2014 have witnessed the gradual expansion of the CAM NC implementation to new TSO networks and IPs. In 2015, the implementation of the code will have to be progressively extended to all IPs in order for the CAM NC to be fully applied by the deadline of 1 November 2015.



# 3.2.3. Review of issues identified and lessons learned in CAM NC early implementation

The CAM Roadmap process in 2013 and 2014 has made it possible to identify a number of aspects which represent an issue or may potentially become an obstacle when implementing the NC provisions. Some issues have already been dealt with by TSOs and NRAs where they appeared, and others remain high on the agenda to ensure that they are tackled in a satisfactory way.

One aspect that has attracted increased attention in 2014 has been the combined application of the CAM and CMP provisions. In July 2014, the European Commission issued a non-binding Staff Working Document<sup>33</sup> that provided further clarification on this matter. The pilot projects use different methods to apply capacity bundling, On PRISMA, two bundling approaches are possible: classic bundling (the bundling of capacity products is performed 'offline' by the TSO) and cross bundling (the bundling of capacity products is performed 'online/ automatically' by the platform). On the GSA platform, TSOs determine the bundled capacity product and submit it to the platform or alternatively, they submit their respective capacity values and the platform allocates the lesser common amount in a bundled manner. Finally, product bundling is applied on the RBP (capacity products are bundled online on the RBP platform and the capacity which cannot be bundled is released back to the relevant TSO for marketing via its own platform or RBP).

An area that needs further investigation is the potential harmonisation of capacity contracts on both sides of an IP. This aspect, which was brought up by stakeholders during the preliminary scoping of a potential Framework Guideline on Rules for Trading, will have to be analysed in detail with the participation of TSOs and network users. Other features dealt with by project promoters include the existence of different currencies and licensing requirements in different countries.

Another set of issues relates to the actual implementation of several NC provisions. Examples include how to shift from the current gas year to the CAM NC gas year, where this year is different; the implementation of the auction calendar; the possibility of applying non-homogeneous price steps in monthly auctions; and how to set the clearing price in day-ahead auctions with a uniform price algorithm in certain situations with conditional bids. All these aspects are being addressed by NRAs and TSOs.

Finally, a more substantial set of issues relates to several features of the capacity booking platforms. The amount, allocation and recognition of costs remain relevant concerns for certain TSOs and NRAs. The three platforms planned or currently in place present different features in terms of the services and costs involved. On some platforms, the costs are largely fixed, whereas others charge fees on an IP basis. Other issues that are emerging include the eventual need

<sup>33</sup> http://ec.europa.eu/energy/gas\_electricity/codes/doc/20140711\_guidance\_congestion\_management\_ngtn.pdf



to supervise the activities of booking platform operators; how coordination between platforms will work in practice; and how to ensure that TSOs agree on which platform to use at certain IPs shared by TSOs participating in different platforms. These questions will have to remain high on the agenda to find ways to tackle them in the course of 2015.

On 4 November 2014, ENTSOG published a report on capacity booking platforms, pursuant to Article 27(3) of Regulation (EC) No 984/2013 (CAM NC). This report provides additional insights into the potential advantages and disadvantages of having either one or several booking platforms in place, on a theoretical level and from the perspective of both network users and TSOs. Further analysis would be required on the basis of facts and figures in order to compare the two alternatives (one or several booking platforms). However, in the current situation where three platform initiatives are in place (PRISMA, GSA and RBP), the most important aspect that needs to be addressed is how those platforms will coexist and work together and how to ensure that TSOs reach agreement on which platform to use for booking capacity for all IPs in the CAM NC scope list. The Agency and ENTSOG will facilitate cooperation between the platform operators within the framework of the CAM Roadmap process in order to find suitable solutions to these issues<sup>34</sup>.

Detailed information about the above topics can be found in Section 4.4 of the updated CAM Roadmap version published in October 2014: http://www.acer.europa.eu/Gas/Regional\_%20 Intiatives/CAM\_roadmap/Pages/default.aspx



#### 3.2.4. Early implementation of the Balancing NC

In response to an invitation from the Madrid Forum to its 25th meeting in May 2014<sup>35</sup>, the Agency and ENTSOG started to follow up on the early implementation of the Balancing NC in 2014. Based on a questionnaire jointly filled in by NRAs and TSO(s), the Agency and ENTSOG prepared a report<sup>36</sup> which presents an overview of the implementation status in each country, outlines the expected implementation timelines for each chapter of the NC and provides insights into the issues identified or expected and implementation practices that are worth sharing.

The following map, included in the aforementioned report, summarises the state of play of the Balancing NC implementation in each MS as at October 2014 by indicating the expected date for full implementation in each country:

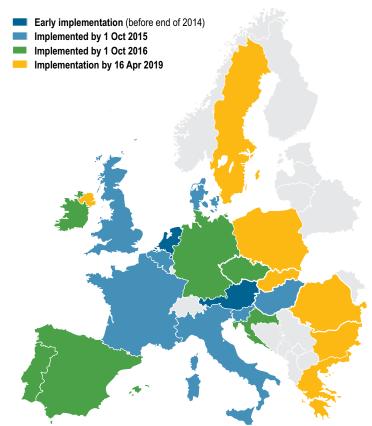


Figure 2 – Expected implementation of the Balancing NC in the EU (as at October 2014)

The implementation review carried out in the report is expected to be updated next year ahead of the deadline of 1 October 2015.

<sup>35</sup> http://www.ceer.eu/portal/page/portal/EER\_HOME/EER\_WORKSHOP/Stakeholder%20Fora/Madrid%20Fora/25supthsup%20Madrid%20Forum

<sup>36</sup> http://www.acer.europa.eu/Gas/Framework%20guidelines\_and\_network%20codes/Documents/ ACER-ENTSOG\_Report\_BAL\_NC\_Early\_Implementation-Final\_22-Oct-2014.pdf



#### 3.2.5. Early implementation in upcoming areas

Following the examples of the CAM and Balancing NCs, it could be envisaged that early implementation work will also start for the forthcoming NC on Interoperability and Data Exchange and, once it is sufficiently mature, for the NC on Tariffs. However, the prospects for early implementation in these two areas still remain uncertain. The adoption and entry into force of the NC on Interoperability and Data Exchange<sup>37</sup> may represent a landmark and starting point which will trigger projects or activities for the early implementation of this NC. For that to happen, TSOs and NRAs will have to consider those areas where 'quick wins' are achievable, possibly in connection with the ongoing implementation of the CAM and balancing provisions, and other areas where more substantial obstacles are likely to be met, and therefore more coordination between the TSO and NRA at a national level and with the adjacent countries is necessary. Whatever the case, early implementation in these areas will only be possible if there is commitment and joint efforts from all relevant parties (MSs, NRAs, TSOs and other stakeholders) with the support of the European Commission, the Agency and ENTSOG.

The text of the NC on Interoperability and Data Exchange which received the favourable opinion of the Gas Committee on 4 November 2014 foresees an application date of 1 May 2016.



# 3.3 Progress in other GRI projects and regional activities in 2014

The current composition of the three regions of the GRI is represented in Figure 3 below.

North-West (NW) region
BE, DE, DK, FR, IE, LU,
NI, NL, SE, NO (observer), UK

South region
ES, FR, PT

South South-East (SSE) region
AT, BG, CY, CZ, GR, HR,
HU, IT, PL, RO, SI, SK

\* Currently the NW region
has no Lead NRA

Figure 3 - Composition of the GRI regions in December 2014

During 2014, the gas regions have been working on a number of regional projects in different areas in accordance with the milestones and deadlines scheduled in their respective Work Plans 2011-2014<sup>38</sup>. The following subsections highlight the main achievements of these regional projects and activities<sup>39</sup>.

<sup>38</sup> The updated Work Plans 2011-2014 of the three gas regions can be found on the Agency's website: http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/Gas\_regional\_work\_plan/Pages/Gas-Regional-Work-Plans.aspx

The GRI NW region has had no Lead NRA since December 2013 and no regional projects are currently run under the GRI umbrella. Therefore, it does not appear in the progress review in this section.



#### 3.3.1. South region

The South region comprises France, Portugal and Spain. Its Lead NRA is CNMC. In 2014, the areas of work<sup>40</sup> and main achievements in the region were as follows:

#### Capacity allocation mechanisms (CAM)

The first coordinated mechanism to allocate capacity products pursuant to the CAM NC took place in March 2014. Firm bundled and unbundled yearly products were auctioned at the two VIPs (on the FR-ES and PT-ES borders) simultaneously via the PRISMA platform. In June 2014, quarterly products were auctioned. TSOs in the region made public the auction calendar for the period from March 2014 to September 2015 to allocate capacity products at the two VIPs. Monthly products have been auctioned in September and October 2014 using the PRISMA platform.

#### Congestion management procedures (CMP)

TSOs and NRAs have worked in a coordinated way on the CMP harmonisation in the South region. The rules for the implementation of the three mechanisms already applicable (over-subscription and buy-back, capacity surrender and long-term use-it-or-lose-it [UIOLI]) have been developed.

In 2013 and early 2014, the French and Spanish regulators approved legislation in their respective countries developed in a coordinated way to implement CMP at their respective interconnections. The CMP provisions in Portugal (Procedures for Access to the System Infrastructures) were approved by the Portuguese Energy Services Regulatory Authority (ERSE). These rules are aligned with the mechanisms approved in Spain.

#### Infrastructures

This area of work focuses on a permanent framework for cooperation among TSOs in the region, ENTSOG and stakeholders, for the creation of investment plans, identification of projects of common interest (PCIs) and cross-border cost allocation (CBCA) requests.

<sup>40</sup> All projects and activities planned in the South region up to 2014 are described in its Work Plan 2011-2014: http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/Gas\_regional\_work\_plan/Pages/ Gas-Regional-Work-Plans.aspx



On 27 March 2014, the final South Gas Regional Investment Plan for the period 2013-2022 was published<sup>41</sup>.

In addition, the regular update of the project status of Open Seasons 2013 and 2015 between France and Spain will be published on the ACER website once the required information from the three TSOs involved has been received.

#### Balancing

A process is ongoing for analysing the integration of market areas in France, in two steps: the creation of a trading region in the south of France by April 2015 and the integration of the three balancing zones by 2018.

The integration of balancing areas between Spain and Portugal is also under analysis, in line with the ongoing work to develop the Iberian gas market.

In Spain, CNMC is drawing up the legal act ('Circular') to regulate the gas balancing regime pursuant to the European NC.

#### Interoperability

The priority issues to be harmonised by November 2015, simultaneously with the CAM and Balancing NCs, have been identified in the South region. These priority issues are the gas year, the gas day and data exchange and nomination/renomination procedures. Further work on these topics will continue in 2015.

#### Hub development

The 'Study about models for the integration of the Spanish and Portuguese gas markets in a common Iberian natural gas hub' prepared by CNMC and ERSE has been submitted for public consultation until September 2014<sup>42</sup>. NRAs are analysing the responses received. A roadmap for the Iberian hub implementation is being prepared accordingly.

<sup>41</sup> http://www.entsog.eu/publications/gas-regional-investment-plan-grips#SOUTH

<sup>42</sup> http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/South\_GRI/Public\_Consultations/Pages/PC-on-the-integration-of-the-ES-PT-gas-markets.aspx



#### 3.3.2. South South-East (SSE) region

The SSE region comprises Austria, Bulgaria, Croatia, Cyprus, the Czech Republic, Hungary, Greece, Italy, Poland, Romania, Slovakia and Slovenia. In 2014, the leadership in this region changed. The principle of rotation for the co-chairmanship of the region was introduced in order to strengthen the collaboration among NRAs and ensure equal representation of different points of view. The Italian NRA, AEEGSI, stepped down in May 2014 from co-leading the region and was replaced by the Romanian NRA, ANRE, as of June 2014. URE and ANRE are therefore the current co-Lead NRAs of the region.

In 2014, the areas of work<sup>43</sup> and main achievements in the region were as follows:

#### · Market integration

Three projects were included in the regional SSE Work Plan 2011-2014 within this area of work: (i) a 'macroeconomic' study on possibilities for cross-border market integration in Europe, focusing on an analysis of the macroeconomic welfare benefits of market integration evaluating two case regions (AT-SK-CZ and AT-IT); (ii) analysing the implementation of the GTM in the region by creating a Central-Eastern European Trading Region (CEETR project); and (iii) setting out a roadmap for the creation of a common regional gas market in the V4 Region (Poland, the Czech Republic, Slovakia and Hungary).

The analysis of the macroeconomic benefits of implementing different models for balancing and trading zones as well as of the main principles under which a trading region could work was published in 2012. The launch of the second phase of the CEETR project was delayed due to a lack of clarity about the overlap with other projects in the region and a lack of involvement by some of the project participants. For the time being, the CEETR project is officially suspended.

The roadmap towards the regional gas market among V4 countries was endorsed by the V4 Prime Ministers in June 2013 and entered its implementation stage in the second half of 2013. At the Gas Forum meeting held on 17 February 2014, it was decided to focus in particular on the field of harmonised implementation of NCs. After Slovakia took up the V4 presidency in July 2014, the focus shifted to security of supply, the implementation of NCs, the creation of an appropriate GTM for the V4 gas markets, and infrastructure developments. Coordination between the V4 and CEETR projects<sup>44</sup> needs to be monitored.

All projects and activities planned in the SSE region until 2014 are described in its Work Plan 2011-2014: http://www.acer.europa.eu/Gas/Regional\_%20Intiatives/Gas\_regional\_work\_plan/Pages/ Gas-Regional-Work-Plans.aspx

The relevant documents from the first phase of the CEETR project and the V4 Roadmap are published at: http://nra.acer.europa.eu/Gas/Regional\_%20Intiatives/South\_South-East\_GRI/Documents/Road\_Map\_toward\_%20the\_V4\_regional\_gas\_market.pdf



#### Interoperability

In the SSE Work Plan 2011-2014, the region aimed to adopt common standards so as to improve system interoperability, based on the European Association for the Streamlining of Energy Exchange in Gas common business practices, regarding aspects such as the units for measuring gas and a harmonised definition of the gas day. In addition, the other priority in the region was to achieve sub-regional integration and harmonisation of procedures, in particular on the route from Slovakia to Germany and back to Slovakia.

No significant achievements have been observed in this area in 2014. Work on the early implementation of the Interoperability NC will start once the NC is adopted. The project relating to the harmonisation of TSOs' procedures decreasing shippers' risk and imbalances in CZ/SK/DE will be discontinued given that there were no significant developments in 2014.

#### Security of supply

MSs and NRAs planned to use the GRI SSE region as a forum to share experiences of security of supply and in particular the implementation of various provisions and requirements from Regulation (EC) No 994/2010. The project will be continued in the next four years, the main goal being to develop joint preventative action and emergency plans.



## 3.4 The way forward for the GRI

#### 3.4.1. Regional Work Plans beyond 2014

The South Work Plan 2015-2016 underlines the important goals achieved in the previous period (2011-2014) and improves those activities that need more effort by all participants in the initiative.

South Work Plan 2015-2016

The Work Plan was submitted for public consultation via the ACER website from 3 to 24 October 2014. Eleven organisations sent their feedback: three TSOs, four shippers and four associations. Regulators revised the Work Plan taking into account the comments received, and approved the final Work Plan 2015-2016 on 3 November 2014.

The Work Plan establishes seven main areas, with specific tasks and deadlines in the coming two years. The milestones laid down took into consideration the creation process for FGs and NCs. In addition, the 'Bridge to 2025' paper and the revised GTM were taken into account.

- i) The goal for CAM for 2016 is to jointly allocate cross-border capacity at the two VIPs of the region: VIP Pirineos (ES-FR) and VIP Iberico (ES-PT). The South region is also contributing to the CAM Roadmap up to the date for binding application of the code (1 November 2015).
- ii) The work on **new and incremental capacity** for 2016 is focused on ensuring the early implementation of the rules to apply them jointly and in a coordinated way in the region.
- iii) With regard to CMP, the operational mechanisms from 1 October 2013 (long-term UIOLI, capacity surrender and oversubscription & buy-back) will be assessed, in particular the coordinated incentive-based oversubscription and buy-back schemes. In addition, the conditions for the implementation of firm day-ahead UIOLI by July 2016 will be analysed in the region.
- iv) The objective for the South region with regard to **balancing** is to identify activities that need harmonising at the borders, as well as to adapt the rules in the region to comply with the provisions of the NC. For this purpose, regulators will exchange information on the implementation of the Balancing NC in the three countries and will work in cooperation to advance the harmonisation of balancing regimes.
- v) In relation to **interoperability and data exchange**, the priority for 1 November 2015 is to work on the harmonisation of the gas year and the gas day, nomination and renomination procedures and data exchange.



- vi) The area of **infrastructures** focuses on setting up a permanent framework of cooperation between TSOs (and ENTSOG), regulators and stakeholders. The next Ten-Year Network Development Plan is expected to be published in 2015 and the third edition of the GRIP South will be published in 2016. Other tasks in the Work Plan in the South region include participation in the relevant regional group in view of the identification process for a second list of gas PCIs; monitoring the implementation of PCIs; and regional cooperation to make decisions on CBCA requests by project promoters.
- vii) The South region is involved in the development of an **Iberian gas mar- ket** in the region. A preliminary analysis, an impact assessment and a roadmap design for the integration of the Spanish and Portuguese gas markets into a single gas market in the South region will be developed.

At the SSE Regional Coordination Committee (RCC) meeting held in Warsaw on 26 May 2014, NRAs decided to launch a process for creating the new Work Plan for the next four years. NRA and stakeholder consultations have been carried out as part of the process and all comments received have been taken into account when drafting the document. The projects planned in the draft Work Plan were presented at the SSE Stakeholders Group (SG) meeting in Bucharest on 12 December 2014.

SSE Work Plan 2015-2018

Various new elements and modifications to the organisational structure were introduced in the draft SSE Work Plan 2015-2018. Due to the fact that the CAM and Balancing NCs are already in force and will become binding soon, and taking into account that the Interoperability and Data Exchange NC has recently received a favourable opinion from the Gas Committee, SSE NRAs decided to establish new common bodies (IG) strictly focused on each of the NCs. The main goal of the IGs is to accelerate the work on NC implementation in the SSE region.

Another significant innovation will be the establishment of project promoters for the individual pilot projects in the Work Plan to provide practical support for each project. Project promoters will be responsible for conveying information on the progress of their particular projects at RCC or IG meetings, when relevant. The new Work Plan also provides for the intensification of cooperation between the GRI SSE region and the EnC.

The scope of the Work Plan 2015-2018 is based on the following three main pillars:

- Harmonised implementation of the NCs;
- · Market integration;
- · Security of supply.



Under the first pillar, there are plans to set up three IGs to incentivise early implementation actions in the region as well as to ensure the harmonised implementation of the three NCs on Balancing, CAM and Interoperability & Data Exchange. The main goal of the CAM NC IG will be to ensure coherence between pilot projects concerning bundled products on capacity booking platforms (PRISMA, RBP and GSA), common capacity allocation procedures between Bulgaria and Greece and gas quality harmonisation in the GRI SSE region.

There are plans to develop six pilot projects on market integration under the second pillar. One project is related to the closer integration of the CEE gas markets. The second one is a continuation of the V4 gas market integration project launched in 2013. Several other individual projects have also been included, such as improving the transparency of TSOs and operators of virtual trading points, harmonising trading licences and monitoring the implementation of the Third Energy Package in GRI SSE MSs.

The last pillar concerns security of supply issues, with a particular focus on close cooperation in the creation of preventative action and emergency plans.

Irrespective of the fact that the final version of the GRI SSE Work Plan 2015-2018 has not yet been approved, the GRI SSE members are to continue their work, aiming to achieve the goals described in the draft SSE Work Plan 2015-2018 as best they can.



#### 3.4.2. Review of the geographical composition in the SSE region

In the previous edition of this report<sup>45</sup>, the Agency recommended opening up a debate about the optimal geographical configuration of the SSE region and the option to split it into several regions, involving all relevant parties and authorities and including a consultation of stakeholders. The Agency has also raised this topic on several occasions in 2014, namely at the 16<sup>th</sup> GRI SSE Stakeholders Group meeting, the 9<sup>th</sup> Energy Community Gas Forum and the 26<sup>th</sup> Madrid Forum.

Responding to this recommendation, in early 2014 the SSE Lead NRAs opened up the debate about reshaping the SSE region, firstly among NRAs and subsequently involving stakeholders from the region. The SSE RCC – which includes all NRAs from the region – drew up a paper summarising the outcome of a survey on the matter among NRAs and presented its main results at the SG meeting in Warsaw in May. The main finding was that the majority of SSE NRAs do not seem in favour of reshaping the region since they do not think that it would be the best solution to the problems faced by the SSE region. Instead, they believe that the region should focus on the early implementation of NCs and on the new tasks and activities included in the new Work Plan 2015-2018 under preparation. The new SSE Work Plan 2015-2018 outlines new priority areas and activities and introduces several changes to the organisational structure and working arrangements of the region.

NRAs have sought stakeholders' views on the topic and the final outcome of the discussion at the RCC and SG meetings on 11 and 12 December in Bucharest confirmed the position taken at the May meetings in Warsaw.

In relation to this, it is important to include a reminder that the Madrid Forum, at its 26<sup>th</sup> meeting on 15 and 16 October, invited the European Commission and the Agency to ensure that a potential new geographical set-up of the gas regions, which also includes EnC Contracting Parties, guarantees the necessary cooperation and flexibility for the regions. The Forum also invited stakeholders to participate in the regional groupings structuring exercise<sup>46</sup>. The Agency will follow the new organisational structure and projects proposed by the lead NRAs in the SSE region to see if they provide a sufficient degree of cooperation and flexibility, including with EnC Contracting Parties. If they do not provide this required level of cooperation and flexibility, a different solution may be needed.

<sup>45</sup> http://www.acer.europa.eu/Official\_documents/Acts\_of\_the\_Agency/Publication/ACER%20 Regional%20Initiatives%20Status%20Review%20Report%202013.pdf

Point 3 'Regional Initiatives and Implementation of Network Codes and Guidelines' in 26th Madrid Forum Conclusions: http://www.ceer.eu/portal/page/portal/EER\_HOME/EER\_WORKSHOP/Stakeholder%20Fora/Madrid%20Fora/26supthsup%20Madrid%20Forum



#### 3.4.3. Cooperation with the Energy Community (EnC)

One of the main highlights of the GRI in 2014 has been the new momentum given to the cooperation between the Agency and the EnC, in particular through the GRI SSE region. In relation to this, it is worth taking stock of different statements and developments made at various stages during the year.

The Agency stated in its policy paper 'A Bridge to 2025'<sup>47</sup> that NRAs from third countries that have concluded agreements with the EU committing them to adopt and implement the EU energy acquis should be allowed to participate in the Agency and its activities, including the RI. The European Council also expressed in its 'Conclusions on 2030 Climate and Energy Policy Framework'<sup>48</sup> in October its support for the further strengthening of the EnC.

The 9<sup>th</sup> Energy Community Gas Forum<sup>49</sup>, held on 7 and 8 October in Ljubljana, welcomed the reflection of closer cooperation needs between the EU and the EnC institutions in the Agency's paper 'A Bridge to 2025'. It also welcomed the proposal from the Agency for the potential extension of the GRI SSE region to EnC Contracting Parties. The ECRB expressed its support for including Contracting Parties' NRAs and stakeholders in the GRI process and asked possible pilot projects on EU/EnC borders to be identified.

As already stated in the previous section, the 26th Madrid Forum also invited the European Commission and the Agency to include EnC Contracting Parties in a potential new geographical set-up of the gas regions. In addition, the Forum welcomed the discussion within the EnC on its future and stressed the need for closer cooperation between the EnC Forum and the Madrid Forum.

Finally, on 31 October the European Commission published a Recommendation of 29 October 2014<sup>50</sup> on the application of IEM rules between the MSs and the EnC Contracting Parties, whereby the Commission invites MSs, NRAs, the Agency and economic operators to cooperate with NRAs and operators of the EnC Contracting Parties in the application of the EU internal market legislation for gas and electricity between the Contracting Parties and the MSs.

<sup>47</sup> http://www.acer.europa.eu/Media/News/Pages/A-Bridge-to-2025.aspx

<sup>48</sup> http://www.consilium.europa.eu/uedocs/cms\_data/docs/pressdata/en/ec/145356.pdf

<sup>49</sup> Conclusions available at: http://www.energy-community.org/portal/page/portal/ENC\_HOME/DOCS/3398147/gf%20conclusions.pdf

<sup>50</sup> http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL\_2014\_311\_R\_0020&from=EN





In line with these background statements, representatives from the EnC Secretariat have already begun participating in meetings of the GRI Coordination Group organised by the Agency and have attended meetings of the SSE SG co-chaired by URE and ANRE. This trend to further strengthen the cooperation links between the Agency and the EnC through the GRI will continue, and new, enhanced ways of cooperation will be pursued for the benefit of both organisations and the EnC Contracting Parties.



#### List of abbreviations

4M MC: 4 Markets Market Coupling

ACER: Agency for the Cooperation of Energy Regulators

ACM: The Netherlands Authority for Consumers and Markets

AEEGSI: Italian Regulatory Authority for Electricity Gas and Water

AESAG: Agency Electricity Stakeholders Advisory Group

aFRR: Automatic Frequency Restoration

ATC: Available Transfer Capacity

BNetzA: The Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway

**BPPSG:** Balancing Pilot Project Stakeholder Group

**BRP:** Balancing Responsible Party **BSP:** Balancing Service Provider

CACM GL: CACM Guideline

**CACM:** Capacity Allocation and Congestion Management

**CAM:** Capacity Allocation Mechanism

CAO: Central Allocation Office

**CASC:** Capacity Allocation Service Company

**CBCA:** Cross-Border Cost Allocation

**CEE:** Central-East Europe

**CEETR:** Central-Eastern European Trading Region

**CMO:** Common Merit Order

**CMP:** Congestion Management Procedures

CoBA: Coordinated Balancing Area

**CRE:** French Energy Regulatory Commission

**CSE:** Central-South Europe **CWE:** Central-West Europe

DC: Direct CurrentEB: Electricity Balancing

Ei: The Swedish Energy Markets Inspectorate

**E-GCC**: e-Grid Control Coordination

**EnC:** Energy Community

**ENTSO-E:** European Network of Transmission System Operators for Electricity ENTSOG: European Network of Transmission System Operators for Gas

**EPC:** European Price coupling **ERI:** Electricity Regional Initiative

**ERSE:** The Portuguese Energy Services Regulatory Authority

**ESA:** Early Start Agreement

FB: Flow-Based

FBMC: Flow-Based Market CouplingFCA: Forward Capacity AllocationFCR: Frequency Containment Reserve

FG: Framework Guideline

FTR: Financial Transmission Right

**GCT:** Gate Closure Time





GRI: Gas Regional Initiative

**GRIP:** Gas Regional Investment Plan

GSA: Gaz-System - Auctions

**GTM:** Gas Target Model

HAR: European Harmonised Auction Rules

HLD: High-Level DesignIEM: Internal Energy MarketIG: Implementation Group

I-GCC: International Grid Control Cooperation

IN: Imbalance NettingIP: Interconnection Point

I-SEM: Integrated Single Electricity Market

JAO: Joint Auction Office

LIP: Local Implementation ProjectmFRR: Manual Frequency RestorationMoU: Memorandum of Understanding

MRC: Multi-Regional Coupling

MS: European Union Member State

NC: Network Code

NRA: National Regulatory Authority

**NVE:** Norwegian Water Resources and Energy Directorate

**NW:** North-West

**NWE:** North-West Europe

**OFGEM:** Office of Gas and Electricity Markets for United Kingdom

**PCI:** Project of Common Interest

PX: Power Exchange

**RBP:** Regional Booking Platform

**RCC:** Regional Coordination Committee

RI: Regional InitiativeRR: Replacement ReservesSG: Stakeholders GroupSOO: Security-Oriented Option

SSE: South South-East

TERRE: Trans-European Replacement Reserves Exchange

**ToR:** Terms of Reference **TR:** Transmission Right

**TSO:** Transmission System Operator

UIOLI: Use-It-Or-Lose-itV4: Visegrad Four region

**VIP:** Virtual Interconnection Point

**XBID:** Cross-Border Intraday



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