

ACER Public Consultation on Draft Framework Guidelines on Electricity Balancing

Evaluation of responses

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1 Introduction

On 25 April 2012, the Agency for the Cooperation of Energy Regulators (herein after referred to as the “Agency”) launched a public consultation on the draft Framework Guidelines on Electricity Balancing (herein after referred to as the “Framework Guidelines”), pursuant to Article 6(2) of Regulation (EC) No 714/2009. These Framework Guidelines focus on issues related to technical and operational provision of system balancing and the balancing rules including network-related power reserve rules, covering the areas of Article 8 (6) (h), and (j) of Regulation (EC) No 714/2009. The purpose of this consultation was to present the draft Framework Guidelines developed by the Agency according to the provisions of the Third Package and to solicit feedbacks from stakeholders on the regulators’ approach to date. Stakeholders were also invited to answer some questions included the Framework Guidelines. Along the Framework Guidelines, the Agency also published draft Initial Impact Assessment that presents the problem definition, objectives and policy options for the integration of balancing markets. While this document supports the policy choices presented in the Framework Guidelines, it was not subject to consultation.

On 29 May 2012, the Agency organised a presentation of the Framework Guidelines for the stakeholders.

The public consultation ended on 25 June 2012 and 48 stakeholders responded with the answers to the questions raised or with specific comments to the Framework Guidelines. This document contains the evaluation of the responses received during the public consultation and a summary of the answers provided by the respondents to the 6 questions within the Framework Guidelines. It highlights the main issues raised by the respondents as well as the Agency’s position, and, where relevant, the changes that have been made to the Framework Guidelines text to reflect the comments received in the consultation process. Finally, the respondents commented on several other issues that were not directly related to the questions from the questionnaire. These comments are summarised and addressed in Chapter 3 of this document.

The respondents represented the interests of different associations as well as individual stakeholders from the industry, transmission system operators, consultants, distribution system operators and financial institutions. Annex 2 lists all respondents together with their area of activity.

2 Responses per question

In the frame of the public consultation, the Agency raised 6 questions on issues related to the Framework Guidelines as presented below. A summary of the answers provided by the stakeholders together with the Agency's view and indications of changes to the Framework Guidelines is given below.

Question 1: Do you consider that harmonisation of the pricing method is a prerequisite to establish a TSO-TSO model with common merit order list for balancing energy? Do you support the use of the pay-as-cleared principle?

Summary of stakeholders' responses: The majority of stakeholders agree that harmonisation of pricing method is a prerequisite to establish a TSO-TSO model with common merit order list for balancing energy. Few of them, however, consider that there is not direct link between the two issues and that some minimum harmonisation would be sufficient. The responses on the choice of the pricing method give a general impression that the choice between pay-as-clear, pay-as-bid and some other method is indeed difficult as different methods have different pros and cons, and these methods can function if they are designed in a proper way. As advantages for pay-as-clear method over pay-as bid method, the stakeholders reported that:

- pay-as-clear method is more appropriate for standardised products;
- pay-as-clear method provides more efficient dispatch and more responsive balancing market;
- pay-as-clear method requires less effort for BSPs to prepare bids and it is thus better for smaller BSPs;
- pay-as-clear method gives accurate price signals to BRPs and transparent imbalance price calculation;
- pay-as-clear method creates a level playing field and
- pay-as-clear method can lead to higher profits which would result in incentives for BSPs to participate in balancing market and to investment in balancing resources including Demand Response.

As downsides of pay-as-clear method compared to pay-as-bid method, the stakeholders reported that:

- balancing market and day-ahead market are not comparable as balancing products cannot be standardised to the same degree;
- pay-as-clear method will probably result in higher imbalance settlement prices;
- in pay-as-clear method on European scale the incentives on BRPs in one control area might influence the incentives on BRPs in another control area and an overreaction of BRPs which would cause system imbalance;
- very high complexity of price formation due to continuous/sequential activation of bids, due to activation duration smaller than settlement period and in cases of frequent congestions;
- higher risk of strategic bidding and market power in smaller areas and in scarcity moments;
- conventional generation also gets big revenues in scarcity moments;
- units with substantial start-up and shut-down costs could capture some extra revenue even when their marginal cost of participating in balancing market is zero, or even negative.

A significant number of respondents prefer pay-as-clear method although some of these consider pay-as bid as also acceptable. Approximately equal number of respondents either supports the pay as bid method or they prefer that the decision is made when drafting the Network Code on Electricity Balancing ("Network Code") or at the implementation stage and after proper cost benefit analysis. Some respondents acknowledge the difficulty of decision and have no preference over both methods, while some consider that harmonisation of pricing method is not needed.

The Agency Response: In light of these responses, the Agency still favours marginal pricing (pay-as-cleared) method. To address the concerns of the stakeholders the final Framework Guidelines still require the marginal pricing to be applied at the start. However, the Network Code may define a process for changing the pricing method in case some other pricing method would better facilitate the general objectives defined in Section 2.1 of the Framework Guidelines and objectives of the corresponding Network Code.

Question 2: Do you think the “margins” should not exceed the reserve requirements needed to meet the security criteria, which will be defined in network code(s) on system operation?

Summary of stakeholders’ responses: Some stakeholders are opposing the possibility for TSOs to withhold any bids from common merit order list, and ask for more justification within the Framework Guidelines and Initial Impact Assessment. However, most of them do acknowledge the concept of margins, which are used only for meeting the security requirements, as an acceptable transition towards the final target. Nevertheless, every effort from TSOs, NRAs and the Agency should be made so that they are kept at a minimum and gradually decreased over time as more comfort and experience is gained with liquid cross-border balancing markets. Some stakeholders expressed doubts that margins can be completely removed after the final target is implemented in all control areas. Stakeholders in general asked for the Framework Guidelines and the corresponding Network Code to define a common methodology for specification, conditions and justification of margins. They also asked for monitoring, transparency and stakeholder consultation regarding the application of these margins.

Majority of stakeholders welcome some kind of limitation of margins, and the security criteria or more explicitly, the volume of required/procured reserve seems appropriate. With this respect, many stakeholders asked for harmonisation of reserve requirements at European level. Few stakeholders, however, do not see the need to limit the margins and that NRAs should be empowered to monitor their level. One stakeholder noted that the Network Code on Load Frequency Control and Reserves might define only minimum requirements and quality targets to be respected using Frequency Restoration Reserve and Replacement Reserve, whereas the exact amount or even the dimensioning method might be the responsibility of each TSO.

The Agency Response: The final Framework Guidelines and Initial Impact Assessment have been slightly adapted to provide more details on the concept of margins and to allow specific bids to be used as part of the margins if it can be demonstrated that they cannot be activated by other TSOs. The Framework Guidelines foresee the approval of NRAs for the methodology to define the margins and its application, which will be subject to recurrent review to improve its efficiency. The overall size of the margins have been limited to the maximum amount, which reflects the volume of reserves based on the dimensioning rules foreseen in the Network Code on Load Frequency Control and Reserves. Since the draft of the Network Code on Load Frequency Control and Reserves is currently in progress, the Agency and the NRAs will monitor this process such that the margins will reflect the minimum requirements and quality targets defined by this network code.

Question 3: Do you support to aim at similar target models for frequency restoration reserves and for replacement reserves? Do you think a distinction should be made between manually activated and automatically activated frequency restoration reserves in terms of models of exchanges and/or timeframes for implementation?

Summary of stakeholders’ responses: Some stakeholders see no reason to make a distinction in target models and implementation timeframes between Frequency Restoration Reserve and Replacement Reserve as well as between manually and automatically activated Frequency Restoration Reserve, since these can only be considered as different products. Majority of stakeholders, however, recognise that there might be a few inherent differences, which may require at least different implementation timeframes and similar or to a certain degree different target models for automatically and manually activated Frequency Restoration Reserve. A certain number of stakeholders supported shorter timeframes and higher priority for manually activated Frequency Restoration Reserve and Replacement Reserve and longer timeframes for automatically activated Frequency Restoration Reserve. While many stakeholders supported the same regulatory framework for all types of reserves and implementation of common merit order list for Replacement Reserve, the feasibility and efficiency benefits of implementing a common merit order list for automatically activated Frequency Restoration Reserve (and, to a certain extent, for manually activated Frequency Restoration Reserves) raised some significant concerns. Few noted that manually activated Frequency Restoration Reserve and Replacement Reserve are also different due to the timeframes of exchanges, which require a different scheduling technology (schedules vs. virtual tie-lines). As

feasibility of common merit order list for different Frequency Restoration Reserves is not fully understood, some stakeholders asked for more flexibility in the Framework Guidelines to set up a different model and a possibly regional scope at least for automatic Frequency Restoration Reserve and to base these decisions on cost benefit analyses. While few stakeholders asked for all Frequency Restoration Reserves to be activated automatically, some were against such obligation. Some stakeholders asked for more transparency of activation of Frequency Restoration Reserve and on the decision process to activate Frequency Restoration Reserve and Replacement Reserve. Few stakeholders addressed the need for standardisation of Frequency Restoration Reserve inside and between synchronous areas, while few others expressed concerns and doubts about the feasibility and net benefits of this requirement. Regarding the priorities, the stakeholders asked for first priority in the harmonisation and standardisation of products and common merit order list for all manually activated reserves as well as netting of system imbalances. The target model for automatic Frequency Restoration Reserve is rather envisaged as the second priority.

The Agency response: The Agency recognises the inherent difference between all automatically activated reserves, which are activated by an automatic controller, and all other Frequency Restoration Reserves, which are activated either manually or via some sort of automatic procedure. As the TSOs have different needs to activate different products within the balancing timeframes, the final Framework Guidelines allow different common merit order lists at least for automatic and manual reserves, whereas TSOs can arbitrage between different common merit order lists with the aim to minimise the total costs of balancing energy. Thus, the targets are related to the implementation of common merit order lists, while the implementation timeframes intend to reflect the existing cross-border arrangements and future implementation challenges. To address the concerns about the feasibility and positive net benefits of European wide TSO-TSO models with common merit order list, the final Framework Guidelines introduce some flexibility to modify these targets to a certain extent, based on cost-benefit analysis provided by TSOs sufficiently in advance. The final decision on these targets remains in the hands of the Agency and NRAs.

Question 4: Do you support the timeframes for implementation?

Summary of stakeholders' responses: Responses from the stakeholders have not provided a clear preference and expectation on the times needed for implementation. Some stakeholders called for fast implementation of the target models, while others see the implementation as challenging and would welcome more flexibility to achieve the proposed targets. Stakeholders in general recognise the need for full integration of day-ahead, intraday and forward markets as a priority to achieve the Internal Energy Market (IEM). Integration of balancing market is considered as a fourth step. However, many stakeholders considered that integration of balancing markets can run in parallel to development of day-ahead and intraday market. For this reason and in light of the goal to achieve the IEM by 2014, some stakeholders are of opinion that the proposed timeframes are too long and no proper justification for setting them has been provided. This concern particularly relates to the 7-year deadline to achieve the final target with full common merit order list. They consider that some important elements can be achieved much faster as demonstrated for example by International Grid Control Cooperation. Other stakeholders, however, see the timeframes as appropriate and some even as very challenging. Many stakeholders support more specific and clear milestones in the Framework Guidelines and a step-by-step approach with systematic cost benefit analysis for each step of integration. One stakeholder asked for the possibility to make steps and deadlines relative to each other and to introduce a series of conditions, steps or milestones, which will need to be achieved before each step of integration. Among other things, stakeholders also outlined the need for early implementation through regional and/or pilot projects, the time needed for market participants to adapt and in light of the experience from day ahead and intraday market integration to foresee the possibility of delays and a strategy to avoid them.

The Agency response: The Agency recognises the benefits of a learning process and the need for flexibility in the development and implementation, which might call for careful and extensive evaluation of costs and benefits. The approach foreseen in the final Framework Guidelines is not to describe the path to achieve the targets, but to define clear and feasible targets while giving sufficient flexibility for the implementation. Thus, the final Framework Guidelines introduce some flexibility in the form and implementation of the European-wide targets, notably with possible cost-benefit analysis as a precondition in some circumstances where the feasibility and efficiency benefits cannot be fully

evaluated at present. Nevertheless, the final Framework Guidelines provide slightly shorter deadlines for the implementation of the final targets to address the concerns of the stakeholders and to compensate for the decreased ambitiousness of the model designs introduced by this flexibility.

Question 5: Do you consider regional implementation objectives as relevant milestones, which should be aimed at in these Framework Guidelines on electricity balancing and the Electricity Balancing Network Code(s)?

Summary of stakeholders' responses: The vast majority of the respondents support the regional objectives as relevant milestones that should be aimed at in the Network Codes on Electricity Balancing. However, they noted that it is important that all regional projects are developing fully in line with the final European target. With this respect one group of stakeholders called for regional milestones to be defined in the Network Code, while another group of respondents proposed that the Network Code would provide a top down framework with clearly defined targets, harmonisation requirements and implementation timeframes. From this perspective, stakeholders generally supported a similar approach as used for the integration of day-ahead and intraday market, i.e. combination of top-down approach with European legal framework put in the Network Code and a bottom up approach with regional implementation under the supervision of ACER Electricity Stakeholder Advisory Group.

The Agency response: The final Framework Guidelines keep the same degree of openness for the actual implementation of the targets. The Framework Guidelines allow for both implementation approaches, either through regional projects or through one or several pilot projects. Thus, the Agency aims at continuing the discussion with the stakeholders on the implementation of the targets at the ACER Electricity Stakeholder Advisory Group.

Question 6: Do you consider important to harmonise imbalance settlement? Do you think these Framework Guidelines on Electricity Balancing should be more specific on how to do it?

Summary of stakeholders' responses: Harmonisation of imbalance settlement seems to be important for a majority of stakeholders, and many of them asked for more details in the Framework Guidelines. Stakeholders asked for further elaboration and specification of the following issues:

- Harmonisation of imbalance settlement price. Many stakeholders support a single (symmetrical) price based on marginal bid of balancing energy, while few consider that a combination of pay as bid for balancing energy pricing and marginal pricing for imbalance pricing is more appropriate;
- Harmonisation of BRP incentives. Most stakeholders argue that imbalance price based on marginal bid of balancing energy will provide the most efficient balancing and correct incentives for BRPs to be balanced ahead of real time. Any additional penalties might incentivise market participants to withhold balancing resources for their own purpose;
- Harmonisation and clarity on calculation of imbalance volumes. Stakeholders in general prefer portfolio responsibility and no distinction between load and generation;
- Few stakeholders asked for larger balancing perimeters based on bidding zones. This would imply one single imbalance volume and imbalance price within bidding zone;
- No obligation to be balanced in day-ahead stage, but to provide only the best forecast to TSOs;
- Harmonisation of imbalance settlement period. Many stakeholders advocated that this period should be set to 15 minutes, while few recognised that the transition to consider such requirements may not necessarily ensure net efficiency benefits for some Member States.
- Clear separation and transparency of costs related to congestion management and costs of balancing the system;
- Few stakeholders advocated that harmonised treatment of other balancing costs (e.g. reserve procurement costs) should also be considered in imbalance settlement;
- Stakeholders widely support that generation units from intermittent renewable energy sources should not receive special treatment for imbalances, while few had concerns that this will provide barriers for smaller renewable generators;
- Harmonisation of the type of published information and timeframes for their publication;

Majority of stakeholders asked for these principles to be defined in the Framework Guidelines, while few consider that some provisions in the Framework Guidelines are already too restrictive and would

prefer to leave these questions open for the Network Code drafting process and further consultation with stakeholders.

Few stakeholders do not see the harmonisation of imbalance settlement as a priority, whereas few of them only acknowledge the need for minimum harmonisation based on general principles and leaving the Member States the freedom to design the imbalance settlement according to their specific needs. Few asked for more motivated reasons why imbalance settlement falls within the cross-border issues.

The Agency response: Based on the responses from stakeholders, the final Framework Guidelines keep a similar level of ambitiousness on the requirements for the imbalance settlement, and now set a clear deadline to harmonise the main features of imbalance settlement. Nevertheless, more flexibility has been allowed in harmonising the imbalance settlement period. Indeed cost-benefit analyses have been introduced to determine if the harmonisation across Europe is valuable and to identify whether some control areas are likely to benefit from a different imbalance settlement period. The Initial Impact Assessment has been also updated to reflect the concerns of the stakeholders.

3 Other issues raised during the consultation process

The stakeholders also raised a number of other issues regarding the Framework Guidelines. First they stressed the necessity to ensure a high level of consistency between different network codes – including Capacity Allocation and Congestion Management and System Operation - to avoid any redundancy and/or incompatibility (e.g. relations between parties, definitions, etc.). Some of them advocated the need to define common regulatory approval procedures, with a systematic involvement of stakeholders in the process. Some serious concerns were raised on the possibility for derogations without clear and transparent criteria and with limited participation of other NRAs and stakeholders, generating a risk of hampering the integration process.

Some additional suggestions were made with respect to the general objectives and principles of the Framework Guidelines. Few stakeholders advocated the development of a cost-benefit analysis to define an optimal trade-off between security of supply and balancing costs. An important matter was the limited consideration of central dispatch market design while drafting the Framework Guidelines. Some stakeholders recognized the need to prevent TSOs from being able to provide balancing services. Very few believed that harmonisation of tariffs for recovery of balancing cost is necessary to establish a cross-border balancing market, while few others required the harmonisation of the terms and conditions related to balancing in order to create a level playing field. The importance of Demand Response as a balancing service was mentioned several times, together with the need to remove regulatory barriers for its development that exist in some current market rules. Some stakeholders argued that non market-based procurement of balancing services might be more appropriate in some circumstances. A minority of stakeholders asked commented on reporting requirements, which may be too onerous and divert resources from delivering key actions for integration.

In a mid-term perspective, some stakeholders were of opinion that BSP-TSO model to exchange balancing energy is likely to generate quick benefits, while being transparent and leaving to market participants the possibility to choose in which market they bid. Most of stakeholders were against any kind of mandatory participation, except in cases of emergency, while few of them additionally pointed out the need for harmonisation of voluntary provision at European level. Few respondents opposed the possibility for TSOs to define margins, so that all bids without exception should be shared in common merit order list. Some advocated that deviation from merit order may be possible to solve internal congestions, however, balancing energy price and imbalance price should not be affected and additional costs should be covered by tariffs. One stakeholder commented that different common merit order lists should be possible for different types of products. With respect to the geographical scope of cross-border exchange, one stakeholder advocated that it needs to be limited to a certain extent in order to properly monitor the state of the system and to react immediately to unexpected grid situations.

Many stakeholders commented that the Framework Guidelines should better address Frequency Containment Reserves. Few stakeholders advocated for regional or European sizing and procurement of reserves as well as sharing of reserves and related costs among TSOs. Some asked for shorter procurement timeframes while any longer term procurement should be justified by TSOs. One stakeholder commented that procurement of reserves should be made distinctly for upward and downward reserves. Concerning the exchange of reserves, one stakeholder specified that they should not be limited to adjacent control areas, while another proposed that no option for the models to exchange reserves should be excluded at this point.

A couple of stakeholders proposed to refer to common Capacity Management Module as developed for the Intraday market, to facilitate the use of remaining capacity after intraday for the cross-border exchanges of balancing energy. Many stakeholders opposed any possibility of reservation of cross-border capacity for balancing and that all capacity should be first given to forward, day-ahead and intraday market. Concerns were raised regarding the challenges in estimating social welfare as well as the status of the entity, which should be responsible to perform the study.

Many stakeholders supported the Framework Guidelines requirements that generation units from intermittent renewable energy sources do not receive any special treatment. However, some argued it might be more efficient that the net system variation due to load and RES uncertainty is managed by a single entity on an aggregate basis. Few stakeholders asked for explicit reference to set gate closure time at one hour before real time at the earliest. Many stakeholders are of opinion that TSOs should not get involved in activating balancing energy in timeframes where market parties are still active. Few stakeholders asked for more real time information that would enable market participants to better assess their current positions. One stakeholder required that the costs of contracted reserves are not included in the imbalance prices.

Few stakeholders asked for the right balance between harmonisation and possible subsidiarity. One stakeholder proposed only a minimum level of harmonisation to achieve efficient and integrated cross-border balancing, while leaving as much as possible room for local variations where deemed necessary. With this respect, he advocated a clear distinction between cross-border and national issues. One stakeholder proposed that the network code should define a set of compatible options for all issues and leaving the decision to Member States to choose the appropriate ones to meet their specific needs.

Concerns were also expressed that the very ambitious targets could go beyond what is practically manageable in real time operations or would require very high costs. Few stakeholders commented on the study performed by the EC related to impact assessment of European balancing market. One stakeholder asked for wider public consultation of the study report while few stakeholders proposed that the study should in particular focus on certain aspects of balancing market integration.

The other issues raised during public consultation by the stakeholders have been grouped into eight topics and are presented in the table below, alongside the responses from the Agency as well as the changes to the Framework Guidelines, where relevant.

Respondent's comment	The Agency response and proposed changes in the FG where relevant
1. General provisions	
<p>One stakeholder asked for clearer distinction between the Framework Guidelines' requirements related to cross-border and national arrangements. In the absence of such clarity, it is difficult to assess the full implications of the Network Code precedence over national frameworks.</p>	<p>Disagree. The distinction between cross-border and national arrangements in the Framework Guidelines is in line with Article 8(7) of the Electricity Regulation.</p>
<p>Few stakeholders asked for better or different definitions of "Balancing", "Imbalance Settlement", "Demand Response", "Imbalance" and "Bidding Zone", while two stakeholders asked to provide a definition of "socioeconomic consequences" and "operators of balancing markets" as well as more structured definition of all reserves. Few stakeholders also asked for consistency of definitions between different network codes.</p>	<p>Partly agree. Some definitions in the final Framework Guidelines have been adapted and consistency with the Network Code on CACM has been sought. New definitions are not needed as the final Framework Guidelines provide enough clarity to these terms. The consistency between different network codes is regularly being monitored by the Agency and ENTSO-E.</p>
<p>Several stakeholders asked for vigilance of ENTSO-E and the Agency to avoid redundancy and incoherence between various network codes as much as possible. Some expressed the need for more precise interaction between Network Code on Electricity Balancing and Network Code on CACM in order to ensure compatibility between both, while for others, the concrete implications of the principles and requirements from Network Codes on System Operation seem to be underestimated. In particular some aspects of the relationship between BSPs/BRPs and TSOs does not seem to be mentioned in the Framework Guidelines and it should thus be explained in which network code this shall be done.</p>	<p>Agree. While the main responsibility for this coherency and consistencies lies with the ENTSO-E, the Agency shall remain vigilant in identifying possible inconsistencies during the drafting of the Network Codes and when providing the reasoned opinions.</p>
<p>Few stakeholders commented on the application of the Framework Guidelines and the Network Code. One stakeholder commented that the Network Code should be directly applicable not only to TSOs but to all EU citizens. Another stakeholder commented that the NRA involvement should have a European perspective and thus the Network Code should define a process for common regulatory approval procedures. One stakeholder also commented that NRAs should not only be able to review and reject or adopt, but also amend TSO proposals. Prior to such approval processes market participants should be informed, involved and consulted. One stakeholder proposed that the Framework Guidelines should additionally require that any implementation of the Network Code should foresee a sufficient time for market players to adapt to the new regimes.</p>	<p>Agree. The Framework guidelines have been adapted accordingly. The competences of NRAs and the Agency are laid down in Directive 2009/72/EC and Regulation No 713/2009 and there is no need to repeat them in the Framework Guidelines. The timeframes in the Framework Guidelines are in general sufficiently long to allow for adaptation of the stakeholders and the determination of the transitory period already foresee consultation with the market participants.</p>

Few stakeholders expressed two kinds of concerns about the possibility for derogations. Firstly, such possibility would add additional delay to the already very long implementation deadlines. Secondly the conditions for granting such derogations provided in the Framework Guidelines are unclear and could imply that each MS having different national rules could apply for derogation, while in reality vast majority of TSOs are in a very similar position which does not require derogation. They would prefer no possibility for derogation. However if derogations are allowed, the process of granting them should be very clear and should also involve consultation with other NRAs and affected stakeholders. Few stakeholders proposed that the Agency would be given a role not only to monitor granting derogations but also to provide an opinion in favour or against a derogation request.

Partly agree. Due to the challenging targets and timeframes and due to the very different balancing regimes currently existing in Europe, the possibility for derogation is needed in the Framework Guidelines. The final Framework Guidelines have been adapted to add more clarity on derogations and a role is given to the Agency to monitor the derogations, as well as to provide opinion to NRAs decisions based on Article 7(4) of Regulation (EC) No 713/2009.

2. General principles

Many stakeholders agree with the overall objectives and principles pursued in the Network Code and stressed that efforts must be maintained that the Network Code is indeed drafted in line with these principles. Some additional suggestions for objectives and principles have been proposed:

1. Providing common rules, equal terms and free entry to all market participants;
2. Providing incentives for BSPs to make all resources available for balancing;
3. Promote proactive balancing of TSOs after the intraday gate closure time;
4. Harmonised structure for financing the procured balancing services;
5. Considering European Policy objectives to increase renewable generation;
6. Minimising the needs for procurement of balancing services;
7. Provide incentives for BRPs to balance themselves;
8. Providing system adequacy and efficient optimisation of resources in different control areas;
9. Increased participation of demand, not only for Frequency Restoration Reserves, but also for Frequency Containment Reserves.

Agree. The Framework Guidelines have been updated to a certain degree. They now provide a set of general objectives, which explicitly or implicitly include most of these suggestions.

One stakeholder proposed that the Framework Guidelines should indicate some parameters in system operation, which should be viewed from an integrated perspective and not from national perspective. Examples are reserve requirements, control targets etc. One stakeholder proposed to introduce a cost-benefit analysis to define the optimal trade-off between cost of reserves and security of supply. The principles to be applied in this kind of optimisation might preferably be set out in these Framework Guidelines.

Partly agree. Indeed measuring the performance of TSOs in balancing the system would be needed in the future. However, this can only be set in the network codes on system operation. Nevertheless, the final Framework Guidelines do require some indicators to be reported in the annual report. The analysis of the trade-offs, as well as integrated indicators, might indeed be interesting features of future development.

Few stakeholders commented that the Framework Guidelines do not recognise that currently, in some countries, the balancing market design is based on a central-dispatch model. In some countries, there is a need for central-dispatch in order to ensure system security at minimum costs for the end consumer.

Agree. The final Framework Guidelines have been slightly adapted to recognise the existence of central dispatch systems. Nevertheless, the Framework Guidelines are still clear that central dispatch systems shall also implement the target model in a way to comply with the general principles defined in the Section 2.1.

<p>Few stakeholders commented that the Framework Guidelines should be consistent with unbundling requirements of the third package and should explicitly forbid the offering of balancing services by the TSOs. One respondent considered that if such arrangements exist, they should be clearly justified with an accurate quantitative cost-benefit analysis.</p>	<p>Agree. Final Framework Guidelines provide more clarity on this issue, by explicitly forbidding such arrangements unless the security of supply is endangered.</p>
<p>One respondent highlighted that the integrated balancing market promoted by the Framework Guidelines interferes with the local responsibilities of TSOs. Thus a key requirement for any model for integrating a balancing market is that it remains compatible with such responsibilities, which are needed due to the size of the largest synchronous area and are essential e.g. to congestion management and to policies governing emergency state.</p>	<p>Partly agree. While the final Framework Guidelines aim at keeping a minimum interference of the targets with the local responsibility of TSOs, it is almost impossible to achieve an integrated balancing market without imposing higher level of coordination between TSOs and imposing joint responsibility in some areas.</p>
<p>Few respondents considered that TSO-TSO model creates exclusive relations between participants and the TSOs leading to potential market distortions, such as asymmetry of information and exercise of market power. Thus, the Framework Guidelines should foresee that (cross-border) balancing market (at least for Frequency Restoration Reserves and Replacement Reserves) is organised by an independent market operator, and TSOs act in this market as single buyers. Two respondents considered that the Framework Guidelines should be more general and give balancing responsibilities to System Operators (i.e. TSOs and DSOs).</p>	<p>Disagree. Given the nature of balancing and the significant influence on the TSO responsibility on the security of supply, the TSO – TSO model is the most pragmatic approach to cross-border exchange balancing services. Ensuring level playing fields and a high level of transparency should adequately address these concerns. Moreover, the reference to fundamental roles and responsibilities of TSOs in balancing is envisaged to be compatible with both current and foreseen design of balancing markets.</p>
<p>One respondent outlined the need to introduce harmonised tariffs to recover costs linked to balancing as a prerequisite for establishing a cross-border balancing market.</p>	<p>Disagree. Harmonisation of tariffs is out of the scope of these Framework Guidelines.</p>
<p>Few stakeholders welcomed the requirement to establish a framework for discussion with and information to relevant stakeholders as well as the formal process for public consultation and the possibility for BSPs and BRPs to propose amendments to the terms and conditions for balancing. One respondent considered the Framework Guidelines requirements for TSOs to adopt the terms and conditions related to balancing would lead to an onerous administrative exercise and a simplified approach should be adopted as such a broad approach may not be appropriate for all areas.</p>	<p>Partly agree. The Agency considers the approach foreseen in the Framework Guidelines as relevant, proportionate and general enough to be applied by all TSOs.</p>
<p>Many respondents welcomed the Framework Guidelines requirement that load entities (whether through aggregators or not) as well as generation units from renewable and intermittent energy sources to be allowed to become BSPs. Some stress that these conditions should be harmonised at the European level in order to create a level playing field and remove entry barriers.</p>	<p>Partly agree. The Framework Guidelines require that the terms and conditions are established in line with the Network Code, which shall define the main principles to ensure the level playing field for all market participants. Nevertheless, full harmonisation of terms and conditions would be very challenging due to very different national legislations.</p>

<p>Few stakeholders outlined the importance for demand response participation in the balancing market, as this will have significant implications for consumers and the development of demand side resources' market and smart products in Europe. According to them, the challenge lies in establishing the standards for demand response participation and removing regulatory and barriers imposed by market rules. Two respondents, however, stressed that demand response should be addressed as any other balancing products and not subject to special treatment.</p>	<p>Partly agree. The Framework Guidelines require from the Network Code to foster the participation of demand response. It is not clear yet what would be the level playing field between generation and demand in the balancing market due to the inherent differences between the two. Nevertheless, it is probable that any rule that was developed to facilitate the participation of generation will need to adapt to consider the ability of demand response to provide balancing services.</p>
<p>Few stakeholder raised concerns that market based procurement of balancing services in small systems with insufficient resources to allow competition, might not be a feasible and/or efficient solution. Given the market power of incumbents in many smaller control areas, such an extensive interpretation of market-based procurement may lead to a significant increase in balancing costs. This requirement poses major risks in terms of security of supply on such systems. The same concerns were raised for centrally dispatched markets. Mandatory provision (at regulated prices) or cost-based procurement of balancing services is proposed as an alternative for such cases.</p>	<p>Disagree. The Framework Guidelines cannot promote non-market based principles for the procurement of balancing services. Imposing market-based methods does not prevent the national regulatory or competition authorities to intervene in case of insufficient competition or market power situations.</p>
<p>Few respondents stressed the importance of transparency in creating the well-functioning integrated balancing market. Some respondents commented that transparency requirements should also include:</p> <ul style="list-style-type: none"> a) justification and information on contracted reserves, b) all information related to procurement process and its outcome, c) activation of balancing energy bids out of merit order for purposes not related to balancing, d) information mentioned in page 14 (short-term predictive forecasts of system conditions). 	<p>Partly agree. In principle, the transparency requirements in these Framework Guidelines mimic the requirements defined in the upcoming guidelines on electricity market transparency. While some of these suggestions have already been included the draft final Framework Guidelines, the final version have been adapted to include some of these suggestions. Proposal on the short-term predictive forecasts go beyond the requirements in guidelines on electricity market transparency.</p>
<p>Few respondents stressed the need that all information published by TSOs is provided in English language, under all circumstances (not only when relevant) and in an open access and open source format.</p>	<p>Agree. While some changes have been introduced in the Framework Guidelines, the upcoming guidelines on electricity market transparency shall define the exact requirements on the modalities of publication.</p>
<p>Two respondents considered that the quick publications of ex post information on bidding might unintentionally disclose commercially sensitive information and should thus be avoided and as a minimum published anonymously</p>	<p>Agree. The anonymity has been added in the Framework Guidelines and the bids could be published in aggregated format to address these concerns.</p>
<p>Few stakeholders stressed the need for the Framework Guidelines to require stakeholder involvement in reporting, in particular in performing cost benefit analyses (e.g. for reservation of cross-border capacity) and that reports are publicly available to all interested parties.</p>	<p>Disagree. While stakeholders involvement is indeed very important, such involvement in preparation of analyses would be very time consuming and inefficient. Stakeholders shall be allowed to express concerns about the methodology and results in the consultation phase. In case of reservation of cross-border capacity, the methodology for cost-benefit analysis shall also be consulted.</p>
<p>One respondent considered the reporting requirements as too onerous, which will divert resource from delivering the requirements. The reporting process needs to be more proportionate, thus, instead of annual, biennial reporting should be foreseen.</p>	<p>Partly agree. While the reporting and monitoring is very important in achieving the target model(s), some changes have been introduced in the Framework Guidelines with this respect.</p>

<p>Few respondents expressed the concerns that the Framework Guidelines and the Network Code could introduce double reporting of market participants to TSOs and DSOs. Some of them propose that the units connected to the DSO grid should provide information only to the respective DSO, whereas some propose that the reference to DSOs should be deleted.</p>	<p>Partly agree. While it is out of scope of the Framework Guidelines to define exactly to whom such data will be delivered, in some cases both TSOs and DSOs will need this data and a requirement to deliver the data to both should not be significantly more burdensome compared to the alternative solutions.</p>
<p>3. Activation and cross-border exchanges of balancing energy</p>	
<p>Few stakeholders are of opinion that as an interim step towards a full TSO-TSO model at least in the short-term, the BSP-TSO model should be allowed, since this would bring significant benefits in the short term. One stakeholder proposed that market participants should be able to bid in any market independently of the TSO responsible for its local control area.</p>	<p>Partly agree. While the Framework Guidelines define the TSO-TSO model as the final target, they do not forbid the development of the interim solutions, such as BSP-TSO model, for exchanges of balancing energy, even though from this perspective, the features of interim TSO-TSO model may be more in line with the final target. In any case, given the short implementation deadlines, the development of solutions, which are intrinsically different from the final target, is not likely to be the most efficient approach.</p>
<p>Many stakeholders responded on the Framework Guidelines requirement that allows TSOs to require information on unused generation capacity after day-ahead and intraday markets and require them to promote the offer of this capacity in the balancing markets. While some consider this as non-proportionate, unnecessary and very burdensome for stakeholders, other stakeholders view this as an indication of mandatory participation in the balancing market. Most of stakeholders are against any kind of mandatory participation, except in cases of emergency, which should be defined in network codes on system operation. Balancing should be competitive enough to attract from both the supply and demand side all technologies, which are technically able to provide the required service. Few stakeholders additionally pointed out the need for harmonisation of voluntary provision of balancing services at the European level in order to avoid discrimination and competition distortions.</p>	<p>Partly agree. The Framework Guidelines have been slightly modified to ensure that such obligation can be imposed by TSOs subject to existing legal frameworks or approval of respective NRAs. Thus, the Framework Guidelines do not require harmonisation of such obligations on European level as this is not considered as essential for integrating balancing markets.</p>
<p>One stakeholder suggested that in order to take into account the implicitly exchanged balancing energy in a form of unintentional deviations, the Framework Guidelines should be more explicit that the system of compensating for unintentional deviations should be revised.</p>	<p>Agree. With this respect, the Framework Guidelines are quite explicit, since they require a financial compensation mechanism for exchanges arising from unintentional deviations.</p>
<p>One respondent suggested that the criteria for the activation of bids in the merit order list should not only include the price, but also Greenhouse Gas emissions that result from the activation of an offer, to be in line with principles set forth in directive 2004/17/EC.</p>	<p>Disagree. There are no reasons to deviate from the objectives of the day-ahead and intraday markets. Given the EU Emission Trading Scheme, the Greenhouse Gas emissions should already be included in the bids for balancing energy.</p>

<p>Few respondents oppose the possibility for TSOs to define margins and that all bids without exception should be shared in the common merit order list. One respondent proposed that margins should be minimised as far as possible and that cost benefit analyses to justify them and NRA approval are needed. One respondent feared that using margins could lead to very high imbalance settlement prices in certain situations and that their use should thus be reconsidered.</p>	<p>Partly agree. The final target foresees that all bids collected by TSOs are shared in the common merit order list. However, since the TSOs are responsible for ensuring the security of supply and need to respect certain security requirements the possibility to define such margins allows a learning process to reach the final target. The Agency expects that as long as the cheapest resources are shared, such margins should not lead to significant welfare loss.</p>
<p>Few stakeholders outlined the need for the Framework Guidelines to provide more clarity on principles for activation of balancing energy. The Framework Guidelines should be more specific that activation is performed based on merit order (to avoid incentives to arbitrage on the differences in procurement of reserves), except in case of internal congestion. In this case, the price of balancing energy as well as the imbalance price should not be affected and additional costs caused by internal congestion should be covered from tariffs. They asked for clear boundaries and strict monitoring of implementation of these requirements.</p>	<p>Agree. Some amendments in the Framework Guidelines have been made to provide more clarity on this issue. In particular, clarity on activation of bids and clarity on using balancing energy bids for congestion management has been added.</p>
<p>One stakeholder commented that different common merit order list should be possible for different types of products (e.g. automatic and manual Frequency Restoration Reserves) and that it should be possible to activate balancing energy out of merit order in order to allow for a complex optimisation process with constraints where activation is performed according to technical-economic criteria.</p>	<p>Partly agree. The Framework Guidelines allow for different common merit order lists for manual and automatic reserves. However, where the target model is based on common merit order list, the activation out of merit order shall not be allowed and if applied anyway, it should be justified transparently. The final Framework Guidelines require activation based on merit order list subject to operational security limits.</p>
<p>Few respondents raised concerns about the Framework Guidelines requirement on common merit order list for automatic Frequency Restoration Reserves. Merit order activation might have a negative impact on the dynamic response of the products which are traditionally activated in parallel and could lead to increase in reserve requirements. Having the same common merit order list for these products across different synchronous areas would further complicate the activation process. An optimised real-time activation of different automatic Frequency Restoration Reserves products being activated differently will require an extremely complex control system depending on the real-time availability of cross-border capacity and interfering with the activation of cross border exchanges of manually activated products. Thus, the net benefits for such solutions are questionable.</p>	<p>Partly agree. The application of the common merit order list for automatically activated reserves is proved feasible in some balancing markets in Europe. Nevertheless, the Framework Guidelines have been adapted to allow for development of a target model, which is still based on common merit order list, but allows for these concerns, if proved justified, to be adequately addressed.</p>

<p>Few stakeholders stressed the need for the Framework Guidelines to provide more clarity on how the common merit order list is constructed and to oblige TSOs to submit bids to common merit order list without changing them in any way in order to avoid any discrimination between different bids. One stakeholder pointed out that while BSPs should be able to offer balancing energy, without having a reserve contract, however, they should still satisfy all terms and conditions to qualify as BSP. One stakeholder proposed that balancing energy bids from contracted reserves should be changed before entering common merit order list in a way to “factor in” the reserve prices and to allow fair competition with bids without contracted reserves.</p>	<p>Partly agree. The Framework Guidelines provide general principles of common merit order list, whereas the exact modalities will be defined in the Network Code. It is inherently given that all market participants bidding in the balancing (energy) market must qualify as BSPs. The concerns about fair competition between bids from contracted and non-contracted reserves should be addressed with the free participation and competition on reserve procurement and balancing energy market. This would set competitive prices for reserves reflecting the marginal costs of providing reserves taking into account the expected revenues from the balancing energy market.</p>
<p>Two stakeholders commented on the geographical scope of exchanges of balancing services. One stakeholder commented that netting of system imbalances should not be applied only between neighbouring TSOs, but to non-neighbouring as well. Another stakeholder argued that the geographical scope of cross-border exchanges should be limited to certain extent. This would enable TSOs to monitor constantly the state of the system based on a manageable number of indicators and to react immediately on unexpected grid situations.</p>	<p>Partly agree. The netting of system imbalances should indeed not be limited only to neighbouring TSOs. The Framework Guidelines have been adapted to allow a modification of certain features of the model. Among such modifications, limited geographical scope could be introduced to enable TSOs to gain experience with exchanging balancing resources across large areas. Nevertheless, the Agency still expects that in the final model, there are no limitations to such exchanges, except for those defined by the operational security constraints.</p>
<p>4. Procurement and exchanges of contracted reserves</p>	
<p>Two stakeholders commented on probabilistic approach to sizing and cross-border exchanges of reserves. One stakeholder pointed out that probabilistic approach is already used to size reserves in some areas due to increasing importance of forecast errors compared to contingencies. However, the importance of contingencies will still need to be considered in the future and this will limit the possibility to share reserves without reservation of cross border capacity. Another stakeholder advocated a probabilistic approach to secure reserves in other markets in shorter timeframes, when probability of free cross-border capacity is high.</p>	<p>Agree. Recognising the importance of remaining contingencies, the agency expects that reserve sizing will become more dynamic in the future and short-term reserve procurement will be followed regularly. The exchanges of reserves, based on the probability of free cross-border capacity, could thus be done as a part of the assessment process, by combining the probability or likelihood of different outcomes (e.g. contingency, availability cross-border capacity, availability of bids in common merit order list, forecast error, etc.)</p>
<p>Few stakeholders advocated for regional or European-wide sizing and procurement of reserves as well as sharing of reserves and related costs among TSOs. This approach would prevent free riding behaviour and would require harmonised security standards and a framework for procurement and financing of contracted reserves.</p>	<p>Agree. While the sizing of reserves is out of the scope of the Framework Guidelines, the Agency in principle agrees that coordination between TSOs in sizing and procuring reserves is needed. The models for exchanges of balancing reserves also foresee common sizing and sharing of reserves, as well as a combined approach to allocate cross-border capacity between energy and reserves within the same allocation process.</p>

<p>Few stakeholders advocated for shorter procurement timeframes, in particular day ahead and eventually only intraday procurement, while any longer term procurement should be justified by TSOs. This would allow meeting the dynamic needs for reserves due to increasing RES penetration, lower the entry barriers for some BSPs that cannot enter into long-term contracts and would create a liquid short-term reference price for flexibility that would be useful for long-term hedging. One stakeholder promoted common (regional) daily auctions for the procurement of reserves.</p>	<p>Agree. The Framework Guidelines have been adapted to require from TSOs to justify the procurement timeframes. In particular, any long-term procurement should be transparently justified.</p>
<p>One stakeholder commented that procurement of reserves should be made distinctly for upward and downward reserves allowing more efficient utilisation of existing balancing resources.</p>	<p>Agree. The Framework Guidelines have been updated accordingly.</p>
<p>Many stakeholders commented that the Framework Guidelines should provide more details and clarity on Frequency Containment Reserves. Firstly, they consider that Frequency Containment Reserves should be procured through market mechanisms; otherwise, TSOs might have an incentive to decrease the needs for Frequency Restoration Reserves by increasing the needs for Frequency Containment Reserves. The Framework Guidelines should provide a clear definition of Frequency Containment Reserves and their role in restoring the system balance as well as more clarity on the procurement mechanism and cost recovery for TSOs. Secondly, the Framework Guidelines should also explain how and to what extent Frequency Containment Reserves affect the price of balancing energy and imbalance settlement price. In general, these stakeholders would prefer if the definition, procurement and activation of all three kinds of reserves were managed in these Framework Guidelines.</p>	<p>Disagree. It is the opinion of the Agency that the procurement and activation of Frequency Containment Reserves have, at the moment, little influence on cross-border balancing market and it is thus out of scope of these Framework Guidelines. The amount of Frequency Containment Reserves should follow clear and justified principles valid throughout EU. The Framework Guidelines do not give clear specification on imbalance pricing, but it requires harmonisation of main features of imbalance settlement (therefore including imbalance pricing). Clarity on imbalance price formation is expected within this harmonisation.</p>
<p>One stakeholder commented that the Framework Guidelines should not incentivise TSOs to procure fewer reserves in the future and that the amount of procured reserves should be guided only by the compliance with the requirements of Network Code on Load Frequency Control and Reserves. Thus, any incentives put on the TSOs should not conflict with such requirements.</p>	<p>Partly agree. While the Agency agrees that the requirements of Network Code on Load Frequency Control and Reserves should always be met, the Framework Guidelines aim at ensuring that these requirements are met in a cost-effective manner. Thus, incentives are needed for TSOs to maintain security of supply in the most efficient way.</p>
<p>Some stakeholders requested more clarity on the procurement of contracted reserves. One stakeholder commented that the Network Code should not only define the timeframes and the duration of reserve procurement, but also the duration of the call. Another stakeholder proposed to forbid explicitly that TSOs impose unnecessary restrictive conditions on reserve products (such as a minimum size of more than 1 MW or restrictions on pooling of reserves).</p>	<p>Agree. The Framework Guidelines are clear enough with this respect, since they define the general principles to be considered by the Network Code when defining of reserve products and reserve procurement. These principles should ensure free entry and participation of demand response and smaller units. When the Agency will provide a reasoned opinion on the Network Code, these objectives and principles will be considered.</p>
<p>One stakeholder commented that for the reasons of security of supply, the benefits and the risks of collateralisation of reserves must be investigated, and conditions for allowing it should be explicitly stated.</p>	<p>Partly agree. The Framework Guidelines are allowing the Network Code to provide more clarity on this issue, if these concerns would prove to be justified.</p>

Few stakeholders commented on the models for exchange of balancing reserves. Some commented that these are only alternatives and do not oblige TSOs to exchange reserves nor do they guarantee any implementation. Another stakeholder commented that exchange of reserves should not be limited to adjacent control areas. One stakeholder asked for more clarity on whether both TSO-TSO and TSO-BSP arrangements are possible and proposed that no option should be excluded at this point. He also considers the definition of “sharing of reserves” as too comprehensive as there could be opportunities to share reserves and reduce the total reserve requirements without a common and fully coordinated use and activation of reserves.

Partly agree. The Framework Guidelines have been adapted to provide more clarity on the exchanges of reserves and to address better the sharing of reserves. Nevertheless, it is expected that integration of balancing markets will be achieved mainly via exchanges of balancing energy, thus the need to exchange balancing reserves will be of secondary importance, as it is closely related to making cross-border capacity available.

5. Reservation and use of cross-border capacity for balancing

Few stakeholders outlined that the Framework Guidelines provisions on the use of cross border capacity and the related cost recovery for exempted interconnectors do not ensure cost recovery for single interconnector operators, which cannot be exempted, and cannot recover the costs for losses through tariffs either. They propose to allow the cost recovery also for single interconnector operators. Few other stakeholders argued that the cost of losses should not be able to influence the use of capacity unless proven socioeconomically sound.

Agree. The Framework Guidelines have been adapted to recognise this problem. The cost recovery of losses in balancing timeframe shall be consistent with the day-ahead, intraday timeframe and subject to regulatory approval.

Two stakeholders proposed to refer to common Capacity Management Module (CMM) as developed for the Intraday market. This would facilitate the use of remaining capacity after intraday market for the cross-border exchanges of balancing energy.

Disagree. The Framework Guidelines recognise the high likelihood that the module for accessing the capacities for cross-border exchanges will need to include a more detailed representation of the network compared to intraday timeframe (e.g. frequent internal congestions).

Many stakeholders opposed any possibility of reservation of cross-border capacity for balancing. Thus, all capacities should be first given to forward, day-ahead and intraday market, whereas only the remaining capacity could be used for balancing. Concerns were raised regarding the challenges in estimating social welfare, about the independency of the party performing the study from the party benefiting from reservation. If reservation is allowed, then it should be based on TSOs buying back the capacity from market participants, it should not exceed a period of one year and regulatory approval as well as proper involvement of market participants must be ensured.

Disagree. It can be expected that capacity and flexibility will be important in future integrated electricity market with high penetration of renewable energy sources. Thus, the optimal allocation of cross-border capacity to energy and reserves market will become more important. The Framework Guidelines are precise enough to guarantee that such ex-ante allocation of capacity to reserves, if allowed, should lead to higher social welfare.

Few stakeholders welcomed the possibility to reserve of cross-border capacity for balancing. One stakeholder asked for proper compensation mechanism for TSOs not benefiting from such capacity reservation.

Partly agree. The cost benefit analysis foreseen for such process also requires the distribution of costs and benefits to be taken into account. Nevertheless, the congestion rent from such reservation and from capacity auctions for energy should be distributed in equal terms.

6. Balance responsibility and imbalance settlement

<p>Few stakeholders noted that in 9 Member States the responsibility for Imbalance Settlement is given to entities other than TSO. They suggest that the Framework Guidelines should define an Imbalance Settlement Responsible Party, which can be an entity other than TSO.</p>	<p>Agree. The final Framework Guidelines are providing additional clarity that responsibility for imbalance settlement may not lay on TSOs exclusively.</p>
<p>Many stakeholders supported the Framework Guidelines requirements that generation units from intermittent renewable energy sources do not receive any special treatment. It should be clearly mentioned that BRPs should be the solely responsible parties for their imbalances, bearing the financial risks of being imbalanced. One stakeholder commented that such obligation on renewable generators, if being experienced as retroactive, should provide for financial compensation. Two stakeholders feared that such obligations would push smaller independent generators towards the larger utilities and decrease competition. In their opinion, it is more efficient that the net system variation due to load and RES uncertainty is managed by a single entity on an aggregate basis. They proposed that this should be a matter for each Member State to decide.</p>	<p>Partly agree. The purpose of the Framework Guidelines is that intermittent renewable energy sources are more responsive to the dynamics of the balancing market and should thus be financially responsible for their imbalances. This does not exclude other solutions to recover these costs or support renewable energy sources.</p>
<p>One stakeholder noted that one of the objectives of balance responsibility and imbalance settlement should be to reduce (and ideally avoid completely) predictable part of imbalances as these are quite common throughout Europe today.</p>	<p>Agree. A well designed balancing market and imbalance settlement should give correct incentives to avoid any intentional imbalances.</p>
<p>Many stakeholders commented on the intraday gate closure time. Some consider the gate closure time one hour before real time as the right balance between self-balancing of BRPs and TSOs' residual balancing. Few stakeholders asked for explicit reference to set gate closure time at one hour before real time at the earliest. One stakeholder commented that gate closure time should not be lower than 15 min before real time. Many stakeholders are of opinion that TSOs should only engage in residual balancing and should not get involved in activating balancing energy in timeframes where market participants are still active. This in particular relates to Replacement Reserves as currently defined, which have strong overlap with the market activities. Self-balancing and residual TSOs' balancing would significantly reduce the need for procurement of reserves and balancing energy as well as their costs.</p>	<p>Partly agree. The Framework Guidelines do not intend to set and harmonise the intraday gate closure time as the definition and its harmonisation will be defined and governed in the Network Code on Capacity Allocation and Congestion Management. The NRAs and the Agency shall monitor the efficiency of electricity balancing and thus also the efficiency of overlaps between balancing and intraday activities.</p>
<p>Few stakeholders asked for more real time information that would enable market participants to better assess their current positions. Information on system load and generation could be used by BRPs to correct their imbalances close to real time and should therefore be made available by TSOs.</p>	<p>Agree. The Framework Guidelines require some information to be published with this regard and to describe additionally the information that is needed for BRPs to be able to help to balance the system and/or to restore its balance.</p>
<p>One stakeholder proposed that all BRPs, which are supplying the customers with a standard load profile, are charged a fair arithmetical average of the costs of the deviation, which should be measured in longer periods (e.g. one year).</p>	<p>Disagree. All BRPs shall be subject to the same imbalance settlement mechanism in order to ensure a level playing field.</p>

<p>Few stakeholders commented on incentives for BRPs and TSOs. One stakeholder commented that the Framework Guidelines leave too much room for TSOs to introduce excessively high incentives (or penalties) on BRPs to be fully balanced in real time. Few stakeholders commented that the imbalance settlement price based on marginal price of balancing energy is per definition the most efficient incentive for BRPs to be balanced. The TSOs, on the other hand should have no financial interest or risks in balancing the system.</p>	<p>Partly agree. Harmonisation of incentives on BRPs is not within the scope of these Framework Guidelines, since it is not essential to promote and implement integrated balancing market. Nevertheless, the question of incentives may be treated in the process of harmonising imbalance pricing. The Framework Guidelines also address that the terms and conditions for BRPs are reasonable and proportionate, thus including possible incentives.</p>
<p>One stakeholder outlined that settlement of imbalances should be based on portfolios of and not on separate settlement for load and supply. This would facilitate future developments like prosumers and storage. Another stakeholder recommended making a distinction between market participants without generation and load (pure trading entities) from the others. If imbalances occur to the first, it is clearly an error in the processing of the market participant and not related to outages of generation or imperfect load forecasting.</p>	<p>Partly agree. Since TSOs have different needs in managing internal network constraints within balancing timeframe, the Framework Guidelines allow the implementation of both solutions, subject to approval of the respective NRA.</p>
<p>Two stakeholders asked for clarity on the influence of implicit and explicit exchanges of balancing energy on imbalance prices. They are concerned that this could lead to improper incentives to market participants to balance themselves, as the price of balancing energy and the imbalance price in one area might influence the imbalance price in another area. This could lead to increase of system imbalances, increased uncertainty of flows and increase in reserve requirements.</p>	<p>Partly agree. Indeed the design in the pricing of balancing energy and imbalance settlement price needs to be carefully studied before implemented in order to avoid adverse incentives on BRPs. In principle, when the situation in one control area influences the incentives on BRPs in another control area, the netting of system imbalances should enable levelling out of the resulting imbalances of BRPs.</p>
<p>One stakeholder asked for explicit notion within in the Framework Guidelines explaining that the costs of contracted reserves are not included in the imbalance prices and shall be recovered from tariffs. TSOs should not bear the price risk, but should be accountable for amount of capacity reserved.</p>	<p>Partly agree. While some reasons exist that at least part of the costs of balancing reserves may be included in the imbalance price, the Framework Guidelines require the harmonisation of imbalance pricing, so that this issue will also be covered.</p>
<p>7. Implementation and harmonisation issues</p>	
<p>Two stakeholders commented that integration of balancing markets should lead to high degree of harmonisation and cooperation between TSOs. One proposed to set a clear timeframe for the adoption of common security standards and to enable efficient harmonisation of reserve procurement.</p>	<p>Agree. It is of the opinion of the Agency that the integrated balancing market requires significant strengthening of TSO cooperation in balancing the European electricity system. Harmonisation of security standards is foreseen in the network codes on system operation, whereas some harmonisation of reserve procurement is already foreseen in Framework Guidelines on Electricity Balancing.</p>
<p>Few stakeholders commented that the timelines are too long and not clear enough. Some propose to shorten the deadlines for at least manually activated reserves and imbalance netting, while others propose that intermediate steps and goals towards the target model could allow for timelines that are more ambitious. However, these must be fully in line with the final model. They propose that the implementation should start immediately through pilot projects and in parallel to other market integration projects.</p>	<p>Partly agree. Different views were expressed from the stakeholders regarding the implementation timelines. While some TSOs have already implemented some targets and other could implement them in relatively short time, for some TSOs the timelines will be challenging. The final Framework Guidelines have been adopted to find the right balance between different needs and expectations regarding the timelines and concerns about the feasibility and efficiency benefits of the targets.</p>

<p>Many stakeholders proposed a pragmatic step-by-step approach through regional implementation and cost benefit analysis before each step. As there is little experience with different elements of the Target Model, this approach would enable to perform cost benefit analysis before implementing the next step as a kind of validation of implementation steps. This approach would also consider the technical and economic consequences and risks related to problems in the balancing timeframe. Few stakeholders also commented that a proper level of discussion between TSOs, NRAs and stakeholders should be established before implementation starts and before each new step. One stakeholder proposed more clarity that the Framework Guidelines require clear EU-wide targets, which does not exclude implementation through regional projects.</p>	<p>Partly agree. A certain level of pragmatism is indeed desired in implementing the proposed target models. The Agency expects that the discussion on the implementation will continue during the drafting of the Network Code and within the AESAG framework. This process enables a systematic implementation through either regional projects or pilot project(s). Nevertheless, introducing the steps conditional to systematic cost-benefit analysis in the Framework Guidelines might be very time consuming. Instead, such analyses could be performed in parallel to actual implementation process.</p>
<p>Stakeholders in general agree that a high level of harmonisation is needed to achieve the objectives defined in the Framework Guidelines. This includes harmonisation of products, requirements, gate closure times, pricing methods, imbalance settlement as well as roles and responsibilities. Some stakeholders asked for more requirements on harmonised reserve procurement as well as on harmonised terms and conditions for participation in balancing market, which seems particularly important for new entrants.</p>	<p>Partly agree. The Framework Guidelines require that the Network Code define common principles for the procurement of balancing reserves throughout EU. This by itself should ensure the level playing field for all market participants within EU.</p>
<p>Few stakeholders also addressed the need to harmonise the TSO principles and practices for balancing and coordination among them. In particular, they asked for more prescription on harmonisation of TSO responsibilities in balancing. One stakeholder explicitly asked for obligations on TSOs responsible for control areas constituting one bidding zone to cooperate, in order to unify balancing arrangements within that bidding zone.</p>	<p>Partly agree. While few requirements have been introduced implicitly in these Framework Guidelines, such changes are in general out of scope of these Framework Guidelines, since they would require careful reconsideration of rules across several different network codes. Unified balancing arrangements within bidding zone would imply aligning the bidding zones with control areas, which is outside of the scope of these Framework Guidelines.</p>
<p>Few stakeholders supported a full standardisation of products for cross-border exchanges and expressed great concerns about specific national products. While some stakeholders explicitly opposed any possibility for the Network Code to allow for specific products, other stakeholders view them as exceptions, which should be kept at a minimum level, should not in any way hamper the integration of balancing markets and should foresee the involvement and monitoring of the Agency in respective approval processes. Few stakeholders are of opinion that the need for such products will not diminish over time and see the process of justifying these products and the requirement to share them as too onerous.</p>	<p>Partly agree. While specific products present the possibility for distortion and fragmentation of the market, they shall be allowed only in cases where the resources from standard products would not be sufficient to balance the system and certain balancing resources would participate only if these specific products are enabled. However, such products should not be used just to allow some specific resources to participate, in particular if TSOs have enough standard resources available. The Agency agrees that careful monitoring of these cases is needed.</p>
<p>Few stakeholders asked for higher involvement of the Agency, NRAs and market participants in the harmonisation of products as well as procurement rules based on technical and market principles.</p>	<p>Agree. The final Framework Guidelines provide more clarity on these two issues.</p>

<p>One stakeholder commented that harmonisation of automatic Frequency Restoration Reserve products, in particular between different synchronous areas, raise significant questions of technical feasibility (e.g. frequency quality) and of economic efficiency (increased demand and lowered supply).</p>	<p>Partly agree. Indeed different synchronous systems have different needs regarding the speed of reserves and their amount. While some reserves currently used in different synchronous areas could be easily standardised, other reserves (such as very fast reserves in smaller systems) will remain specific. Thus, the harmonisation of products will need to define some standard products for all synchronous areas, together with some specific products to address additional specific needs of smaller synchronous areas.</p>
<p>Few stakeholders asked for the right balance between harmonisation and possible subsidiarity. One stakeholder expressed concerns about the feasibility and efficiency of harmonisation requirements and that harmonisation should be pursued only to the point where it still provides benefits to the customers. He outlined the trade-off between the benefits of integrating markets and preserving the flexibility of balancing products, processes and incentives to address current and future needs as well as keeping the secure operation of the system. Another stakeholder proposed only a minimum level of harmonisation to achieve efficient and integrated cross-border balancing, while leaving as much as possible room for local variations where deemed necessary. With this respect, he asked for more clarity and distinction between cross-border issues and national issues. One stakeholder proposed that the Network Code should define a set of compatible options for all issues related to balancing and leaving the decision to Member States to choose the appropriate ones to meet their specific needs.</p>	<p>Partly agree. The Initial Impact Assessment presents four policy options and argues that the policy option C is expected to deliver the right balance between efficiency benefits, time of implementation and undesired changes of balancing responsibilities. Therefore the Framework Guidelines aim at setting out the requirements which are expected to deliver significant benefits, while respecting the feasibility, costs and implementation time. The final Framework Guidelines were adapted to address additionally these concerns by allowing more flexibility in defining the final targets, in harmonisation of products, etc. Nevertheless, the expected benefits can only be realised with relatively high level of harmonisation of the most essential elements of balancing markets.</p>
<p>One stakeholder outlined that product definitions and reserve sizing/procurement are interdependent and should preferably be addressed in a single code. Since one key factor in sizing of reserves is the time when BRPs become responsible for providing their own reserve for covering a generator trip, this requirement might usefully be fixed at European level.</p>	<p>Partly agree. Reserve sizing has a stronger link to system operation than with balancing market. As regards the BRP responsibility for covering the generation trip, it is more appropriate to view such events in the light of TSO's responsibility and BRP's incentives and financial responsibility regardless of the timeframes.</p>
<p>One stakeholder commented that imposing mandatory creation of BRPs for all grid users is not needed and should not be within the scope of the Framework Guidelines as they should deal with cross-border issues only.</p>	<p>Disagree. For the functioning of integrated balancing market, the balance responsibility in each Member State is essential.</p>
<p>8. Initial Impact Assessment</p>	

<p>Few stakeholders commented that the integration models defined in the Framework Guidelines have not been properly justified with a cost benefit analysis and it is thus impossible to ascertain if the proposals for widespread harmonisation are proportionate to the benefit that would be derived. One stakeholder consider such analysis as essential, since only a small proportion of turnover is produced within balancing timeframe. Another stakeholder asked for assessment of costs and benefits of each incremental step in the integration process on top of the benefits achieved with the intraday target model. Concerns were also expressed that the very ambitious targets could go beyond what is practically manageable in real time operations or would require very high costs.</p>	<p>Partly agree. Efficiency gains delivered by some existing models deriving from the concept of surpluses (e.g. imbalance netting, BSP-TSO and TSO-TSO) have been assessed by NRAs and/or TSOs and are mentioned in the Initial Impact Assessment. The document also includes references to some quantification with respect to expected benefits in implementing a common merit order list, which may be completed by the study mandated by the European Commission. Concerns with respect to technical feasibility of options have been taken into account in the new version of the Framework Guidelines.</p>
<p>Few stakeholders asked for improvements of IIA. One stakeholder expected that Initial Impact Assessment would put more focus on demand response in particular within evaluation criteria and policy options.</p>	<p>Partly agree. The new version of the Impact Assessment takes into account requirements on demand response, as part of the problem definition.</p>
<p>Few stakeholders commented on the study performed by the EC related to impact assessment of European balancing market. One stakeholder asked for wider public consultation of the study report while few stakeholders proposed that the study should in particular focus on certain aspects of balancing market integration</p>	<p>Partly agree. The mentioned study is performed by the European Commission and the Agency is not involved in the corresponding decision process.</p>

Annex 1 - ACER

The Agency for the Cooperation of Energy Regulators (Agency) is a European Union body established in 2010. The Agency's mission is to assist National Regulatory Authorities in exercising, at the Community level, the regulatory tasks that they perform in the Member States and, where necessary, to coordinate their action. The work of the Agency is structured around the working bodies, composed of the Agency staff members and staff members of the National Regulatory Authorities. These working bodies deal with different topics, according to their members' fields of expertise.

This report was prepared by ACER Electricity Network and Market Task Force (AENM TF) of ACER Electricity Working Group (AEWG).

Annex 2 - List of Respondents

No	Organisation	Type
1	Assoelettrica	Association
2	Baltic Cable AB	TSO
3	BDEW	Association
4	BNE	Association
5	CECED	Association
6	CEDEC	Association
7	Centrica	Industry
8	CEZ	Industry
9	EDF	Industry
10	EDF Energy	Industry
11	Edison	Industry
12	EFET	Association
13	EirGrid	TSO
14	EICom	National Regulatory Authority
15	ELEXON	Industry
16	ELPEC	Cunsultant
17	EnBW	Industry
18	ENEL	Industry
19	Energie-Nederland	Association
20	Energy Pool	Industry
21	ENTSO-E	Association
22	EON	Industry
23	ERDF	Association
24	ESBI	Industry
24	Eurelectric	Association
24	Europex	Association
24	EWEA	Association
24	GDF SUEZ	Industry
24	Gealectric Energy Storage	Industry
30	GEODE	Association
31	Iberdrola	Industry
32	IFIEC	Association
33	IWEA	Association
34	JP Morgan	Financial institution
35	National Grid	TSO
36	Nordenergi	Association
37	Oesterreichs Energie	Association
38	OTE	Industry
39	RWE	Industry
40	SEDC	Association
41	SSE	Industry
42	swissenergy	Association
43	Swissgrid	TSO
44	Transnet BW	TSO
45	UNIDEN	Association
46	Vattenfall	Industry
47	VIK	Association
48	Wartsila	Industry