



***Public consultation for the design of the TERRE
(Trans **E**uropean **R**eplacement **R**eserves **E**xchange)***

07th of April 2016 (Answers Analysis)

Content

1	Introduction	5
1.1	Q 1.1 Do you have specific comments regarding Chapter 1 content? (Please indicate sub-chapter reference when possible).....	5
2	Overview of different manual reserves balancing markets in TERRE.....	7
2.1	Q 2.1 Do you have any specific comments regarding Chapter 2 content? (Please indicate sub-chapter reference when possible).....	7
3	Product & Imbalance Need	10
3.1	Q 3.1 Which format of balancing energy offers are most attractive to stakeholders?	10
3.2	Q 3.2 Do stakeholders agree with the definition and features of the TERRE cross border product?	13
3.3	Q 3.3 What are the stakeholder's views on BRP-TSO & BSP-TSO rules & requirements?.....	18
3.4	Q 3.4 Does the TERRE product allow for the participation of all types of balancing service providers (e.g. RES, Thermal, and DSR)? And if not, what changes in the features will allow greater participation in the TERRE project? ..	22
3.5	Q 3.5 What are your views on the application of the local features of the TERRE cross border product (e.g. Harmonization of price cap and floors or Maximum Bid Sizes for Indivisible Offers)?.....	24
3.6	Q 3.6 The number of bid formats (Divisible, Block, Exclusive, Linking Offers) which may be used by BSP represents a trade-off between the flexibility offered to BSP (with several types of offers) and the simplicity to offer bids and to run the algorithm (eg, with only one standard type of offer). What are you views on this trade-off? Would you advocate for keeping all types of bids offered by TSOs or to reduce the number of possible offers?	26
3.7	Q 3.7 Do you agree with the proposed design of the TSO imbalance need?	29
3.8	Q 3.8 Do you agree with the possibility for inelastic and elastic imbalance needs?	31
3.9	Q 3.9 Do you have specific comments regarding chapter 3 content? (Please indicate sub-chapter reference when possible).....	35
4	Balancing CMO & Algorithm	37
4.1	Q 4.1 Do you have any specific comments on the Balancing CMO description?	37
4.2	Q 4.2 What is your opinion on allowing internal and XB counter-activations?	39
4.3	Q 4.3 Do you agree with the proposed treatment of HVDC losses?.....	41
4.4	Q 4.4 Do you have specific comments regarding chapter 4 content? (Please indicate sub-chapter reference when possible).....	42

5	Settlement	45
5.1	Q 5.1 Do you agree that the proposed settlement design is in line with the principles of the EB GL and the integration of balancing markets?	45
5.2	Q 5.2 Do you agree with the application of cross border marginal pricing, settlement of the block and the proposed design for the definition of Marginal Price between TSOs at the XB level?	46
5.3	Q 5.3 What is your perspective regarding the alignment of the TSO-TSO settlement procedure and the BSP-TSO settlement procedure?	48
5.4	Q 5.4 Do you have specific comments regarding chapter 5 content? (Please indicate sub-chapter reference when possible)	50
6	Cost Benefit Analysis	52
6.1	Q 6.1 What are your views on the methodology used and assumptions made in the Cost Benefit Analysis?	52
6.2	Q 6.2 What are your views on the results of the Cost Benefit Analysis?	55
6.3	Q 6.3 Do you think the conclusions of the Cost Benefit Analysis are valid for the expected market in 2018?	57
6.4	Q 6.4 Do you have specific comments regarding chapter 6 content? (Please indicate sub-chapter reference when possible)	59
7	Timing	61
7.1	Q 7.1 What are your views on the reduction of XB scheduling step for balancing?	61
7.2	Q 7.2 What are your views on the interactions between the TERRE process and the XB intra-day market?	62
7.3	Q 7.3 What are your views on the frequency of the clearing (one single clearing per hour)?	65
7.4	Q 7.4 Do you have specific comments regarding chapter 7 content? (Please indicate sub-chapter reference when possible)	67
8	TERRE Platform - High Level Functional Architecture	70
8.1	Q 8.1 Do you have specific comments regarding chapter 8 content? (Please indicate sub-chapter reference when possible)	70
9	Available Transmission Capacity	72
9.1	Q 9.1 Do you agree with the proposed methodology for the calculation of available transmission capacity used by TERRE solution for both AC and DC borders? If not, what would be your proposal?	72
9.2	Q 9.2 Do you have specific comments regarding chapter 9 content? (Please indicate sub-chapter reference when possible)	74
10	Governance	75
10.1	Q 10.1 Do you have specific comments regarding chapter 10 content? (Please indicate sub-chapter reference when possible)	75

11 Transparency	77
11.1 Q 11.1 Do you have specific comments regarding chapter 11 content?...	77
12 Harmonization Issues	80
12.1 Q 12.1 Which features (if any) of local balancing market design needs to be harmonized for an efficient functioning of the TERRE project? If several, please rank the first three you consider the most important to harmonies.	80
12.2 Q 12.2 Do you share the position from TERRE TSOs (i.e. the caps and floors in balancing energy markets should be removed by the entry into force of TERRE)?	84
12.3 Q 12.3 In case this cannot be done before the entry into force of EB GL, do you agree on the transitional application of the solution through settlement? Or which is your view regarding a backup solution?	86
12.4 Q 12.4 What is the minimum amount of time that market participants need to update your RR balancing offers after receiving the results of the cross-border intra-day (XBID) process?	87
12.5 Q 12.5 Do you consider there are other key issues that need to be harmonized to avoid significant distortions between BSP across TERRE Members States? 89	
12.6 Q 12.6 Do you have specific comments regarding chapter 12 content? (Please indicate sub-chapter reference when possible).....	90
13 Project Implementation Plan	91
13.1 Q 13.1 Do you have specific comments regarding chapter 13 content? (Please indicate sub-chapter reference when possible).....	91
14 Possible evolutions	95
14.1 Q 14.1 Do you have specific comments regarding chapter 14 content? (Please indicate sub-chapter reference when possible).....	95

0 Preamble

The consultation phase is one of the most important step for TERRE project. It is why, the TSOs thank all the stakeholders who have studied and answered the consultation document and the proposed design.

This document includes all the stakeholder answers which the TSOs received.

Please consider that all these feedbacks were assessed and the conclusions are included in a separate document which will be sent also to the stakeholders.

1 Introduction

1.1 Q 1.1 Do you have specific comments regarding Chapter 1 content? (Please indicate sub-chapter reference when possible)

Stakeholder 1	For us is very important that the future procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to little producers.
Stakeholder 2	No specific comments.
Stakeholder 3	
Stakeholder 4	<p>We set out some high-level requirements for a successful TERRE implementation in our answer to Question 0 and also below.</p> <p>(1) We need continuing engagement by the TERRE Project with the local, non-TSO, stakeholders.</p> <p>(2) Because the local arrangements (such as our operation of GB imbalance settlement) that will interface with TERRE need to be designed and perhaps, as in GB, have local NRA approval, we need the confirmed TERRE business model of what will done by the central TERRE arrangements, and by when. And in particular how TERRE expects to interface with these local arrangements.</p> <p>(3) We need the TERRE business model, once confirmed, to be subject to a strict change control process, including consultation with those responsible for the local arrangements where they would be impacted. (Those responsible for the local arrangements would also have the best idea of how they would be impacted so all changes should be at least notified to them.)</p> <p>(4) We need a testing plan that includes and encompasses the needs of those responsible for the local arrangements that will interface with TERRE, for example for GB, TERRE's end to end testing should involve GB's balancing settlement and imbalance settlement systems and GB BSPs and BRPs who wish to participate.</p> <p>We also note that section 1.3 states that the 'governance issues have been dealt with'. However, we have some questions on this.</p> <ul style="list-style-type: none">• How can issues that arise within local arrangements, but reveal wider issues that can only be resolved by the central TERRE arrangements, be raised with TERRE and

	<p>decided upon efficiently and rapidly, so that necessary changes to the local arrangements are not delayed?</p> <ul style="list-style-type: none"> ● In particular, how can a party which is not a TERRE TSO (but is essential to TERRE's successful implementation in one of the TERRE Member States, such as us in GB) obtain a resolution of design decisions?
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	<p>We considers the time period available to stakeholders to respond to the consultation (sub-chapter 1.4) rather short. Given the length of the consultation document, the number of questions to answer and the fact that the project covers multiple countries – from which a European group as us has to gather the necessary input on local market design and potential impacts – 4 weeks is too short a period. Given the time already spent on the project, we do not belief that an additional 2 – 4 weeks would result in material delays of the project.</p>
Stakeholder 8	No comment (descriptive chapter).
Stakeholder 9	<p>Subchapter 1.1 – paragraph 4 and Subchapter 1.4 – paragraph 3</p> <p>Is TERRE project planning to publish and explain in a public workshop the final package (including the “high level design document”), after taking into account the results of the consultation, prior the submission to the NRAs?</p> <p>We would see this transparency milestone very useful. Moreover, the final package could list the regulatory changes required at national level envisaged by the TSOs involved in the project, as a draft of the final list provided by the NRAs in their Approval. This could provide all the parties proper visibility on next regulatory steps, and allow identifying key issues.</p> <p>Please, see answer to Q 13.1 for more comments.</p>
Stakeholder 10	<p>The project covers only part of the EU market. In particular, countries where the TSOs have announced that they will not use RR, such as Germany and the Netherlands, are not included. We request clarification on how cross-border aspects between two countries (like for example Germany and France) will be dealt with when the TSO on one side of the border uses RR and the TSO on the other side does not.</p>
Stakeholder 11	No comment
Stakeholder 12	
Stakeholder 13	<p>What would be the implications when a NRA does not approve the common NRA position paper?</p> <p>What would be the the requirements for a future participation in TERRE (e.g. ADMIE)?</p>
Stakeholder 14	no comments
Stakeholder 15	No comment
Stakeholder 16	Not Answered

Stakeholder 17	We do not have specific comments on this chapter.
Stakeholder 18	Not Answered
Stakeholder 19	No.
Stakeholder 20	<p>The consultation document states that «The main objective of the TERRE project is to establish and operate a platform capable of gathering all the offers for Replacement Reserves from TSO's local balancing markets and to provide an optimized allocation of RR to cover the TSOs imbalance needs.»</p> <p>At the same time, in different statements in the consultation document state that there will be local products used to balance the system. For this reason, it is important to understand if and when TERRE product will replace local products. On this point, it is of utmost importance that the consultation document explains how TSOs will efficiently decide between local products, TERRE product, and manual-FRR.</p> <p>In addition, considering that currently national balancing markets present notable differences (TSO engagement, balancing perimeters, balancing service provider, possibility of portfolio bidding, etc...), the introduction of TERRE products should be anticipated and accompanied by a convergence process in terms of national balancing rules in order to allow a level playing field and assure security of supply.</p>
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

2 Overview of different manual reserves balancing markets in TERRE

2.1 **Q 2.1** Do you have any specific comments regarding Chapter 2 content? (Please indicate sub-chapter reference when possible)

Stakeholder 1	We are agree that solar and wind production can participate to this market but it is important that a non discriminatory traetment is garanteed for every participant independent of the fuel and powerplant type
Stakeholder 2	No specific comments.
Stakeholder 3	Not Answered
Stakeholder 4	<p>We do not understand the sentence on page 14 that 'harmonisation of local settlement rules will be tackled under the framework of the RR CoBA implementation'. We expect that TERRE will form the RR CoBA , so how do the TERRE TSOs see this harmonisation being achieved?</p> <p>We are, not the GB TSO, is responsible for administering the rules and operation of balancing settlement in GB so we would expect to be involved in the discussions on</p>

	<p>harmonisation whenever these occur. Failure to involve us at the earliest opportunity could mean delays in implementing harmonisation later, which could cause problems for the TERRE project as a whole.</p>
Stakeholder 5	Not Answered
Stakeholder 6	It wasn't fully clear. More explanation around the table would have helped.
Stakeholder 7	<p>The rather short note following the second table of chapter 2 (top of page 14 of the consultation document) creates confusion. Given that the TERRE project will be a – or even the sole – RR Coordinated Balancing Area (CoBA), postponing the harmonization of local settlement rules for the RR CoBA framework makes little sense. As also reiterated in our answer to questions in chapters 3, 5 and 12, an alignment of local rules is imperative to make the TERRE project a platform where BSPs can compete on an equal basis.</p> <p>We realizes that such an alignment requires the involvement of National Regulatory Authorities (NRAs) and as such strongly encourages NRAs to tackle this subject well before the final implementation of the TERRE project to ensure competition of BSPs in different countries on a fair basis and without distortions to the integrated RR market. However, TSOs also have a role in this by a timely, pro-active proposal of such a set of harmonized local rules. We strongly encourages TSOs to start this work, in consultation with NRAs to ensure the necessary alignment is achieved by the time the TERRE project goes live.</p>
Stakeholder 8	<p>The note below Table 2-2 on the intraday cross-border gate closure times (GCTs) at the various borders concerned in the project mentions that the harmonization of the local settlement rules will be tackled under the framework of the RR COBA implementation. The TERRE project being the sole BPP focusing on the implementation of RR in Europe, it seems inappropriate that the question of harmonisation of settlement rules is set aside, to be dealt with in the future. TSOs should at the very least provide as of now an assessment as to the viability of the project without harmonised settlement rules, as well as an assessment of the efficiency losses linked to non-harmonised settlement rules.</p>
Stakeholder 9	<p>Table 2-1 –More detailed and comprehensive information (use of these reserves, handling of bid formats, further technical/regulatory evolutions at national level linked to TERRE or with different nature) would allow better identifying pros and cons of different design options.</p> <p>Table 2-2 – It seems that some data refer to XB intraday allocation and other refers to both national-XB (example: REE and FR-SP border).</p>
Stakeholder 10	<p>The note below Table 2-2 on the intraday cross-border gate closure times (GCTs) at the various borders concerned in the project mentions that the harmonization of the local settlement rules will be tackled under the framework of the RR COBA implementation. The TERRE project being the sole BPP focusing on the implementation of RR in Europe, it seems inappropriate that the question of harmonisation of settlement rules is set aside, to be dealt with in the future. Efficiency – in terms of costs and operational execution – is the primary objective of the reform of any balancing arrangements. While we are convinced that pooling RR resources at a regional level should improve efficiency, we also consider that harmonisation is not a goal in itself and that a careful consideration of related costs, risks and benefits is required. TSOs should therefore at the very least provide as of now an assessment as to the viability of the project without harmonised settlement rules, as well as an assessment of the impact of harmonised and non-harmonised settlement rules on the efficiency of the</p>

	<p>common RR procurement.</p> <p>Overall, we see Chapter 2 as very ‘light’ and merely a short description of the status quo. Ideally, it should go further, for example qualitatively exploring the differences between different markets, and explain which criteria are used for the activation of RR (and mFRR) and how overlap with market parties’ activities on the intraday market is avoided. Also, in the context of a possible harmonisation of GCTs and shortening of ISPs, it would be useful to get the understanding of the involved TSOs about the role they expect RR (and mFRR) to play considering the need to avoid overlaps and balkanisation of the intraday market.</p> <p>Chapter 2 should also explain how procurement and especially activation of RR and mFRR affects imbalance prices in the various countries.</p> <p>Finally, Chapter 2 does not clearly outline the impact on existing processes at all the TERRE borders, for example how the FBM at the French-Swiss border will be impacted.</p>
Stakeholder 11	<p>We are pleased to see that there should not be an interaction between TERRE activation and ID trading. However, the consideration of the TERRE outer borders is incomplete. E.g. for Switzerland the borders CH-DE and CH-AT are considered, whereas for FR-DE, FR-BE this is not the case. A complete consideration of the TERRE borders would be appreciated. We stress for zero interference between TERRE and XB ID trading.</p>
Stakeholder 12	
Stakeholder 13	No further comments
Stakeholder 14	<p>For us some key questions are not clear. For example do BSPs need a kind of a qualification to participate offers over the TSO - TSO model in other countries. How countries with bidding obligations for qualified assets handle assets from other countries in case of a shortage of offers?</p>
Stakeholder 15	<p>Table 2-2: We are pleased to see that interactions between TERRE activation and intraday trading are excluded. However, the consideration of the TERRE outer borders is incomplete. E.g. for Switzerland the borders CH-DE and CH-AT are considered, whereas for FR-DE, FR-BE this not the case. A complete consideration of the TERRE borders would be appreciated. We stress for zero interference between TERRE and cross-border intraday trading.</p>
Stakeholder 16	Not Answered
Stakeholder 17	<p>This chapter gives an excellent view on the challenge represented by the integration of balancing markets, showing the diversity of national market designs. Therefore, particular attention has to be paid to the harmonisation of national market features during the first implementation phase of the project. In particular, TSOs should carefully assess which parameters are to be harmonised and at which pace, taking into account the final Target Model.</p> <p>As regards Table 2.2 on Intraday and Cross-border gate closure, we suggest to add a line “FR national” showing the gate closure times applicable in the French national market as it is presented in the case of Swiss and British markets.</p>
Stakeholder 18	Not Answered

Stakeholder 19	Overall, we see Chapter 2 as very 'light' and merely a brief, factual description of the status quo. Ideally, it should go further, for example qualitatively exploring the different approaches and products in various markets. We would also welcome an explanation of how procurement and activation of RR (and mFRR) affects imbalance prices in the various countries..
Stakeholder 20	<p>The tables correctly represent Replacement Reserve, manually activated Frequency Restoration Reserve products and gate closures in Spain and in Italy.</p> <p>At the same time, we would like to point out that in Spain Replacement Reserves refers to the Reserve that is activated before the current hour, this would be both: tertiary reserve scheduled before P48, and deviation management.</p> <p>Finally, it must be noted Italian ISPs are differentiated for source; in particular, demand and generation not enabled to supply dispatching services – i.e. belonging to market participants that are not BSPs - has an ISP of 1 hour.</p>
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

3 Product & Imbalance Need

3.1 Q 3.1 Which format of balancing energy offers are most attractive to stakeholders?

Stakeholder 1	Hourly product and 15 minutes product
Stakeholder 2	Though we wouldn't oppose to the use of any of the depicted formats, or even more, due to the complexity of the algorithm, the limited time to match this market and the necessity of following the results, we are concerned about the functioning of clearing process and the only formats we see necessary are divisible offers and block offers.
Stakeholder 3	N/A
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	<p>This depends on the particular format that BSPs are used to in their own markets. TERRE offers will have to interact and complement the local market arrangements. BSPs are likely need to use a product which allows them to offer something as similar as possible to that offered in the local market to ensure that offers are kept consistent with each other.</p> <p>From an operational perspective a reasonable number of block offer options is required and the possibility to handle ramps should be given. However, the complexity of the mechanism would raise with the increasing number of offered block options. This reduces the plausibility and the transparency of market results and thus may create obstacles for new market entrants.</p>

Stakeholder 7	<p>We considers that all offer formats except the multi-part offer have merits in order to make attractive offers into the TERRE platform. If the use of the formats does not impose any timing constraints for the clearing algorithm, we would propose to implement all offer formats, except the multi-part offers.</p>
Stakeholder 8	<p>We consider that the need for all these type of offers has to do with different rules of Reserve Markets in each country, namely portfolio bidding and unit bidding</p> <p>We feel some level of harmonisation should take place in the meantime, prior to the entry into operation of Project Terre</p> <p>From the several type off offers:</p> <p>Divisible Offers, Block Offers, Exclusive Offers, Multi-part Offers (divisible or block) and Linking Offers (divisible or block)]</p> <p>We think they are all needed except if harmonised bidding rules were to be implemented</p> <p>In our particular case, with bidding rules by physical unit, Divisible Offers and Multi-part offers are essential.</p>
Stakeholder 9	<p>Please see answer to Q 3.6</p>
Stakeholder 10	<p>The format of the balancing offers is a critical element of the TERRE project. As detailed in our answer to question 3.8, there is a trade-off between simplicity and flexibility. Our preference is to focus on implementing the formats that are common to all markets (e.g. block offers) that enable existing approaches towards balancing to be preserved as much as possible.</p> <p>While we see some merits to more complex formats, e.g. linked or multipart offers, as shown in Table 2.1, these are not common to all markets and, in the case of exclusive offers, are not currently used at all. Such formats could add a significant degree of complexity to the project TERRE algorithm and for market participants, and therefore could be envisaged at a later stage of implementation of project TERRE. For the time being, TSOs should focus on ensuring that bid formats do not prevent any technology from taking part in the balancing market, providing a non-discriminatory, level-playing field for all market participants.</p>
Stakeholder 11	<ul style="list-style-type: none"> • We welcome the large possibility of offers, which allows us to manage our constraints • Divisible offers have always to guarantee a minimum quantity to reproduce the technical constrains of our assets. • Despite the wide variety of products a fast and transparent price based allocation has to be guaranteed.
Stakeholder 12	
Stakeholder 13	<p>At the moment the Swiss RR market accepts only block offers, as they better suit the needs of the local BSPs. Therefore it is only reasonable for the easiest integration of the Swiss BSPs in TERRE project that block offers remain in the list of the accepted balancing energy offers.</p> <p>Any additional format of balancing energy offers that would meet the needs of other</p>

	international BSPs, and would therefore increase the balancing market liquidity, is more than welcome.
Stakeholder 14	Divisible and Block orders
Stakeholder 15	<ul style="list-style-type: none"> • We welcome the large possibility of offers, which allows us to manage our constraints and represent fixed and start-up costs. The definition of the exclusive and multi-part offers must consider the time dimension more precisely. • Divisible offers have always to guarantee a minimum quantity to reproduce the technical constraints of our assets. • Swiss RR market accepts only block offers, as they best suit the needs of the local BSPs. Therefore it is only reasonable for the easiest integration of the Swiss BSPs in TERRE project that block offers remain in the list of the accepted balancing energy offers.
Stakeholder 16	
Stakeholder 17	All the bid formats described in the consultation document should be considered necessary for modelling BSP's constraints (see Q3.6).
Stakeholder 18	
Stakeholder 19	<p>In our view the format of the balancing offers is a critical element of the TERRE initiative. Our preference is for implementation the simplest solution that enable existing approaches towards balancing to be preserved as much as possible. This should be in the form of discrete block offers for delivery over a defined period, with market participant enable to select their preferred quantity and duration.</p> <p>While we see some merits in linked or multipart offers (as shown in Table 2.1), these are not common to all markets and, in the case of exclusive offers, are not currently used at all. These more complex projects will add a significant degree of complexity to the project TERRE algorithm and for market participants. Therefore, such complex offers could be envisaged for stage 2 implementation of project TERRE.</p>
Stakeholder 20	<p>When considering what the most attractive offers are for market participant, it is important to consider that all TSOs should allow portfolio bidding in every region. In fact, nowadays, in some Countries, market participants are obliged to bid for each power plant. Only allowing portfolio bidding, it is possible to assure a level-playing field across the borders.</p> <p>When defining the product type, it is important that bids are able to replicate cost structures. In this moment, European balancing markets are operated under different rules; in some countries, operators must offer their capacity for each power plant, in other markets operators can place portfolio bids. Compared to unit bids, portfolio bidding allows greater freedom, hence BSP can autonomously change the production mix used to deliver replacement reserve.</p> <p>In principle, we not against allowing all energy offers. If portfolio bidding is not allow in every bidding zone and only divisible offers are available, market participant that can bid their portfolio are favoured. For this reason, market operators should be able to place different block bids in order to reflect their cost structure and they allow a level playing field in the case of no rules harmonization on portfolio bidding. For the</p>

	<p>same reason, we are in favour of exclusive bids, especially if block bids are introduced. In fact, exclusive bids give the possibility to better describe change in production costs for unit bidding. In addition, considering that cost structure of power plants is influenced by production volume, we consider important to not introducing too many limitations on the number of allowed block bids. Following the same arguments, we consider multi-part offers and exclusive offers as great instruments also for unit bidding (not only portfolio bidding) because they allow a better depiction of costs. Finally, we favour the possibility of introducing linking offers in time because they allow system stability and they reduce the likelihood of unfeasible results (and thus imbalance risk).</p> <p>At the same time, with divisible offers and block offers is feasible to replicate all other types of offers, ie that using divisible offers and block offers we can get the same results as with the rest of offers for short periods of time (in this case it is for a maximum of 1-hour). This solution could simplify the algorithm and the process.</p>
Stakeholder 21	
Stakeholder 22	

3.2 **Q 3.2** Do stakeholders agree with the definition and features of the TERRE cross border product?

Stakeholder 1	<p>Partially:</p> <p>-activation, ramping period, full activation time and minimum delivery period in these form in our opinion not usable</p>
Stakeholder 2	<p>Yes, in a general way, and provided the product is compatible with local RR markets. In this way, if the local RR market resolution is 60 min, then offers for 60 min should be accepted to trade in TERRE in the same conditions as 15 min offers. Additionally, concepts as ramping and full activation time should not be used in the offers themselves, they would be just take into account when bidding by BSPs.</p>
Stakeholder 3	N/A
Stakeholder 4	
Stakeholder 5	<p>Taking under consideration the different definition of the balancing products of the TSO, we consider that the resolution of the product should be 1 hour, in contrast with the 15 mins proposed. We consider that an hourly resolution is sufficient for the cross-border exchange of RR. There are other mechanisms to balance the system steadily provided by the Frequency Restoration Reserves (FRR).</p> <p>We also maintain a simplification of the format of balancing energy offers from the one defined in the proposal. An excessively complex format could result in less transparency of the market.</p> <p>It has to be defined whether accepted offers are firm, or may be withdrawn in case of a system imbalance.</p>
Stakeholder 6	<p>Some divergences in the proposed design may exist:</p>

	<p>Items (1) "Preparation Period" and (2) "Ramping Period" are irrelevant and inconsistent with the framework proposed. Only item (3) "Full Activation Time" should be relevant and should be included in the features of the product before the activation features. The same product definition should be used for all BSPs offering the TERRE product as the one exchanged by TSOs between themselves (where only the "Full Activation Time" will be considered).</p> <p>Item (8) "Validity Period" seems unnecessarily restrictive: Given the proposed hourly frequency of the clearing, the whole bidding process may be operationally intensive for market participants. Extending the validity period beyond 60 minutes may help mitigate this problem and incentivise participation of BSPs in the process. From our perspective longer delivery periods of e.g. 4-6 hours should be allowed.</p> <p>Item (10) "Maximum Offer Size" should not be restricted. We cannot see a benefit from this restriction.</p> <p>Item (12) "Price" foresees the possibility of local caps/floors. Similarly to the previous point, we see a danger in non-harmonised price rules practically excluding bids from use in certain markets. TSOs and NRAs should work on removing price caps/floors to ensure that reserves exchanges are most optimal and economically efficient at a regional level.</p> <p>It is furthermore of concern that the TERRE product focusses on delivery of a block of energy and does not recognise ramping. This is partly not consistent with national arrangements, e.g. in GB. It may be possible for this to be synthesised to some extent through linked offers but this would only be possible for plant with fast ramp up times and for short duration offers as all would have to take place within the maximum block of one hour. And certainly no new caps and floors should be introduced. Therefore the whole concept of "elastic needs" is strongly questioned.</p>
Stakeholder 7	<p>Wz has the following comments regarding the product definition:</p> <ul style="list-style-type: none"> • We strongly favors the application of harmonized pricing rules and avoid using diverging local rules, including local floors and caps. As already stated in response to question 2.1, we encourages NRAs to align the rules before the implementation of the TERRE project and the TSOs to make the necessary proposals for harmonizing the pricing rules. • Only the Full Activation Time should be relevant. The mentioning of the preparation and ramping period in table 3-1 should only be illustrative and indeed have a free range between 0 and 30 minutes. However, in line with previous point, we would strongly argue that this product definition is also applicable for the local TSO-BSP rules without a fixed ramping period or standard ramping rate. As TSOs will exchange energy blocks on the TERRE platform between themselves, the same product definition should be used between BSP and TSO. • The validity period should not be limited to 60 minutes. Market parties should be able to make offers that remain valid for several auctions, on the condition that the offer can be adjusted up to the GCT of the period that it covers. It allows for a more efficient bidding of 'recurring' offers while maintaining the ability to offer them on the (cross-border) Intraday and cancel or adjust them subsequently on the TERRE platform.

	<ul style="list-style-type: none"> • The impact of the application of the local rules regarding the maximum offer size of indivisible offers is unclear. Will a local application of a low maximum offer size constrain the activation of bids exceeding this value by the TSO setting this low value? This would in effect create a sort of unshared bids and could be a tool used to shield a market from cross-border bids. This value or values should be transparent to all market parties active on the TERRE platform, as it may impact the selection of their bids.
Stakeholder 8	<p>The general framework for the definition and feature of the TERRE product broadly follows that of other standard products as defined by BPP #7 on standard products. A few divergences appear nonetheless:</p> <ul style="list-style-type: none"> • Items (1) Preparation Period and (2) Ramping Period are irrelevant and inconsistent with the framework proposed in BPP #7. Only item (3) Full Activation Time should be relevant and should be included in the features of the product before the activation features, in line with BPP #7. The same product definition should be used for all BSPs offering the TERRE product as the one exchanged by TSOs between themselves (where only the Full Activation Time will be considered). • Item (10) Maximum Offer Size should be better defined, as the impact of the application of the local rules for indivisible offers is unclear. We see the potential for local applications of a low maximum offer size constraining the activation of bids exceeding this value by certain TSOs. This would in effect create unshared bids and could be a tool used to shield isolate a market from cross-border exchanges. • Item (12) Price foresees the possibility of local caps/floors. Similarly to the previous point, we see a danger in non-harmonised price rules practically excluding bids from use in certain markets. TSOs and NRAs should work on removing price caps/floors to ensure that reserves exchanges are most optimal and economically efficient at a regional level.
Stakeholder 9	Yes
Stakeholder 10	<p>The general framework for the definition and feature of the TERRE product broadly follows that of other standard products as defined by BPP #7 on standard products. A few divergences appear nonetheless:</p> <ul style="list-style-type: none"> • Items (1) Preparation Period and (2) Ramping Period are irrelevant and inconsistent with the framework proposed in BPP #7. Only item (3) Full Activation Time should be relevant and should be included in the features of the product before the activation features, in line with BPP #7. The same product definition should be used for all BSPs offering the TERRE product as the one exchanged by TSOs between themselves (where only the Full Activation Time will be considered). • Item (8) Validity Period seems unnecessarily restrictive: given the proposed hourly frequency of the clearing, the whole bidding process may be operationally intensive for market participants. Extending the validity period beyond 60 minutes may help mitigate this problem and incentivise participation of BSPs in the process, especially for smaller market participants. • Item (10) Maximum Offer Size should be better defined, as the impact of the application of the local rules for indivisible offers is unclear. We see the potential for local applications of a low maximum offer size constraining the activation of bids exceeding this value by certain TSOs. This would in effect create unshared bids and could be

	<p>a tool used to shield isolate a market from cross-border exchanges.</p> <ul style="list-style-type: none"> • Item (12) Price foresees the possibility of local caps/floors. Similarly to the previous point, we see a danger in non-harmonised price rules practically excluding bids from use in certain markets. TSOs and NRAs should work on removing price caps/floors to ensure that reserves exchanges are most optimal and economically efficient at a regional level. And certainly no new caps and floors should be introduced. Therefore the whole concept of “elastic needs” is strongly questioned (see also our answer to question 3.8).
Stakeholder 11	<ul style="list-style-type: none"> • In our opinion the definition of the activation time is ambiguous. The way it is described in the document suggests a possible activation all 15 min. In table 3-1 the full activation time is described as 30 min. This means that all activation have a lead time of 30 min, thus an activation for hh:45 would be sent at hh:15. For operational simplification all activation within the next hour must be sent in one single activation. Table 3-1 has to adapted (3) Full activation time : minimum 30min. • The maximum offer size must be compatible with the technical constrains within our portfolio. • The resolution of 0.1 MW for divisible volume is exaggerated. 1 MW granularity is largely sufficient. • Why has Max delivery period to be 60 min? We would appreciate the possibility to offer block orders connecting more than 4 quarter hours as a to be started machine might have to run longer than 1 hour. • Depending on the IT solution offering products every 60 minutes could be much to complicated. Why can the validity period not be longer than 60 min? • We also support TERRE not interfering/competing with the established intraday markets and working as an additional market closer to delivery.
Stakeholder 12	
Stakeholder 13	<p>The definition and features of the TERRE cross border product are such that facilitate the participation of BSPs with a wide range of portfolios in terms of fuel and flexibility.</p> <p>We also support TERRE not interfering/competing with the established intraday markets and working as an additional market closer to delivery.</p> <p>In our opinion the definition of the activation time is ambiguous. The way it is described in the document suggests a possible activation all 15 min. In table 3-1 the full activation time is described as 30 min. This means that all activation have a lead time of 30 min, thus an activation for hh:45 would be sent at hh:15. For operational simplification all activations within the next hour must be communicated at the same time. Table 3-1 has to be adapted “(3) Full activation time: minimum 30min”.</p> <p>The time resolution of 15 minutes will enable BSPs with more flexible assets to make the most of their flexibility once the barrier of the 1 hour scheduling step constraint is removed.</p>
Stakeholder 14	3.1.1 Divisible Offers resolution of divisible Volume should be min. 1MW

Stakeholder 15	<ul style="list-style-type: none"> • In our opinion the definition of the activation time is ambiguous. The way it is described in the document suggests a possible activation all 15 min. In table 3-1 the full activation time is described as 30 min. This means that all activations have a lead time of 30 min, thus an activation for hh:45 would be sent at hh:15. For operational simplification all activations within the next hour must be sent in one single activation. Table 3-1 has to be adapted (3) Full activation time : minimum 30min. • Why has (6) Max delivery period to be 60 min? We would appreciate the possibility to offer block orders connecting more than 4 quarter hours as a started machine might have to run longer than 1 hour. • (8) Validity Period seems unnecessarily restrictive: given the proposed hourly frequency of the clearing, the whole bidding process may be operationally intensive for market participants. Extending the validity period beyond 60 minutes may help mitigate this problem and incentivize participation of BSPs in the process. • (10) Maximum offer size must be defined in more details, in order to avoid discrimination while applying different local rules. • The resolution of 0.1 MW for (11) Divisible Volume is exaggerated. 1 MW granularity is largely sufficient. • Identical to point (10) non-harmonized (12) Price rules such as caps and floors can discriminate certain BSPs depending on the local rules applied.
Stakeholder 16	
Stakeholder 17	We have no major objections to the definition and the main features of the TERRE cross-border product. However, we wish to highlight that local TSO-BSP arrangements will be crucial to determine the BSPs' capability to offer the TERRE product (see Q 3.3).
Stakeholder 18	We would be interested to know if there is scope to extending the maximum delivery period beyond 60 minutes in future.
Stakeholder 19	<p>We broadly agree with the proposed definition of the TERRE product. However, as noted in our response to Q 3.1, our preference is to develop a simple product for early implementation with more complex products following later on. Moreover, the product should ensure standardisation. Therefore, we make the following remarks:</p> <p>Item 10 Maximum Offer Size should be better defined, as the impact of the application local rules (for indivisible offers) could lead to fragmentation. A low maximum offer size set at the local level would constrain bids exceeding this value, effectively creating unshared bids and could be used as a tool to isolate a market from cross-border exchanges.</p> <p>Item 12 Price foresees possibility of local caps / floors. We see a danger of non-harmonised rules excluding bids from use in certain markets. Therefore TSOs and NRAs should work on removing caps / floors, and no new ones should be introduced.</p>
Stakeholder 20	We agree with the current definition: P-Sch-30-15. In addition, on the issue of unshared bids, it is important to ensure a high level of information to participants, therefore unshared bids should be shown in the common merit order but should be flagged as unavailable to other TSOs.
Stakeholder 21	

Stakeholder 22	
-----------------------	--

3.3 Q 3.3 What are the stakeholder's views on BRP-TSO & BSP-TSO rules & requirements?

Stakeholder 1	On this stage not enough detailed to be commented
Stakeholder 2	As a general principle, TSO's should not change BSP offers, i.e., grouping or splitting the offers each participant in the market has sent to local markets, looking as the cross border and local RR market as a unique market, when possible.
Stakeholder 3	N/A
Stakeholder 4	<p>Section 3.1.2 of the consultation document states that a number of elements will be defined at a later stage of the project including, but not limited to:</p> <ul style="list-style-type: none"> • Calculation of imbalance and imbalance price • Settlement • Non-compliance • Settlement or not of ramping <p>Firstly, we do not understand how the calculation of imbalance and imbalance price for BRPs will be undertaken under the TERRE Project governance. The overall formulation for imbalance and imbalance price is set out under the Guideline on Electricity Balancing (GL EB) and we believe that the local arrangements, e.g. under the local GB arrangements, would adjust imbalance calculations and prices as needed to conform to the eventual GL EB requirements. So we see no need for TERRE involvement in setting imbalances and imbalance prices for BRPs.</p> <p>In fact, we argue strongly against having any TERRE involvement in setting imbalances and imbalance prices for BRPs given that it could cause multiple successive system changes in our local arrangements (to conform with TERRE and then, later, to conform with GL EB, if different).</p> <p>It is also noted that a harmonisation of imbalances and imbalance prices is required by Article 24 of the draft GL EB (July 2015 version) across all TSOs, so this is geographically wider than the TERRE CoBA and will require engagement with non-TERRE TSOs. Also Article 64 of the GL EB requires that imbalance price calculations consider Frequency Restoration Reserve (FRR) as well as RR costs. So for the first reason a TERRE RR CoBA setting of imbalance would not be appropriate; and for both these reasons a TERRE RR CoBA setting of imbalance price would not be appropriate.</p> <p>There is one exception to this, in that we believe that TERRE should specify whether the ramps associated with TERRE Products should be considered as imbalance or not. See also our answer to consultation Question 3.5.</p> <p>Secondly, whatever items are within the scope of TERRE, we do not agree that the significant details of settlement, non-compliance and ramps can be defined later in</p>

	<p>the project, given that we also need to build systems to interface with TERRE either directly or via our TSO, National Grid. These details are needed as soon as possible, given the challenging deadline (including, for us, our local NRA's approval of changes to our systems and processes to interface with TERRE).</p> <p>If later changes are made during the implementation of TERRE to any aspect, this could also cause us substantial timing issues with both the need to adjust a live systems build and the need to seek additional local NRA approval before we can amend the arrangements again.</p>
Stakeholder 5	We consider it is important to establish common criteria for these rules and requirements, that apply to all TSO and provide a transparent framework. No addition prequalification should be required to BSP that are already providing balancing services in their country.
Stakeholder 6	These are crucial aspects of the project which impact on the local balancing arrangements. In GB this issue is being covered through the Issue 60 group and a number of interdependencies have been identified. The project's impact on the continuing design of these local arrangements should not be underestimated and as we mention in answers to other questions, should be factored into things such as the cost benefit analysis and other implementation timescales.
Stakeholder 7	In line with our comments on the application of pricing rules in response to questions 2.1 and 3.2, we consider that it is imperative to ensure a fair competition between BSPs on the TERRE platform to avoid any market distortions. We therefore support the TSOs intention to harmonize to the fullest extent possible the BSP-TSO rules and requirements, as well as the BRP-TSO elements. Both NRAs and stakeholders should be kept informed if and when obstacles to such harmonization are encountered.
Stakeholder 8	In line with our comments in response to question 3.2, we support the TSOs' objective to harmonise BSP-TSO and BRP-TSO rules and requirements to the fullest extent possible before the entry into force of TERRE. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered by the project.
Stakeholder 9	<p>Does the text "the following items will be defined in a later stage of the project" mean that a further consultation to the stakeholders is envisaged in the frame of the TERRE pilot project?</p> <p>Regarding some terms and conditions listed in this subchapter, please see further answers.</p>
Stakeholder 10	In line with our comments in response to questions 2.1 and 3.2, we support the TSOs' objective to harmonise BSP-TSO and BRP-TSO rules and requirements to the fullest extent possible before the entry into force of TERRE, based on an appropriate cost-benefit analysis. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered by the project.
Stakeholder 11	<ul style="list-style-type: none"> • The BSP-TSO and BRP-TSO rules and requirements issue is something that should have been discussed within the current phase of TERRE project in greater detail, as it affects the fair, transparent and non-discriminatory participation of the BSPs in TERRE. • We have serious concerns regarding how to overcome differences between the TERRE participants. We ask for equitable market condition for all BSPs, especially concerning calculation of the imbalance price, prequalification, compliance and ramping issues.

	<ul style="list-style-type: none"> Regarding the BSP-TSO rules, it is our belief that they should reflect the TSO-TSO rules on a one to one basis. The TERRE related products that would be accepted by the local TSO for submission to TERRE (BSP-TSO), should meet the same conditions as the products described in TERRE (TSO-TSO) (e.g. local markets should accept portfolio offers for TERRE, even if this is not allowed in the local market). The same should apply for the settlement of service (e.g. both pay as cleared), the treatment of non-compliance, the settlement of ramping and the prequalification of new service providers.
Stakeholder 12	
Stakeholder 13	<p>The BSP-TSO and BRP-TSO rules and requirements issue is something that should have been discussed within the current phase of TERRE project in greater detail, as it affects the fair, transparent and non-discriminatory participation of the BSPs in TERRE.</p> <p>Regarding the BSP-TSO rules, it is our belief that they should reflect the TSO-TSO rules on an one to one basis. The TERRE related products that would be accepted by the local TSO for submission to TERRE (BSP-TSO), should meet the same conditions as the products described in TERRE (TSO-TSO) (e.g. local markets should accept portfolio offers for TERRE, even if this is not allowed in the local market). The same should apply for the settlement of service (e.g. both pay as cleared), the treatment of non-compliance, the settlement of ramping and the prequalification of new service providers.</p> <p>Regarding the BRP-TSO rules, it is also important that a harmonization in the methodology of the imbalance and imbalance price calculation is achieved.</p>
Stakeholder 14	<p>is the lead time of 30mins flexible ? right now we can modify the lead time and activation period for rte balancing market. What is the shortest validity and activation period ? if the shortest validity period is 15min how can this product be nominated at the border switzerland-france ? does this offer has to be linked in time to get to a 30mins activation time ?</p>
Stakeholder 15	<ul style="list-style-type: none"> We support the objective to harmonize the BSP-TSO and BRP-TSO rules as it affects the fair, transparent and non-discriminatory participation of the BSPs in TERRE. We have serious concerns regarding how to overcome differences between the TERRE participants. We ask for equitable market condition for all BSPs, especially concerning calculation of the imbalance price, prequalification, compliance and ramping issues.
Stakeholder 16	
Stakeholder 17	<p>The consultation document only focuses on the description of the high-level characteristics of the product exchanged by TSOs. BSPs require a detailed view of local BSP-TSO arrangements in order to assess their capability to implement the tools and processes necessary to offer TERRE products.</p> <p>For instance, the introduction of “explicit offers” besides “implicit offers” is a major change for French BSPs which would require at least 18 months to be implemented starting from the definition of all applicable rules and requirements (to be confirmed by the detailed technical specifications). Therefore, we urge TSOs to define these requirements, especially all the characteristics of the expected physical delivery of an activated bid. Notably, the following issues should be rapidly specified:</p>

	<ul style="list-style-type: none"> - Local settlement rules, (in particular the inclusion or not of ramps in local settlement); - Compliance rules and definition of possible penalties; - Rules on firmness of bids and treatment of outages; - Expected physical delivery, especially whether capacity vs energy delivery is required; - Ramping period specifications. For example, figures 3-1 and 5-1 show ramp up and ramp down periods outside the delivery period, whereas RTE proposed to French stakeholders the delivery of +/- 5 minutes ramps overlapping the imbalance settlement period. This is, for instance, a significant issue that needs to be clarified. <p>Furthermore, we deem essential to precise the specific bidding requirements imposed on BSPs, e.g. in terms of bid format specifications etc. In order to be able to clearly identify which blocks can be offered in TERRE, we wish further technical details (including the ones specified at TSO level) concerning the following bidding options given by the current design proposal:</p> <ul style="list-style-type: none"> - The expression of “delivery time period” in order to offer a 15’ block on a restricted timeslot (e.g. 12:30-12:45); - The modality for offering a 60’ indivisible block, due to delivery period constraints; - The modality for presenting “top-offers”, sub-offers of “exclusive offers” and “multi-part” offers. - Information requirements on the location of the activated power plants (e.g. bidding zone, network node); - Possible conversion of offers by TSOs (besides the case of Central Dispatch Systems) beyond the possibility to mark certain bids as unavailable (“unshared”/“restricted”) on the Common Merit Order (CMO). In our view, the implementation of this option (i.e. the conversion of products by TSOs) should be limited as far as possible.
Stakeholder 18	
Stakeholder 19	<p>Given the nature of Project TERRE and the form of cross border trades that are envisaged, the TSOs will play a key role in the development of this form of trade. We would hope that over time the role of the TSOs would reduce and market participants would be able to participate directly in the market. We remain concerned about TSOs specifying the cross border requirement and with the potential for the TSOs to exclude certain bids for domestic reasons. In line with our response to 5.3, we welcome the objective to align the BRP-TSO and TSO-TSO rules and requirements to the full extent possible provided it does lead to overall detrimental impacts at the local level (in other words, any changes in the spirit of alignment should be subject to a cost-benefit analysis). Market participants should always be consulted in this case.</p>
Stakeholder 20	<p>As it is said before, currently national balancing markets are different in terms of balancing philosophy (central dispatch and self-balancing) and in terms of rules and requirements for BSPs and BRPs. For this reason, NRAs and TSOs should first evaluate if</p>

	and how it is possible to assure security of supply and a level playing field between market participants. In the case the analysis shows positive results, it will be possible to continue with the integration and harmonization of procurement of Replacement Reserve.
Stakeholder 21	
Stakeholder 22	

3.4 Q 3.4 Does the TERRE product allow for the participation of all types of balancing service providers (e.g. RES, Thermal, and DSR)? And if not, what changes in the features will allow greater participation in the TERRE project?

Stakeholder 1	It will depend on still open details
Stakeholder 2	Yes, and RES, Thermal or DSR will have to fulfill the same technical requirements.
Stakeholder 3	Yes. The TERRE product is flexible for supporting the participation of all types of balancing service providers
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	Every capacity fulfilling the requirements by TSOs should be eligible to participate in the TERRE projects. Hence proper products and the possibility to use block bids ensure additionally that all kind of technologies can take part at the tender for balancing services. However, any privileged market access should be avoided to create a level playing field.
Stakeholder 7	<p>For the participation of thermal units, the Full Activation Time of 30 minutes will mean in practice that some will not be able to participate to the TERRE platform unless they are already running due to activation during a previous timeframe.</p> <p>We welcome the possibility for RES to participate to the TERRE project. Participation to balancing markets through technology-neutral products is an important step in the full market integration of RES. The actual participation of RES is however also dependent on other constraints. The regulatory framework (e.g. support mechanisms), technology (e.g. metering and steering), operational (e.g. level of automation in the communication protocols between different parties in order to deal with exogenous meteorological variables) and contract constraints may all impact whether and how RES can bid into balancing markets. So while the opening of balancing markets through technology-neutral products is welcome, it may require time and additional steps before RES can fully participate to such markets.</p>
Stakeholder 8	<p>All market participants, whether operating generation assets, managing demand or storing energy, should be enabled to bid in a technology-neutral balancing market on a level-playing field.</p> <p>In the case of RES-E producers, participation to balancing markets is an essential step towards full market integration, an important factor in the valorisation of RES-E inflows, and a welcome contribution to market liquidity.</p>

	We see demand side participation as much more difficult due to the size of the TERRE Product, and also due to the lack of legislation in some countries.
Stakeholder 9	Yes
Stakeholder 10	<p>We are a strong supporter of the integration of all capacity providers into the energy market. All market participants, whether operating generation assets, managing demand or storing energy, should be enabled to bid in a technology-neutral balancing market on a level-playing field.</p> <p>In the case of RES-E producers, participation to balancing markets is an essential step towards full market integration, an important factor in the valorisation of RES-E inflows, and a welcome contribution to market liquidity. Bidding of RR products by RES-E producers may, however, be limited by other constraints, such as the regulatory framework (e.g. support mechanisms), technology (e.g. metering and steering), or operational and contract constraints. All these elements may affect whether and how RES can bid into balancing markets. We call on policy makers in the concerned Member States and beyond to ensure that no regulatory obstacle can limit the participation of RES-E producers to the RR market in particular, and to all other markets in general.</p>
Stakeholder 11	<ul style="list-style-type: none"> • Activation duration limited to one hour excludes the participation of certain assets with a minimum running or reduction time. We recommend an activation duration limit of min. two hours.
Stakeholder 12	
Stakeholder 13	We believe that the current product definition of TERRE allows the active participation of all types of BSPs.
Stakeholder 14	'--
Stakeholder 15	<ul style="list-style-type: none"> • Activation duration limited to one hour, excludes the participation of thermal and nuclear assets. We need a minimum of two hours. This can be solved through linking two cross border products or through extending the max delivery period.
Stakeholder 16	
Stakeholder 17	<p>A precise answer to this question would require additional information on the local implementation of TERRE. However, we can easily consider that some generation and demand units could be excluded from TERRE if the products they can provide are not compatible with the features of the TERRE product. For example, some DSR products need earlier activation notice (2h) or longer activation duration, and therefore may not be offered in TERRE.</p> <p>Concerning our generation, we envisage to make balancing bids from thermal units compliant with the proposed timing and format for TERRE product (i.e. full activation time of 30', delivery period less than or equal to 1 hour). Other available products, such as some offers from nuclear power plants, are too long (in terms of activation time or delivery period) to be offered. The volumes actually offered and the activated units will also depend on the flexibility of bidding formats and on local arrangements.</p>
Stakeholder 18	
Stakeholder 19	In our view the project TERRE process should be technology neutral and all types of service providers should be able to participate.
Stakeholder 20	In general terms, the participation of RES and Demand Response is facilitated through a shorter FAT and delivery periods. In addition, RES and DSR are generally

	<p>connected on distribution networks. Activation of these resources can only happen if aggregation is possible and there is a communication framework between TSOs and local DSO. In this moment, TERRE project does not analyse in details these two elements (but in some Countries RES can already participate to the balancing market. For example, In Spain a Royal Decree published in February 2016 allows participation of RES in Ancillary Services). At the same time, TERRE does not prevent the participation of RES, or DR.</p> <p>We consider TERRE product will allow the participation of all types of balancing service providers. Balancing product should not be restricted for the participation of any specific technology, products should be technologically neutral, and the participation of Balancing Service Providers should be voluntary. The process should be: 1) A product is defined, 2) BSPs are qualified, 3) Qualified BSPs can participate in TERRE.</p>
Stakeholder 21	
Stakeholder 22	

3.5 Q 3.5 What are your views on the application of the local features of the TERRE cross border product (e.g. Harmonization of price cap and floors or Maximum Bid Sizes for Indivisible Offers)?

Stakeholder 1	For the market participant the goal of the project has to be an harmonization of the products features
Stakeholder 2	They are desirable, but not causing any delay in the implementation of the project. In this way, NRAs should support the harmonization process.
Stakeholder 3	<p>The maximum bids size is necessary for indivisible offers. Without this limit, large volume of indivisible offers if selected will potentially introduce operational issues with the ramping up/down of generation at the boundary of delivery time period.</p> <p>From the market point of view, the enforcement of price cap and floor shall be implemented with great caution. Otherwise, the price cap and floor would introduce unrealistic price signal for balance service providers. From the algorithm point of view, the price cap and floor can be supported as an option.</p>
Stakeholder 4	<p>In our roles as operator and administrator of GB balancing settlement and imbalance settlement, we need to know for certain which aspects of TERRE will be harmonised, and how they are to be harmonised, as soon as possible. This is in order to evaluate which aspects will require us to amend our systems and local rules in compliance with the TERRE requirements and to implement those changes in good time. It will not work for us if these are decided too near in time to the entry into force of TERRE, as we won't have sufficient time left to change our systems or obtain local NRA approval to do so.</p> <p>In this respect the treatment of ramps should be clarified as soon as possible.</p> <p>The imbalance arrangements in European Member States are not yet harmonised and it will take time to implement harmonisation after the requirements are known and have been approved by the NRAs. Because of this, we suggest that consideration is given to treating ramps as zero-priced contracts and not treated as imbalances by the TERRE Member States. Treating ramps as imbalances will cause BSPs to include</p>

	<p>their local imbalance costs in their TERRE Bid Prices. Because currently the imbalance prices are based on different formulations in different TERRE Member States, this will pollute the Common Merit Order. Treating ramps as zero-priced contracts means that TERRE TSOs still only pay for the TERRE Products and not the ramps and also avoids polluting the Common Merit Order List, while also ensuring that local BRPs are not disadvantaged in local imbalance arrangements for ramping actions essential for the delivery of the accepted TERRE product.</p>
Stakeholder 5	
Stakeholder 6	<p>We are concerned that TERRE could result in significant design changes to local markets. We believe that if changes are required to meet the Electricity Balancing Guidelines then it would not be wise to make changes to accommodate TERRE, only potentially to back these out to meet the guideline requirements. This seems to be a particular risk associated with the progression of TERRE whilst the final requirements of the guideline are yet to be agreed.</p>
Stakeholder 7	<p>In line with our answers to previous questions, we are not in favor of operating the TERRE platform while divergent, local rules are still in place. Such divergent rules have direct impacts on the bidding behavior and possibilities of market players in the different countries, and as a result create unfair competition between them. Such distortions of cross-border markets should be avoided.</p> <p>We therefore reiterates its encouragement to align such rules before the implementation of the TERRE project, with both NRAs and TSOs cooperating efficiently and pro-actively to achieve this.</p>
Stakeholder 8	<p>In line with our comments in response to questions 3.2 and 3.3, we encourage TSOs to harmonise the features of the TERRE product to the fullest extent possible before the entry into force of TERRE. We see a danger in non-harmonised rules and features practically excluding bids from use in certain markets, thereby weakening the optimality and economic efficiency of reserves exchanges at a regional level. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered by the project.</p>
Stakeholder 9	<p>Please see answers to Q 12.X. regarding harmonization of price cap and floors.</p>
Stakeholder 10	<p>In line with our comments in response to questions 3.2 and 3.3, we encourage TSOs to harmonise the features of the TERRE product to the fullest extent possible before the entry into force of TERRE, based on an appropriate cost-benefit analysis. We see a danger in non-harmonised rules and features practically excluding bids from use in certain markets, thereby weakening the optimality and economic efficiency of reserves exchanges at a regional level. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered by the project. Harmonisation should be done at the level of best practices where possible, so that it does not undermine efficiency at some borders by having to lower standards for the sake of harmonisation.</p>
Stakeholder 11	<ul style="list-style-type: none"> • Ideally caps, floors and maximum bid sizes should be determined by the market. Thus we support only operational necessary constrains. • No restriction on bid sizes. This would only reduce the offers.
Stakeholder 12	

Stakeholder 13	We believe that TERRE workgroup and the involved TSOs and NRAs should work towards harmonized features of the TERRE cross border product, as it is the only solution that guarantees non-discrimination to BSPs and is in line with the GL EB. The application of local features should be avoided to the extent that this is possible.
Stakeholder 14	We agree, that for a proper function of a joint market the markets have to be harmonized in all parameters
Stakeholder 15	<ul style="list-style-type: none"> • Caps, floors and maximum bid sizes should not be introduced. Thus we support only operational necessary constraints. Any constraint must consider the technical possibility of our portfolio. If an introduction of price caps and floors is necessary for operational reasons, they should be in line with the EEX directives. We strongly believe that TERRE workgroup and the involved TSOs and NRAs should work towards harmonized features of the TERRE cross border product, as it is the only solution that guarantees non-discrimination to BSPs and is in line with the GL EB.
Stakeholder 16	
Stakeholder 17	As already mentioned, the local arrangements applied in TERRE will have a crucial impact on the ability of BSPs to participate in the project and, therefore, on the efficiency of the mechanism itself. As regards harmonisation of local features, please refer to answers to the questions in section 12.
Stakeholder 18	
Stakeholder 19	As noted in our response to Q3.2, we believe that local features should be minimised and in any event should be phased out over time to ensure a level playing field for all market participants.
Stakeholder 20	In our view, the integration of RR and mFRR should be based on a level playing field between market participants. For this reason, the harmonisation/removal of cap and floor prices is fundamental and it should be introduced before the go ahead of TERRE project. In addition, if TERRE project should choose for the introduction of maximum bid size, this limit should not be too stringent and it should be harmonized between bidding zones.
Stakeholder 21	
Stakeholder 22	Please refer to Q12

3.6 Q 3.6 The number of bid formats (Divisible, Block, Exclusive, Linking Offers) which may be used by BSP represents a trade-off between the flexibility offered to BSP (with several types of offers) and the simplicity to offer bids and to run the algorithm (eg, with only one standard type of offer). What are your views on this trade-off? Would you advocate for keeping all types of bids offered by TSOs or to reduce the number of possible offers?

Stakeholder 1	please as simple as possible to reduce market entry barriers
Stakeholder 2	See answer to Q3.1.
Stakeholder 3	The suggested bid formats provide great flexibility to BSP. Based on our experiences with available optimization tools and modelling techniques, the scheduling algorithm is capable of handling various bid formats proposed for the TERRE product.

Stakeholder 4	
Stakeholder 5	
Stakeholder 6	Flexibility for BSPs would appear to be important given that the TERRE product may not fully reflect the products traded in local balancing markets. However, as stated in answer to question 3.1 a reasonable number of possible bid formats would be preferable so that ramps can be represented and no technology would hamper to take part.
Stakeholder 7	<p>It is difficult for stakeholders to gauge the precise impact of the availability of the different bid formats on the timing requirements of the algorithm. The availability of such possibilities matters little if market parties have insufficient time to make fully use of them. Given that the available time is already quite limited between the closing of the cross-border Intraday and the GCT of the TERRE project, it would not make sense to further reduce it in order to allow all such formats to be available. If, on the other hand, the reduction of offer formats would also reduce the TERRE clearing time – currently at 10 minutes between H-45min and H-35min – this should be considered in dialogue with stakeholders during the implementation phase, when more concrete information on the impact to the clearing time is available.</p> <p>Concretely, the use of multi-part offers seems superfluous, given that it could indeed be modeled as an exclusive offer. In such a case, it would be most instructive to have a better understanding whether the use of multi-part offers would have an impact on the time to run the algorithm.</p>
Stakeholder 8	See answer to question 3.1 before
Stakeholder 9	<p>According to table 2-1, exclusive offers (3.1.3.3) are not used nowadays. Paragraph 3.1.3.3 explains pros and cons of introducing this format (greater flexibility for portfolio bidding, but the number of sub-offers should be limited). We suggest postponing the introduction of this format in a later stage of the project, once the go-live gives all the parties more knowledge.</p> <p>Regarding linking offers in time (3.1.3.5), some of the features could be simplified (different prices) in the first go-live, as it is noted that “number of links (sub-offers) for one Linking Offer should be also limited to a maximum number”..</p> <p>More sophisticated offers could be introduced in next evolutions of TERRE, once the performance of the pilot project in the first go-live is assessed in a transparent manner and more complex orders demonstrate significant gains.</p>
Stakeholder 10	<p>As noted in our response to question 3.1, we believe it is prudent to first focus on the implementation of bid formats that are most common to all markets.</p> <p>In general the future bid formats should ensure that no technology is hampered to take part in the balancing market, providing a non-discriminatory, level-playing field for all market participants. We attract TSOs’ attention to the fact that introducing multiple and complex bid formats could be contradictory with the concept of a CMO and the idea of marginal pricing. While in a day-ahead auction the use of block bids may not have a significant effect on the clearing process, in a balancing market with a fraction of the traded volume and the number of bids, the complex clearing process can heavily affect the clarity price signal, which would contradict the original intention of establishment of the CMO.</p>

Stakeholder 11	<ul style="list-style-type: none"> • The simplicity to offer bids and the basic need to reflect the different constraints of plants have to precede. Better not keep all types of bids than reduce the number of possible offers. The actual product definition in French Mécanisme d'Ajustement seems quite robust.
Stakeholder 12	
Stakeholder 13	<p>The costs (e.g. computational time, IT costs) of running a complex algorithm with all types of offers are not clarified in the consultation document. According to the information provided by our local TSO (Swissgrid) the algorithm tests conducted with bids of every available bid format showed that the time needed for the TERRE clearing phase did not, in any case, exceed 10 minutes. Therefore the number of bid formats accepted is not expected to influence significantly the performance of the algorithm. Consequently we are in favour of maintaining all types of bids offered by the TSOs, as this would simplify the participation of BSPs from different countries and with different assets in the TERRE project.</p>
Stakeholder 14	3.1.3 Too many Offer possibilities. Exclusive offers and multipart offers not needed.
Stakeholder 15	<ul style="list-style-type: none"> • The costs (e.g. computational time, IT costs) of running a complex algorithm with all types of offers is not elucidated in the consultation document, thus a clear response to this trade-off is impossible. However, in case of trade-off the consideration of technical parameters are a mandatory. In case of trade-off it is better to reduce the types of bids than reduce the number of possible offers. The actual product definition in French Mécanisme d'Ajustement seems quite robust.
Stakeholder 16	We would like to keep the multi-part bids, as used by our TSO.
Stakeholder 17	<p>We agree with the need to strike the right balance between the flexibility offered to BSPs and the simplicity of the products exchanged. Nevertheless, we wish to highlight that the current design of the TERRE product has already been oversimplified with the exclusion of the energy associated with ramps, whereas the amount of energy delivered during ramping periods is far from negligible. We still believe that this additional energy delivery has to be taken into account by the TSOs in the Common Merit Order (CMO), in order to avoid additional balancing activations, including counter-activations.</p> <p>As far as we are concerned, TERRE bids will mainly come from thermal generation units (hydro plants are more suitable to be offered in the mFRR process) which are characterised by delivery period corresponding to the full window of one hour and by significant ramping periods.</p> <p>According to our preliminary analyses the following constraints need to be integrated in the bid format:</p> <ul style="list-style-type: none"> - For a single 15' step, exclusivity between upward and downward offers; - For a single 15' step, exclusivity between different setpoints; - Linking of consecutive 15' steps, to express a minimum delivery period (e.g. when a new power setpoint has been set and this cannot be changed for a minimum time period). As the initial commercial schedule may vary over the TERRE delivery period, the linked blocks (sub-offers) need to comprise different volumes; - Conditional links ("if bid 1 is activated then bid 2 is available"), without which our

	<p>possibility to offer schedule shifting will be restricted. For instance, a scheduled set-point set at 12:30 may be either anticipated (e.g. at 12:00 or 12:15) or postponed (e.g. at 12:45 or 13:00);</p> <p>- A number of links up to 20 which is in our view necessary to maximise the bidding capability of each single unit concerned.</p> <p>Therefore, all the described bid formats for balancing energy offers to be processed in the CMO should be considered as necessary for modelling these constraints. Any reduction of the number of possible offers, including the lack of “conditional offers” and the envisaged limitation of the number of links (sub-offers) per offer could result in a reduction of BSP’s bidding capability. This limitation should be avoided, as it could have a detrimental effect on the efficiency of the CMOL, and therefore on the expected benefits of the project.</p>
Stakeholder 18	
Stakeholder 19	<p>As noted in our response to Q3.1, we believe that it is prudent to first focus on the implementation of bid formats that are most common to all markets, thereby enabling existing approaches towards balancing to be preserved as much as possible.</p> <p>Therefore, for the initial implementation of Project TERRE, the standard product should be based on discrete block offers for delivery over a defined period. More complex formats e.g. linked or multipart offers could be envisaged at a later stage in Project TERRE. We are concerned that the additional complexity of differing bid formats may impact on the operation of the algorithm and may result in inefficiencies in outcomes.</p>
Stakeholder 20	<p>Although increasing the number of bid formats could increase the complexity of the algorithm, this increase should not be unbearable. In fact, in different bidding zones TSOs (between them Italy and Spain) already operate complex algorithms in order to balance the system near time of delivery. At the same time, if with divisible offers and block offers is feasible to replicate all other types of offers, ie that using divisible offers and block offers we can get the same results as with the rest of offers for short periods of time (in this case it is for a maximum of for 1-hour), for simplicity we could also consider to keep just Divisible and Block Offers.</p>
Stakeholder 21	
Stakeholder 22	<p>We believe that, especially in its first phases, the pilot project should focus on simplicity by allowing only one kind of bid format with an easy structure, such as Divisible Offers . This would also help in dealing with the correct harmonization of the different national markets where, as thoroughly reported in chapter 1, different bid formats are allowed.</p>

3.7 Q 3.7 Do you agree with the proposed design of the TSO imbalance need?

Stakeholder 1	only for the inelastic volume. The elastic volume case suggest a potential speculation role from TSO and this is our opinion against a well functioning market
Stakeholder 2	No. A TSO should not be allowed to price their needs, not even in the case of elastic needs. The TERRE should rely on a common European merit order, so the price comes from the offers themselves to provide the balancing energy need for security reasons.

Stakeholder 3	N/A
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	We cannot follow the proposed restriction to the maximum size of the imbalance need. There seems to be no benefit in restricting ex-ante the imbalance need of a TSO to a volume of bids equal to the number it puts on the CMOL.
Stakeholder 7	The 'Maximum Size' characteristic of the imbalance need is unclear. It seems to indicate a form of reciprocity, restricting the imbalance need of the TSO by the volume of shared bids that it is able to provide to the Common Merit Order List (CMOL). While it may be logical that a TSO has some sort of 'priority access' to a volume of bids equal to the number he puts on the CMOL, we see no benefit in restricting ex ante the imbalance need to this volume. It would encourage a TSO to seek the remaining volume of imbalance need through local, Specific Products instead of sourcing it from the common platform.
Stakeholder 8	The Maximum Size characteristic of the imbalance need is unclear. It seems to indicate a form of reciprocity, restricting the imbalance need of the TSO to the volume of shared bids that it is able to provide to the Common Merit Order List (CMOL).
Stakeholder 9	<p>Firstly, we support the go-live of the project without elastic imbalance needs. Only bids from BSPs should be considered. Moreover, we see an overlap between the use of elastic imbalance needs and the Unshared Offers (subchapter 3.1.4.1).</p> <p>Secondly, a proposal of minimum standard features and rules applicable to all TSOs for the calculation of their imbalance needs should be subject of consultation to stakeholders and approval by NRAs. We think that this key issue is not "standardized" in the proposal (chapter 3.2).</p> <p>Finally, transparency is crucial on this matter. Please see answer to Q 11.1.</p>
Stakeholder 10	The Maximum Size characteristic of the imbalance need is unclear. It seems to indicate a form of reciprocity, restricting the imbalance need of the TSO to the volume of shared bids that it is able to provide to the Common Merit Order List (CMOL). We see no benefit in restricting ex-ante the imbalance need of a TSO to a volume of bids equal to the number it puts on the CMOL. It would incite a TSO to seek the remaining volume of imbalance need through local, Specific Products instead of sourcing it through the common platform.
Stakeholder 11	<ul style="list-style-type: none"> • In general we agree with the description of the TSO imbalance need. • A point that needs to be further clarified is the maximum size of the imbalance need. According to Article 3.2.1 it should not be higher than the shared offers made by the BSPs in this direction (to our understanding within the particular bidding zone). Exceptions to this rule apply under conditions that are not described in the document. It is also not clear if this limit applies for the sum of elastic and inelastic imbalance needs.
Stakeholder 12	
Stakeholder 13	<p>The structure of the TSO imbalance need given in table 3-2 must be in line with the cross-border product definition of table 3-1. The following points have to be aligned:</p> <ul style="list-style-type: none"> o Minimum size: Table 3-1 1MW vs Table 3-2 0MW

	<p>o Divisible volume: Resolution in Table 3-1 0.1MW vs Table 3-2 1MW</p> <p>Another point that needs to be further clarified is the maximum size of the imbalance need. According to Article 3.2.1 it should not be higher than the shared offers made by the BSPs in this direction (to our understanding within the particular bidding zone). Exceptions to this rule apply under conditions that are not described in the document. It is also not clear if this limit applies for the sum of elastic and inelastic imbalance needs.</p>
Stakeholder 14	
Stakeholder 15	<ul style="list-style-type: none"> • To our understanding the structure of the TSO imbalance need given in table 3-2 must be in line with the cross-border product definition of table 3-1.
Stakeholder 16	
Stakeholder 17	<p>We understand that a large autonomy is left to TSOs to set their imbalance need. This is justified by the differences in the way electricity systems are managed from one country to another. In our view, full transparency on the methodologies used by TSOs to define their imbalance needs is required and this is particularly important when it comes to the notion of elastic need (see Q 3.8). However, even in case of inelastic demand, market players should be informed on the methodologies applied by TSOs in each country.</p>
Stakeholder 18	
Stakeholder 19	<p>Whilst we recognise that Project TERRE is based on establishing an initial project need, we remain concerned about the role of the TSOs in setting this need. We believe that we should move towards greater harmonisation of the balancing markets with the role of the TSOs diminishing overtime. Such an approach must be consistent with the definition of the common merit order.</p>
Stakeholder 20	<p>We disagree with the possibility for TSOs to define elastic needs.</p> <p>In addition, we would like to have additional information on how imbalance needs are divided between local products and TERRE product.</p>
Stakeholder 21	
Stakeholder 22	

3.8 **Q 3.8** Do you agree with the possibility for inelastic and elastic imbalance needs?

Stakeholder 1	see answer 3.7
Stakeholder 2	<p>The main concern is about the role of TSOs in a common balancing market. TSOs should provide and share means (energy offers) to solve imbalances, but in the description of elastic imbalance needs TSOs seem to participate in the market, even pricing their needs.</p> <p>In fact, we make a clear statement opposing the elastic demand option. If TSOs have other commercial resources to solve the imbalance, they are contradictory with the unbundling principle. If TSOs have regulated assets, it should be clearly defined how</p>

	to manage them in the market: setting a maximum price could be fine, but not bidding or pricing the needs.
Stakeholder 3	From vendor's point of view, the algorithm should provide the flexibility of modelling both inelastic and elastic imbalance needs.
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	<p>It's not fully clear why an efficient solution would have a price cap/floor, as provided by the posting of elastic needs. TSOs become an active player the market: They can even set the settlement price by pricing their bids and offers, and putting them on the CMOL together with bids and offers from market parties. In this way, TSOs are actually marketing the energy from their imbalances, rather than procuring balancing energy to deal with their imbalances. Besides, the non-harmonised methodologies for pricing the various TSOs' imbalance needs would further add to the confusion and lack of transparency as to the extent to which TSOs will effectively be active on the market.</p> <p>Overall, this proposal of elastic imbalance needs is a serious reconsideration of the separation of roles between TSOs and BSPs, which is at odds with the spirit of the Third Energy Package and its unbundling principle. TSOs should use inelastic imbalance needs – as is the case for all other balancing processes – and integrate the uncertainty on the required balancing energy into the volume of the imbalance need instead of the price. This will ensure a more transparent and less complex procurement process.</p>
Stakeholder 7	<p>We have serious reservations about the ability of TSOs to price their imbalance needs on the TERRE CMOL. By pricing their bids and offers, and putting them on the CMOL together with bids and offers from market parties, TSOs are directly active on the market instead, potentially even setting the settlement price and imposing de-facto price caps on the market. TSOs are thus actually marketing the energy from their imbalances, instead of procuring balancing energy to deal with their imbalances.</p> <p>We are convinced that TSOs should use an inelastic imbalance need – as is the case for all other balancing processes – and include the uncertainty regarding the required balancing energy into the volume of the imbalance need instead of the price. This will make the procurement process more transparent and the optimization potentially less complex.</p> <p>An additional issue with the proposed methodology for the elastic imbalance need is its un-harmonized approach. Each TSO is allowed its own methodology for defining one or more imbalance bids without providing any transparency on how such bid(s) is(are) derived. Given the current – and for the foreseeable future still remaining – disparity on how TSOs balance their system and the use of Specific Products, arbitrating between RR and other balancing processes creates distortions not only in the TERRE platform but also in the balancing markets of the other balancing processes. At the very least – and despite the fact that we remain convinced that the inelastic imbalance need is the correct way to define the TSO balancing needs – such methodology should be harmonized, transparent and result in the definition of a single volume of imbalance per TSO with associated price. This would be a first step in ensuring that the elastic imbalance need is solely based on a comparison between the expected prices of mFRR bids and the prices on the TERRE CMOL.</p>

Stakeholder 8	<p>We have serious reservations about the appropriateness of allowing TSOs to price their imbalance needs on the TERRE CMOL. By pricing their bids and offers, and putting them on the CMOL together with bids and offers from market parties, TSOs are directly active on the market, potentially even setting the settlement price. In this way, TSOs are actually marketing the energy from their imbalances, rather than procuring balancing energy to deal with their imbalances. Besides, the non-harmonised methodologies for pricing the various TSOs' imbalance needs would further add to the confusion and lack on transparency as to the extent to which TSOs will effectively be active on the market.</p> <p>Overall, this proposal of elastic imbalance needs is a serious reconsideration of the separation of roles between TSOs and BSPs, which is at odds with the spirit of the Third Energy Package and its unbundling principle. TSOs should use inelastic imbalance needs – as is the case for all other balancing processes – and integrate the uncertainty on the required balancing energy into the volume of the imbalance need instead of the price. This will ensure a more transparent and less complex procurement process.</p>
Stakeholder 9	Please see answer to Q 3.7.
Stakeholder 10	<p>We have serious reservations about the appropriateness of allowing TSOs to price their imbalance needs on the TERRE CMOL. By pricing their bids and offers, and putting them on the CMOL together with bids and offers from market parties, TSOs are directly active on the market, potentially even setting the settlement price. In this way, TSOs are actually marketing the energy from their imbalances, rather than procuring balancing energy to deal with their imbalances. Besides, the non-harmonised methodologies for pricing the various TSOs' imbalance needs would further add to the confusion and lack on transparency as to the extent to which TSOs will effectively be active on the market.</p> <p>Overall, this proposal of elastic imbalance needs is a serious reconsideration of the separation of roles between TSOs and BSPs, which is at odds with the spirit of the Third Energy Package and its unbundling principle. TSOs should use inelastic imbalance needs – as is the case for all other balancing processes – and integrate the uncertainty on the required balancing energy into the volume of the imbalance need instead of the price. This will ensure a more transparent and less complex procurement process.</p>
Stakeholder 11	<ul style="list-style-type: none"> • Yes
Stakeholder 12	
Stakeholder 13	The proposal of inelastic and elastic imbalance needs that the TSOs can submit is a flexible tool that can help TSOs meet their balancing need in an economic optimal way (by taking into consideration alternative means to TERRE), while dealing with the imbalance volume uncertainties.
Stakeholder 14	<p>how does the different imbalance needs (inelastic/elastic) the pricing of bsp ? is the inelastic need comparable to the existing "mode dégradé" ? how will the existing mode dégradée be handled in the future ?</p> <p>What happens if the TSO does not activate enough energy due to a conservative elastic imbalance need?</p>
Stakeholder 15	<ul style="list-style-type: none"> • The proposal of inelastic and elastic imbalance needs that the TSOs can submit is a flexible tool that can help TSOs meet their balancing need in an economic optimal

	<p>way (by taking into consideration alternative means to TERRE), while dealing with the imbalance volume uncertainties.</p> <ul style="list-style-type: none"> • One could argue that in extreme cases certain elastic offers could be activated in order to compensate the counter activation of certain products outside TERRE with known prices (e.g. aFRR, mFRR). This kind of activation would be driven not by the TSOs balancing needs but by financial profit for the TSO. Therefore it is of importance that such activations are excluded from the calculation of the imbalance prices (BRP-TSO).
Stakeholder 16	
Stakeholder 17	<p>We agree with the possibility for TSOs to express either elastic or inelastic imbalance need. Nevertheless, an adequate level of transparency on the methods used by all TSOs for the determination of their imbalance needs is of utmost importance to enable BSPs to anticipate these needs and, therefore, to guarantee the availability of products able to satisfy them. This is a key issue, as the methodology used to treat elasticity of TSOs' imbalance needs will undoubtedly have an effect not only on the RR process, but also on the forthcoming aFRR and mFRR processes.</p>
Stakeholder 18	
Stakeholder 19	<p>We do not agree with the use of elastic imbalance needs. Since the auction will take place at fixed periods in time, the need should be firm at this time. This will allow for efficient clearing and an understandable auction process.</p>
Stakeholder 20	<p>Firstly, we disagree with the possibility for TSOs to define elastic needs; TSOs cannot be market players, hence they should be price takers and not price setters.</p> <p>Secondly, the current text does not describe in details the methodology, the algorithm, and the criteria. The current drafting seems to give complete freedom to TSOs to set elastic prices, hence there is no transparency on price formation.</p> <p>Thirdly, page 22 states that «Each TSO will define an applicable methodology for determining the inelastic and/or elastic volume, and they may use all or none of the previous parameters». The definition of methodologies cannot be left to the discretion of "each" TSO.</p> <p>Finally, as it is said before, if cap and floor prices are introduced, it is important that are harmonised between bidding zones in order to allow a level playing field between market participants.</p>
Stakeholder 21	
Stakeholder 22	<p>We underline that the concept of "elastic need" (i.e. a price/volume couplet) should be carefully evaluated, in order to avoid potential market distortions. By pricing their bids and offers, and putting them on the CMOL together with bids and offers from market parties, TSOs could end up being directly active on the market, potentially even setting the settlement price (therefore influencing the social welfare value).</p> <p>In our view the TSO should be allowed to put in the CMO only their inelastic needs, and the social welfare should be determined only by the price competition between the market participants which should be the only entitled to receive/pay the common settlement price.</p>

3.9 Q 3.9 Do you have specific comments regarding chapter 3 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	
Stakeholder 2	No more comments.
Stakeholder 3	We understand and support the high level design of the TERRE production set out in chapter 3. We look forward to comment on the detailed design once it becomes available based on our experiences.
Stakeholder 4	<p>A number of key decisions (the settlement arrangements for accepted TERRE products including the timing of billing and payments; the treatment of ramps; Gate Closure time; and non-compliance arrangements) are being left until later in the project. If these decisions are left too much longer, it raises an increasing risk that we will not have sufficient time to change our balancing and imbalance settlement systems to be ready in time for TERRE implementation.</p> <p>We also have two questions in relation to this.</p> <ul style="list-style-type: none"> • What is the plan for making decisions on these aspects, i.e. when will we know what these decisions are? There should be a TERRE plan for coming to these decisions and consulting with and notifying the local stakeholders, who are also building systems to make TERRE a success. • How will TERRE notify us and other stakeholders of the decisions that are to be made in a 'later' stage of the project?
Stakeholder 5	
Stakeholder 6	N/A
Stakeholder 7	<p>In sub-chapter 3.1.3.4, we are rather confused by the example. The multi-part offers are depicted as a solution to model fixed costs. At the same time, the example illustrates with increasing per MWh costs for increasing volumes, which is counter-intuitive for integrating fixed costs into bids with increasing volumes. This would rather be the other way around, with diminishing per MWh costs for increasing volumes.</p> <p>In sub-chapter 3.1.4.1, the classification of unavailable offers should be handled in a transparent way towards the BSPs that are making these offers. The choice by TSOs to keep such offers from the CMOL of the TERRE project has an impact on the BSP, as its offers have a reduced (unshared offers) or non-existing (restricted offer) chance to be selected. A BSP making an offer marked as unavailable and kept out of the CMOL of the TERRE project should be compensated for his loss.</p> <p>In sub-chapter 3.1.4.2 the bid conversions coming from Central Dispatch Systems (CDS) is mentioned, though only with the short announcement that a methodology for such a conversion is to be developed. We are worried by the intention to supply the TERRE CMOL with balancing resources from a CDS "as long as their activation and delivery parameters fit the parameters of the TERRE product" while making no mention on how the pricing would be tackled. It is important that bids coming from a CDS are not only correctly translated from local balancing resources in technical parameters, but that the pricing of such bids also allow for correct comparison of bids coming from a self-dispatch system. To achieve this, we request that the methodology</p>

	that will be develop will also include pricing elements and that the development will be done in close collaboration with stakeholders.
Stakeholder 8	No other comments
Stakeholder 9	Please see answer to Q 3.7.
Stakeholder 10	We do not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • In Article 3.1.4.1 it is mentioned that certain BSP offers can be marked by TSOs as unavailable. This can happen either for offers the TSO wants to keep back for its own use (unshared offers) or for offers that could lead to internal congestions or operational issues (restricted offers). <p>The conditions under which a TSO can mark certain orders as unavailable should be further clarified. A transparent communication regarding unavailable and restricted offers is an essential component of a well-functioning market.</p> <p>It is also unclear whether the unshared offers that the TSO keeps for its own use are going to be activated outside TERRE and if and how the settlement for those offers will be made.</p> <p>Additionally it is essential for transparency reasons that the BSPs receive information on their offers that have been marked as unavailable, before the clearing phase to find an alternative to market them.</p>
Stakeholder 12	
Stakeholder 13	In Article 3.1.4.1 it is mentioned that certain BSP offers can be marked by TSOs as unavailable. This can happen either for offers the TSO wants to keep back for its own use (unshared offers) or for offers that could lead to internal congestions or operational issues (restricted offers). This provision is in accordance with the GL EB. It is our view that the conditions under which a TSO can mark certain orders as unavailable should be further clarified. It is also unclear whether the unshared offers that the TSO keeps for its own use are going to be activated outside TERRE and if and how the settlement for those offers will be made. Additionally it is essential for transparency reasons that the BSPs receive information for their offers that have been marked as unavailable, before the clearing phase. In that way they might find an alternative use for their offered flexibility.
Stakeholder 14	'--
Stakeholder 15	<ul style="list-style-type: none"> • 3.1.4.1: A transparent communication regarding unavailable and restricted offers is an essential component of a well-functioning market. This is particularly true for unavailable offers mainly triggered for domestic economic reasons, whereas for restricted offers technical or congestions reasons are more relevant. It is our view that the conditions under which a TSO can mark certain orders as unavailable should be further clarified. It is essential for transparency reasons that the BSPs receive information for their offers that have been marked as unavailable, before the clearing phase.
Stakeholder 16	
Stakeholder 17	Paragraph 3.1.3.3 and Figure 3-6 show an example of exclusive offers in volume. Yet, it would be useful to describe also exclusive offers in time.

Stakeholder 18	
Stakeholder 19	No.
Stakeholder 20	The document does not analysis the firmness regime of inserted and accepted orders. For this reason, we would welcome if TERRE elaborates on this issue.
Stakeholder 21	<p>The types of bid formats included in the Project (paragraph 3.1.3) should be evaluated considering national specificities and ensuring a gradual implementation. It should be pointed out that exclusive bids are not used in any of the Countries included in the Terre Project.</p> <p>Elastic Imbalance Needs:</p> <p>We would not support any possibility for TSOs to submit elastic bids/offers to the Common Merit Order. Imbalance Need should be submitted as a fixed volume, without price.</p>
Stakeholder 22	<p>We believe that an insight should be provided regarding the contents of paragraph 3.1.4. The possibility for TSOs to restrict or not share certain offers should be better analyzed, through a specific consultative process, as to avoid discretionary behaviors. A minimum requirement would therefore be to duly inform market operators on the reasons that lay behind the TSO's decisions over the unavailability of certain offers. Otherwise it would be not clear, for example, if BSP balancing availability has not been selected due to competition (i.e. the price asked/offered) or grid constraints.</p> <p>A similar insight is also required regarding the conversion of bids related to CDSs as it is not clear how the TSOs would proceed in converting the bids (e.g. would the TSO be able to use national bids as "building blocks" to define a bid in such a format, which is unavailable in the relevant national market?), as well as a complete transparency on selected offers/prices made by each power plant participating to the market..</p> <p>Lastly, we deem necessary to provide further the details over the concept of "physical delivery" referred to in sub paragraph 3.1.4.2</p>

4 Balancing CMO & Algorithm

4.1 Q 4.1 Do you have any specific comments on the Balancing CMO description?

Stakeholder 1	With the available information is not possible to evaluate algorithm. The principle to maximize the welfare is in our opinion wrong. the goal of such kind of market should be the guarantee of supply
Stakeholder 2	Please refer to answer to question 3.8.
Stakeholder 3	N/A
Stakeholder 4	

Stakeholder 5	Not Answered
Stakeholder 6	Again, it is not clear why including elastic needs would provide a lower balancing cost solution.
Stakeholder 7	We have no comments on the description of the Balancing CMO.
Stakeholder 8	No comment (descriptive chapter).
Stakeholder 9	<p>We support the go-live of the project with only inelastic needs. Please see answer to Q 3.7.</p> <p>A fallback procedure in case the TERRE process should be tackled in further stages, after the go-live.</p> <p>We prefer to keep the hourly XB scheduling step in the first phase of the TERRE project to allow a faster implementation. Further improvements and evolution should be tackled in future stages (similar to more sophisticated offers) after consultation.</p>
Stakeholder 10	No comment (descriptive chapter).
Stakeholder 11	<ul style="list-style-type: none"> • There are still some doubts on Balancing CMO based on social welfare, when some offers might be kept back for regional purposes.
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	'--
Stakeholder 15	No comment
Stakeholder 16	Not Answered
Stakeholder 17	<p>We support the main features of the CMO. In particular, we are in favour of the one-stage clearing process integrating the netting of imbalance needs and the activation of downward/upward offers. However, we want to stress that the efficiency of intra-day market has to be ensured in all the bidding zones involved in the project. Indeed, the establishment of an optimisation function embedded in the RR process does not justify the absence of efforts in improving the intra-day market design.</p> <p>We also support the proposal to undertake the optimization for the defined Market Clearing Time Period, i.e. the whole hourly delivery period.</p>
Stakeholder 18	Not Answered
Stakeholder 19	We agree that a common merit order is required for balancing. As noted above this will be facilitated through the use of simple standard products in the initial role out of Project Terre.
Stakeholder 20	We agree that the mechanism should maximize social welfare and it should use a single CMO and one-stage clearing process. At the same time, a common merit order can deliver adequate results only if there are common cap and floor prices and bids are able to reflect providers' costs (as expressed in section 3). In addition, before the introduction of TERRE, TSOs and NRAs should perform a detailed cost-benefit analysis on the possibility to modify market clearing time periods.

	At the same time, it is important that the consultation document describes in greater details 4.2.2 Volume indeterminacies: [...] Different solutions of the main function may result in the same social welfare. If these solutions represent different accepted volumes, either in terms of offers or in terms of needs, then the solution that leads to the highest accepted volume is accepted. In fact, it could be useful to understand if it would be better to accept the one with lowest accepted volume.
Stakeholder 21	
Stakeholder 22	

**4.2 Q 4.2 What is your opinion on allowing internal and XB counter-activa-
tions?**

Stakeholder 1	Not relevant, important is the coordination between TSO
Stakeholder 2	We agree with the concept as long as it uses always real offers made by market participants, not grouping of them made by any TSO or imbalance needs created by TSOs. Again, please refer to answer to question 3.8.
Stakeholder 3	The counter-activation is consistent with the objective of TERRE, i.e. increase the overall social welfare and improve market efficiency. The algorithm shall support the internal and XB counter-activations. If needed, market rules can be developed to limit the volume of counter-activations.
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	The core task of TSOs is to ensure the system stability. An efficient exchange of energy is guaranteed by market participants and indeed by market coupling. Hence we reject the proposed option for counter activations. This option would soften the separation of roles between TSOs and BSPs which is at odds with the spirit of the Third Energy Package and its unbundling principle.
Stakeholder 7	<p>We understand the rationale behind allowing internal and cross-border counter-activations, as they may increase the social welfare. However, we make some strong reservations about allowing such actions in the context of a balancing energy procurement process as it implies that TSOs are no longer balancing their system but acting as market operators.</p> <p>The exchange of bids between market parties is a market function for which the forward, day-ahead and intraday time horizons – and in some markets after-day trading – are available. In order to optimize their functioning, it is important to ensure their liquidity and market depth. In the Intraday, liquidity is often concentrated close to the Intraday GCT, i.e. as close as possible to real-time. By allowing a potential exchange between market parties beyond the GCT of the cross-border Intraday, liquidity from the Intraday may be shifted towards the TERRE platform. This would actually result in an impoverishment of the Intraday, running counter to the objective of the NC EB to allow BRPs as much opportunity as possible to balance their perimeter.</p> <p>Additionally, in combination with the elastic imbalance need of TSOs – as discussed in question 3.8 – the use of counter-activations could potentially shift liquidity from the</p>

	Intraday market towards a balancing platform where TSOs also actively market their imbalances. In this, the unbundling principle would seem to get on a slippery slope where an additional semi-market is created where TSOs can behave as a kind of market participant.
Stakeholder 8	In line with our response to question 3.8, we have concerns that internal and cross-border counter-activations could lead to a reconsideration of the respective roles of TSOs and BSPs. Counter-activations would grant a role to TSOs that we believe goes beyond that of managing BSP imbalances: BSPs are responsible for adjusting position in all timeframes, from forward to intraday, and the efficient functioning of these markets depends on their liquidity and depth. Allowing counter-activations by the TSOs would be tantamount to having market participants mandatorily exchanging bids beyond the gate closure of the intraday market.
Stakeholder 9	We support the go-live of the project without counter-activations, and tackle this matter in a further stage of the project, after due analysis and consultation (with real data, since the study presented in the consultation is based on historical data of 2013).
Stakeholder 10	In line with our response to question 3.8, we have concerns that internal and cross-border counter-activations could lead to a reconsideration of the respective roles of TSOs and BRPs. The core task of TSOs is to ensure system security. An efficient exchange of energy is guaranteed by market participants and indeed by market coupling. Counter-activations would grant a role to TSOs that we believe goes beyond that of managing BRP imbalances: BRPs are responsible for adjusting position in all timeframes, from forward to intraday, and the efficient functioning of these markets depends on their liquidity and depth. Allowing counter-activations by the TSOs would be tantamount to having market participants mandatorily exchanging bids beyond the gate closure of the intraday market. Considering that liquidity on the intraday market is often concentrated close to GCT, this would have the potential to reduce liquidity on the intraday market, which already suffers from limited dynamism in some of the concerned Member States. This would also contravene the principle of the Electricity Balancing guideline that both BRPs and BSPs should be given maximum opportunities to adjust their portfolio before intraday GCT.
Stakeholder 11	<ul style="list-style-type: none"> • We support counter-activations.
Stakeholder 12	Not Answered
Stakeholder 13	We support allowing internal and XB counter-activations as their pros (increase of social-welfare; non-distortion of marginal price; higher chance of BSP activation) outweigh the cons from the BSP perspective.
Stakeholder 14	will this "internal" netting be made transparent to the bsp's ?
Stakeholder 15	Counter-activations have a positive impact on the social welfare and increase slightly the activation volumes. As presented in the consultation document, counter activation are not expected to occur at large extent. For these reasons we approve the concept of counter-activation.
Stakeholder 16	Not Answered
Stakeholder 17	We share TSOs' view on counter-activations contributing to increasing the social welfare.
Stakeholder 18	Not Answered

Stakeholder 19	We do not support the use of allowing internal and XB counter activations for the initial deployment of Project TERRE. Once the TSOs have defined a requirement this should be fixed through the procurement process.
Stakeholder 20	In line with our response to question 3.8, internal and cross-border counter-activations could lead to a reconsideration of the respective roles of TSOs and BRPs. The core task of TSOs is to ensure the system stability but counter-activations would grant a role to TSOs that we believe goes beyond that of managing BRPs imbalances. It is important to correct a statement of the consultation made in the consultation document. In fact, not in all bidding zones intraday gate closures are close to real time. For example in Italy and Spain, as shown in table 2.2, XB intraday markets close at least 3.5 hours before delivery.
Stakeholder 21	
Stakeholder 22	

4.3 Q 4.3 Do you agree with the proposed treatment of HVDC losses?

Stakeholder 1	yes
Stakeholder 2	No comments.
Stakeholder 3	Yes. The HVDC losses shall be considered in the algorithm. Based on our experiences with the implementation of scheduling algorithm for RTOs/TSOs in North America and Europe, the algorithm should be able to support multiple loss models according to the technical characteristics of HVDCs.
Stakeholder 4	We need more detail on how the Day-Ahead Market Coupling treats HVDC losses if this is the proposed treatment in TERRE before we can assess the proposal for its impact on our systems and processes and give you a considered response. There was no detail in the TERRE consultation document on this point.
Stakeholder 5	Not Answered
Stakeholder 6	It's not really clear how this works from the consultation document. Some more clarity on this would be helpful before we would be able to comment.
Stakeholder 7	We agree to treat the HVDC losses in the same way as the Day-ahead market coupling does.
Stakeholder 8	No comment
Stakeholder 9	Yes
Stakeholder 10	We agree with the proposed solution.
Stakeholder 11	• Yes
Stakeholder 12	Not Answered
Stakeholder 13	We support using the same methodology for the consideration of the HVDV losses as in Day-Ahead Market Coupling.
Stakeholder 14	'--

Stakeholder 15	Since the HVDC losses are treated identical to the Day-Ahead Market Coupling we have no objection to the proposed treatment.
Stakeholder 16	Not Answered
Stakeholder 17	We agree with the proposed treatment of HVDC losses. However, this proposal should be more detailed. For instance, it is difficult to anticipate how the situation on the border between France and Spain would be handled, where both HVDC and AC lines coexist.
Stakeholder 18	Not Answered
Stakeholder 19	We recognise that delivery volumes may need to be adjusted for losses, both AC and DC losses. We believe that a common approach is required to the treatment of delivered volumes (loss adjusted) and that this should be reflected in the price.
Stakeholder 20	Yes, we agree with the proposed treatment of HVDC losses.
Stakeholder 21	
Stakeholder 22	

4.4 Q 4.4 Do you have specific comments regarding chapter 4 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	no, see above
Stakeholder 2	Specifically, since we do not support the existence of elastic needs by TSOs, in 4.2.5 Netting method, the reference to elastic needs should be eliminated.
Stakeholder 3	In general, the balancing algorithm should be capable of scaling up very well. This means taking into account new geographies (new COBAs, zones), new complexities – such as different types of products such as RR, mFRR, aFRR, interval timeframes, and technical constraints. Given our experience in implementing balancing markets, a well implemented algorithm leads to accurate price signals and is performance proven. This is necessary to achieving feasible results so that national TSOs can avoid implementing backup mechanisms.
Stakeholder 4	<p>Section 4.2.4 notes that ‘it will be important to shorten the scheduling step in future’. We note that this must not be used as an argument to prejudge the Imbalance Settlement Period (ISP) duration as well. There is no compelling need to make Imbalance Settlement Period (ISP) duration and scheduling step equal. For example, GB currently operates with minute by minute balancing products and a 30 minute ISP. This will also be important to note if other CoBAs for different Standard Products, such as mFRR, have, or have a desire to have, different scheduling steps from TERRE.</p> <p>Section 4.2.8 notes that if the TERRE clearing process fails, then national processes will apply. It is very important for balancing and imbalance processes that each party affected, including us as the balancing settlement and imbalance settlement administrator for GB, knows exactly when the central TERRE process has failed, and also when it can assume that the process has failed, even if it is only slow or late.</p> <p>We will need pre-defined fall-back rules in our local arrangements that come into action when there is no or missing information from the central TERRE systems. This should be agreed by the TERRE project across all the TERRE TSOs and communicated</p>

	to us as soon as possible so that we can design our local systems to interface with TERRE. See also our answer to consultation Question 7.4.
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	<p>We support the use of Unforeseeably Accepted/Rejected Offers (UAO/URO), if it is implemented in a fair and transparent way. For this, two conditions have to be met:</p> <ul style="list-style-type: none"> - The use of UAOs and/or UROs should result in a demonstrable increase in overall welfare; - Side-payments should be used to both indemnify market parties with UROs as they suffer opportunity costs and pay market parties with UAOs the difference between the clearing price and their bid price. <p>These two conditions ensure acceptability of the use of UAO/UROs by market participants in order to increase the overall welfare.</p> <p>Additionally, the use of UAO/UROs to achieve an overall increase in welfare should be explained and communicated in a transparent way. Otherwise, such seemingly paradoxical measures may undermine the trust of market parties in the efficiency and fairness of the TERRE platform. The current handling of Paradoxically Rejected Bids (PRBs) in the Euphemia algorithm of the day-ahead market coupling does not meet any of the two conditions of transparency and side-payments. As a result, the trust of market parties in the fairness of the algorithm has been undermined and its optimality is current put in question. The TERRE project should learn from this experience when dealing with the UAO/UROs.</p>
Stakeholder 8	No comment
Stakeholder 9	The result of the study of Unforeseeably Accepted/Rejected Offers referred in sub-chapter 4.3.2.3 should be published and subject to consultation.
Stakeholder 10	<p>On section 4.3.2.3 on Unforeseeably Accepted and Rejected Offers (UAO/URO): while the Unforeseeably Rejected Offers are equivalent to PRBs in the day-ahead timeframe, we have questions regarding the use of Unforeseeably Accepted Offers. The remuneration of bids should certainly not be less than the requested price. However, the use of pay-as-bid for UAOs would introduce a discrimination in the treatment of the various offers and would go against the principle of uniform marginal pricing. While we support efforts to improve the efficiency of joint procurement of RR, amendments of such importance to the market design should not be decided without considering their impact on the intraday market and overall welfare. Therefore, a thorough assessment of the risks and benefits of introducing UAOs, as well as more details on the precise methodology considered by TSOs is needed for us to take a definitive position on the subject.</p> <p>Along the lines of existing requests made by us in the framework of the use of Paradoxically Rejected Bids (PRB) in the Euphemia algorithm for the day-ahead timeframe, the use of UAO/URO should be fair and transparent. The framework designed for the use of UAOs and/or UROs should be clear and result in a demonstrable increase in overall welfare; regular reporting on the occurrence of the use of UAO/URO, as well as on their impact on social welfare, should be available to market participants.</p>

Stakeholder 11	<ul style="list-style-type: none"> • No comment
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	4.3.2.3 This question is quite an important issue especially how to make such unforeseeable activations transparent for all market participants.
Stakeholder 15	Chapter 4 is relatively high-level, which makes it complicated to give an in-depth opinion concerning the Balancing CMO and algorithm. We stress on the fact that we approve the general concept of an optimized welfare and a harmonization of local rules to avoid complexities and prevent discrimination.
Stakeholder 16	Not Answered
Stakeholder 17	We would like to stress that “Unforeseeably Accepted and Rejected offers” should be an issue to be treated in a transparent way, from the very beginning. Notably, the experience gained through the implementation of the day-ahead price coupling should be duly taken into account. Whereas the price coupling project (PCR) is undoubtedly a success, there are currently growing discussions on the subject of Paradoxically Rejected Bids. Since this issue is in our view rather similar for both the projects, we advocate for full transparency starting from the design and early implementation of TERRE.
Stakeholder 18	Not Answered
Stakeholder 19	No comment
Stakeholder 20	<p>The document should better analyse how TSOs will optimise the use of local balancing products and TERRE product.</p> <p>In addition, it is not clear if Terna will define its Imbalance Need at global (Italy) level or at zonal (or aggregate of zones) level. We request to clarification on this point.</p>
Stakeholder 21	<p>National price zones and congestions in Italy (par. 4.3.3):</p> <p>“Terna, for each market zone, will submit to TERRE: different ATC values; different offers and one need for the whole area”. From this text it is not clear if Terna will define its Imbalance Need at global (Italy) level or at zonal (or aggregate of zones) level. We request some clarifications on this point.</p> <p>Elastic Imbalance Needs:</p> <p>We would not support any possibility for TSOs to submit elastic bids/offers to the Common Merit Order. Imbalance Need should be submitted as a fixed volume, without price.</p>
Stakeholder 22	Referring to par. 4.3.3, it is not clear whether the “imbalance need” submitted by the Italian Tso will be a national-level aggregate or a series of zonal needs.

5 Settlement

5.1 Q 5.1 Do you agree that the proposed settlement design is in line with the principles of the EB GL and the integration of balancing markets?

Stakeholder 1	We support the pay as cleared approach
Stakeholder 2	Yes, we do.
Stakeholder 3	We have typically seen marginal pricing (pay-as-cleared) as the de-facto pricing mechanism in balancing markets. This is true for energy based actions. However, for non-energy actions we have also seen pricing based on pay-as-bid.
Stakeholder 4	<p>There is a statement in section 5.4 that the Imbalance Price can be calculated as the weighted average costs of the entire hour. We assume that this is a typographical error and that it should have stated the Marginal Price. If, however, it really did mean Imbalance Price then this is not in line with the GL EB, and we would further question why TERRE is concerned with calculating an imbalance price, as this should be left to the local arrangements, which will also harmonise as required by the GL EB.</p> <p>Other than on the above point, we agree that the proposed design for a marginal price is in line with the latest public draft GL EB (July 2015), but note that the GL EB is not yet in its final agreed form and we have had no sight of more recent developments in the text.</p>
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We agree that the use of Pay-as-Cleared is in line with the principles of the EB GL. However, the pricing method for balancing energy as covered in Art. 42 of the EB GL (ACER draft) is applicable not only on the settlement between TSOs as proposed in the TERRE project. It is also applicable to the settlement between TSO and BSP and TERRE should include such an alignment of the settlement design in its scope.
Stakeholder 8	We support the implementation of marginal pricing for the settlement of RR energy exchanged through the TERRE platform, along the lines of the ACER Framework Guidelines and the current version of the Electricity Balancing guideline. We do not believe that an alternative pricing methodology can be more efficient at European level. We understand these provisions as applying to settlement of both TSO-TSO and TSO-BSP exchanges.
Stakeholder 9	We support the implementation of marginal pricing according to EB GL , for both TSO-TSO and BSP-TSO settlement. We do not support the ramp settlement.
Stakeholder 10	We support the implementation of marginal pricing for the settlement of RR energy exchanged through the TERRE platform, along the lines of the ACER Framework Guidelines and the current version of the Electricity Balancing guideline. We do not believe that an alternative pricing methodology can be more efficient at European level. We understand these provisions as applying to settlement of both TSO-TSO and TSO-BSP exchanges.
Stakeholder 11	<ul style="list-style-type: none"> • We mainly point on the pay-as-cleared scheme.
Stakeholder 12	Not Answered

Stakeholder 13	We support the proposed settlement design, as it is in accordance with the Framework Guidelines (FW) (2012) and the GL EB (2015).
Stakeholder 14	Yes
Stakeholder 15	According to the framework Guidelines on Electricity Balancing and the EB GL the pay-as-cleared pricing scheme is clearly the preferred scheme. This corresponds to our conviction of an adequate pricing methodology.
Stakeholder 16	Not Answered
Stakeholder 17	The proposed design seems to be in line with the principles of the EB GL concerning the preference for the application of the pay-as-cleared principle for the settlement of XB Balancing schedules derived from TERRE. However, from both BSPs and BRPs point of view, this choice needs to be confirmed by the local implementation arrangements.
Stakeholder 18	
Stakeholder 19	We believe that Project TERRE is in line with the Balancing Framework Guideline, while recognising that the final version is yet to be ratified.
Stakeholder 20	The settlement design is in line with Electricity Balancing Guidelines.
Stakeholder 21	
Stakeholder 22	

5.2 Q 5.2 Do you agree with the application of cross border marginal pricing, settlement of the block and the proposed design for the definition of Marginal Price between TSOs at the XB level?

Stakeholder 1	yes
Stakeholder 2	Yes, we do.
Stakeholder 3	See response above
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	As mentioned above, a block trade and settlement poses issues for the GB arrangements about who is responsible for the ramp volumes. Occurring ramps should not be at the expense of the BSPs.
Stakeholder 7	We agree with the proposed settlement design between TSOs – both for the pricing in the form of Pay-as-Cleared (marginal pricing) as the exclusion of the power ramps –, and asks that the same design is applied to the settlement between BSPs and TSOs.

	We also agree with the proposed methodologies in case of indeterminacies and netting.
Stakeholder 8	We agree with the proposed settlement design between TSOs, both for the pricing in the form of Pay-as-Cleared (marginal pricing) and the exclusion of the power ramps.
Stakeholder 9	Yes
Stakeholder 10	<p>We agree with the proposed settlement design between TSOs, both for the pricing in the form of Pay-as-Cleared (marginal pricing) and the exclusion of the power ramps. In line with our comments in response to question 5.A, we request that the same design principles apply to the settlement between BSPs and TSOs.</p> <p>We also agree with the elements on the calculation of the marginal price and on the settlement of price indeterminacies – which foresees a neutral solution likely to have the least impact on welfare. Regarding congestion rents, we agree with the TSOs that the methodology for allocation these rents should be aligned to that of other timeframes.</p>
Stakeholder 11	<ul style="list-style-type: none"> • We not yet overlook all the implications within the bidding zones.
Stakeholder 12	Not Answered
Stakeholder 13	We believe that the described cross border marginal pricing, block settlement and definition of marginal price between TSOs at the XB level complies with the GL EB. Moreover the methodology of handling indeterminacies, netting of imbalance needs and calculation of congestion rents is solid.
Stakeholder 14	5.4 Are the bidding zones equal to today's TSO responsibilities? Is it possible, that bidding zones within countries (except the mentioned price zones in Italy) can occur? Is it possible that these bidding zones are different from one day to the other (maintenance of transmission lines, power plants etc.?)
Stakeholder 15	We agree with the application of cross border marginal pricing, the settlement and the definition of marginal pricing between TSOs at the XB level. Nevertheless, we see major challenges within the bidding zones for an adequate settlement. Mainly in the calculation of the balancing energy price and the frequency of the publication. We understand that this is out of scope of the TERRE project but this will finally have an important impact on the implementation of TERRE. It is important that the handling of Marginal Price between TSOs at XB level within TERRE is consistent with methodologies applied in other coupling mechanisms.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We disagree with the exclusion of the energy associated with ramps from the settlement of the TERRE product since the delivered energy during ramping phases is far from negligible, e.g. in case of a 15 minutes block it may potentially represent twice the energy amount considered for the product, and therefore it has to be taken into account. In particular, Table 2-1 shows that a majority of TSOs currently include ramps in local settlement and, if it was up to BSPs to embed this additional energy in their bids, this could greatly inflate prices.</p> <p>Moreover, we also wish to contest the relationship presented in §5.2 between the “scheduled” nature of the TERRE product and the exclusion of ramps. On this matter, we do not see any fundamental difference between scheduled and direct activated products.</p>
Stakeholder 18	We would like Entso-e to consider including ramps in product settlement.

	Ramp settlement is a key characteristic of several Member State's existing regimes. Excluding ramps from settlement introduces significant risks to market participants in these Member States and creates a barrier to participation in Terre.
Stakeholder 19	We agree with the approach towards cross border marginal pricing and settlement of the block. We agree with the definition of the marginal price.
Stakeholder 20	<p>If the product is used only as RR, the settlement should be pay as clear; otherwise, if TERRE product is used to resolve internal congestions, pay as bid methodology should be preferred. In fact, this pricing methodology could allow a specific valuation of resources' location.</p> <p>We agree that the settlement should avoid energy associated with ramps; in order to ensure transparency, each BSP should internalize in its bid the "cost" of the ramp.</p>
Stakeholder 21	
Stakeholder 22	

5.3 Q 5.3 What is your perspective regarding the alignment of the TSO-TSO settlement procedure and the BSP-TSO settlement procedure?

Stakeholder 1	depends on the still open details
Stakeholder 2	The alignment of both settlement procedures is the only way to avoid discrimination between market participants.
Stakeholder 3	N/A
Stakeholder 4	<p>It is important that settlement procedures are aligned between TERRE and local arrangements; or at least that the local arrangements are designed in the knowledge of the precise TERRE proposals for settlement (both the timing of billing and money transfers).</p> <p>This is because we invoice BSPs and BRPs at set times using the information we have to hand according to set rules and the payment due dates are also specified in those invoices. If we have local payment arrangements that do not match the TERRE payment arrangements, we will have the situation where local BSPs are expecting to be paid but we have received no money from central TERRE arrangements to pay them; and where TERRE TSOs are expecting to be paid but we have received no money from the local BSPs to pay the TERRE TSOs. Therefore we must align our arrangements and TERRE together and they must remain aligned on an ongoing basis.</p> <p>So we need to know the TERRE proposals for the timing of billing and payments as soon as possible; and we will need sufficient and long notice of any future change to these proposals so that we can amend our own systems in line with TERRE each time that TERRE changes in future.</p> <p>We also need to know how frequently and for what period TERRE plans to bill and settle payments, e.g. GB currently operates with daily billing with payment approximately 28 days following the day in question. And we need to know whether TERRE will do re-calculations/reconciliations for a given billing period if errors are found in the initial TERRE calculations or input data for example; and when it will do them if it does; and whether it will apply interest?</p>

	<p>In response to Question 3.5, we also made an observation on the settlement treatment of ramps as follows.</p> <p>The imbalance arrangements in European Member States are not yet harmonised and it will take time to implement harmonisation after the requirements are known and have been approved by the NRAs. Because of this, we suggest that consideration is given to treating ramps as zero-priced contracts and not treated as imbalances by the TERRE Member States. Treating ramps as imbalances will cause BSPs to include their local imbalance costs in their TERRE Bid Prices. Because currently the imbalance prices are based on different formulations in different TERRE Member States, this will pollute the Common Merit Order. Treating ramps as zero-priced contracts means that TERRE TSOs still only pay for the TERRE Products and not the ramps and also avoids polluting the Common Merit Order List, while also ensuring that local BRPs are not disadvantaged in local imbalance arrangements for ramping actions essential for the delivery of the accepted TERRE product.</p>
Stakeholder 5	Not Answered
Stakeholder 6	Somehow this would need to be aligned in a sensible manner to allow BSPs to offer into TERRE and the local balancing market in a consistent manner. A BSP will probably want to offer products into both and acceptances in one mechanism will affect what can be accepted in the other.
Stakeholder 7	In line with our responses to previous questions, we consider that the BSP-TSO settlement procedure should be harmonized for all BSPs. The way BSPs are settled has a direct impact on their bidding behaviour. Consequently, having divergent settlement regimes will skew the playing field and distort the market by favouring BSPs in one country over BSPs in another country. As all BSPs have to compete directly on the same CMOL, they should do so under the same rules.
Stakeholder 8	In line with our responses to questions 5.1 and 5.2, we believe that the TSO-BSP settlement procedure should be aligned on the TSO-TSO settlement procedure. Considering that all BSP bids will compete on the same CMOL, introducing different TSO-BSP settlement procedures would skew the playing field and effectively introduce discrimination between market participants.
Stakeholder 9	We support harmonization of TSO-TSO and BSP-TSO settlement to marginal pricing.
Stakeholder 10	In line with our responses to questions 5.1 and 5.2, we believe that the TSO-BSP settlement procedure should be aligned on the TSO-TSO settlement procedure. Considering that all BSP bids will compete on the same CMOL, introducing different TSO-BSP settlement procedures would skew the playing field and effectively introduce discrimination between market participants.
Stakeholder 11	<ul style="list-style-type: none"> • No comment
Stakeholder 12	Not Answered
Stakeholder 13	We strongly believe that a harmonization between the TSO-TSO and BSP-TSO settlement procedure regarding the TERRE standard product should be achieved. BSP-TSO settlement of the TERRE standard products should move to pay as cleared scheme for all involved TSOs. The same alignment should be achieved regarding the non-inclusion of ramps in the settlement.
Stakeholder 14	'--

Stakeholder 15	No comment
Stakeholder 16	Not Answered
Stakeholder 17	<p>We believe that, if TSO-TSO settlement is based on marginal price, TSO-BSP settlement regimes should be based on the same method. Moreover, TSO-BRP imbalance settlement rules should allow accurately passing on balancing costs to the BRPs, while taking into account the method adopted to set the price of balancing energy. This could be achieved, for instance, by fixing an imbalance settlement price on the basis of the weighted average cost of all balancing energies. This approach will ensure the financial neutrality of TSOs.</p> <p>We also believe that NRAs should be in charge to ensure the consistency of the national TSO-BSP and TSO-BRP settlement procedures together with the TSO-TSO settlement, even though the current discrepancies should not prevent the implementation of the project.</p>
Stakeholder 18	
Stakeholder 19	We believe that, ideally, the TSO-TSO settlement process and the BSP-TSO settlement process should be aligned.
Stakeholder 20	<p>The presence of different ISPs should not be a problem for the implementation of TERRE project, at the same time TSOs and regulatory authority should continue studying if there are significant advantages for BSP with long ISP and should analyse possible solutions.</p> <p>In addition, as already said, on netting of Imbalance Needs: Elastic needs should not be allowed, and accordingly to this, last two bullets on page 34 from the consultation paper should be deleted</p>
Stakeholder 21	
Stakeholder 22	

5.4 Q 5.4 Do you have specific comments regarding chapter 5 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	
Stakeholder 2	No more comments.
Stakeholder 3	The common solution should be flexible to meet new timelines, processes and settlement charges without the need of new development. The application of such features should be formula and event driven.
Stakeholder 4	See our answers to Questions 5.1 and 5.3.
Stakeholder 5	Not Answered
Stakeholder 6	N/A

Stakeholder 7	We have no further comments on this chapter.
Stakeholder 8	No comment
Stakeholder 9	<p>Subchapter 5.4 - It is mentioned one methodology for the calculation of the Imbalance Price, but stating that there are “different methodologies under study”, but no further explanation is given.</p> <p>Subchapter 5.6 - The occurrence of indeterminacies described in chapter 5.6 (only netting of needs) have to be reported. Please see answer to Q 11.1. In the case of elastic needs we agree with setting middle price. In the case of inelastic needs and elastic needs, we support the proposed solution (the last ‘theoretical’ accepted offer).</p> <p>Subchapter 5.7 - We expect a consultation launched by NRAs will take place on this matter.</p>
Stakeholder 10	We do not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • 5.2: The standard product of TERRE will only be the scheduled product. The ramps have to be considered while developing the relation of BRP and BSP within the bidding zones. The market conditions within the bidding zones must be designed in a way to minimize negative impacts on the TERRE participation.
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	'--
Stakeholder 15	<p>5.2: The standard product of TERRE will only be the scheduled product. The ramps have to be considered while developing the relation of BRP and BSP within the bidding zones. The market conditions within the bidding zones must be designed in a way the minimize negative impacts on the TERRE participation. 5.4: For a coherent Imbalance Price calculation, the price for the entire hour (60 min) should be based on marginal pricing. Rather than calculating a weighted average cost, the Imbalance Price of the different 15 min should be combined using a marginal pricing approach.</p>
Stakeholder 16	Not Answered
Stakeholder 17	When congestions occur on TERRE borders, we believe that NRAs should consider the redistribution of congestion rents to BRPs, e.g. by reducing cash-out prices. This would ensure a fair cost-allocation between the relevant market participants while ensuring the financial neutrality of TSOs.
Stakeholder 18	
Stakeholder 19	No.
Stakeholder 20	The consultation documents states that the marginal price will be applied to the XB balancing energy exchanges. At the same time the document does not describe if implicitly the local (Italian) pricing rule will change from the current Pay As Bid to System Marginal Price. For markets with Pay as Bid, it is important to understand how offers will be considered, in particular if different offers should be sent for TERRE and local products. Due to the impact on the market participants and on the system of

	any change in the dispatching service market pricing rule, we think that it is not sufficient to consult such an important change in a XB pilot project consultation; instead a specific consultation at Italian level should be organized.
Stakeholder 21	<p>Marginal Price choice (par. 5.1):</p> <p>it is stated that the marginal price will be applied to the XB balancing energy exchanges. Does this imply that the local (Italian) pricing rule will change from the current Pay As Bid to SMP? Due to the impact on the market participants and on the system of any change in the dispatching service market pricing rule, we think that it is not sufficient to consult such an important change in a XB pilot project consultation; instead a specific consultation at Italian level should be organized.</p> <p>Elastic Imbalance Needs (par. 5.3)</p> <p>We would not support any possibility for TSOs to submit elastic bids/offers to the Common Merit Order. Imbalance Need should be submitted as a fixed volume, without price.</p>
Stakeholder 22	We believe that, given the co-existence of different national settlement methods among the project's parties (as referred to in 5.2), it is of utmost importance for market operators to clearly understand if and how this mechanism would affect national settlement methods without bringing on distortionary effects on the respective markets (i.e. how would the TSO-TSO marginal pricing be reflected in pay-as-bid markets).

6 Cost Benefit Analysis

6.1 Q 6.1 What are your views on the methodology used and assumptions made in the Cost Benefit Analysis?

Stakeholder 1	We miss completely the value of security of supply
Stakeholder 2	<p>There would be necessary much more detailed information to assess the methodology, but the assumptions explained in the chapter 6 sounds reasonable and also the definition of the counter-factual scenario.</p> <p>In the case of Spain, it is not clear in the document if the simulations take into account the Management of Deviations Market, so the results given for the base case could be non-realistic.</p>
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	<p>In our opinion the input data for the analysis is not representative of the foreseeable situation when the mechanism starts to run. The CBA is based in just one year data (2013) and the offers considered are the ones that providers presented considering their national regulation at that moment, in cases with very different price formation mechanisms, and even Pay as Bid markets.</p> <p>Additionally, several changes have occurred since then and may continue to occur. For</p>

	example, in Spain renewable technologies are now taking part of the balancing markets.
Stakeholder 6	<p>The cost benefit is always going to be limited by looking at fixed data under the existing regime and doesn't take account of behavioural changes which could occur. A significant omission of the analysis is that it looks at cost implications on TSOs centrally and in the local market, but does not consider the cost implications and knock on effects on local balancing markets, nor on the costs of participants' systems and processes in dealing with these new arrangements. Experience in GB suggests significant changes will be needed in local balancing and settlements arrangements to accommodate the project.</p> <p>Further details are needed to assess the conducted CBA and challenge the results.</p>
Stakeholder 7	<p>We have the following concerns regarding the assumptions made for the Cost-Benefit Analysis:</p> <ul style="list-style-type: none"> • In particular for the UK and France – but also more general – our questions on how the current bids into the balancing markets have been translated into 'equivalent' bids for the TERRE platform. The current organization of the balancing markets is far removed from the bidding of a Standard Product in the TERRE platform. For example, in the UK, unit characteristics and prices are transmitted (i.e. implicit offers) from which National Grid selects an optimal combination of technical characteristics and prices. How this process is converted into explicit offers for the Standard Product is unclear and should be further explained. Any underlying assumptions – both from a technical as market perspective – may have a large impact on the outcome of the Cost-Benefit Analysis. • It is unclear how local rules are treated and what level of harmonization is assumed. These are important assumptions to correctly interpret the impact on BRPs and BSPs that are reflected in figures 6-12 and 6-13. • The exclusion from the French data of the hydraulic pumped energy transfer stations (STEP) casts doubts on the results obtained for France. As acknowledged on page 88, they cover a large volume of activation of balancing in France and will thus likely distort the results quite significantly. France has indeed results in the CBA that seem to deviate from the other countries. This impact should thus be better explained in the general conclusions, but preferably the volume should be included in the CBA either in a way that this volume could be expected to participate in the future or through the introduction of an equivalent volume. • The calculation of the costs does not provide any details making it hard to assess its validity. In any case, market parties will also have to make costs to adapt to the implementation of the TERRE project, which are currently not included in the CBA. A change to a hourly, explicit bidding process may require substantial changes to the current operational processes. This should be correctly reflected in the CBA.
Stakeholder 8	No comment
Stakeholder 9	Please see answer to question 7.4.
Stakeholder 10	We believe it is complex to isolate the costs and benefits of the exchange of RR on the one side, and that of other changes in the balancing market design, either at local, regional or European level. For instance, the CBA should clarify what portion of the suggested benefits can be attributed to the introduction of an imbalance netting

	process or the harmonisation of local changes in market design (e.g. harmonisation of GCTs, shortening of ISPs), and which benefits can be directly attributed to the joint RR procurement.
Stakeholder 11	<ul style="list-style-type: none"> • We have not enough information and time to properly answer the questions on cost benefit analysis. The involved experts should express their confidence and doubts. At least we have some doubts on French numbers, as imbalances in France seem generally quite small compared to the numbers of Switzerland and Italy as well as the ones of the other countries.
Stakeholder 12	Not Answered
Stakeholder 13	The assumption of running twice the same model and changing only the boundary conditions (ATC) is reasonable. It is unclear how the harmonization of local rules and pricing is modeled in the simulation tool developed. Thus the absolute values presented in chapter 6 are associated with non-negligible uncertainties.
Stakeholder 14	'--
Stakeholder 15	The assumption of running twice the same model and changing only the boundary conditions (ATC) is reasonable. For us it is unclear how detailed and precise the harmonization of local rules and pricing is modeled in the simulation tool developed during the design phase. Additionally, at present XB exchanges are already functional (BALIT, MDA) and there consideration for the CBA is not clearly mentioned in the consultation document. Thus the absolute values presented in chapter 6 are associated with non-negligible uncertainties. We have not enough information and time to properly analyze the results cost benefit analysis. The involved experts should express their confidence and doubts.
Stakeholder 16	Not Answered
Stakeholder 17	See the answer to question Q 6.2.
Stakeholder 18	Not Answered
Stakeholder 19	We believe that there is merit in developing cross border arrangements for regulating reserve and the methodology and assumption re a reasonable basis for this type of analysis.
Stakeholder 20	<p>In principle, we agree with the general methodology presented by ENTSO-E. At the same time, we would like to point that a simulation of one year is too short in order to compare costs and benefits. In addition, benefits should consider a confidence interval as the one requested to market participants in the CBA on ISP harmonization because the methodology mixes data from very different balancing markets, some operating pay-as-bid, others marginal pricing; some with unit based bidding and others with portfolio based bidding. Finally, the analysis should also make sure that commercial available cross-border capacities used in the study are in line with physical available cross-border capacity in order to avoid considering transaction that are unfeasible.</p> <p>On the analysis of costs, we would like to point out that the same platform introduce for TERRE could be used in the future for the introduction of more valuable products for the balancing of the system, for example RR capacity.</p>
Stakeholder 21	Not Answered
Stakeholder 22	

6.2 Q 6.2 What are your views on the results of the Cost Benefit Analysis?

Stakeholder 1	see above: incomplete
Stakeholder 2	<p>The assessment of the results it's a very difficult task.</p> <p>In the Spanish case, for example, the evolution of GCT from H-4 to H-1 will change the volumes of balancing energy and the remaining ATC for balancing markets.</p> <p>We accept that it's not easy to simulate the behavior of market participants but on the other hand, we cannot use the historical data as a fair representation of this new scenario.</p>
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	N/A
Stakeholder 7	<p>We believe in the integration of the European electricity markets, including the balancing markets. Implemented correctly, it provides new opportunities and efficiencies. It is thus no surprise to us that the TERRE project would have a positive, economic impact. However, there are still questions concerning the obtained results:</p> <ul style="list-style-type: none"> • Referring to our comments on the assumptions, it is unclear how robust the results are with regard to assumptions on the conversion of current bids into Standard Products for TERRE or the exclusion of part of the French balancing volume. • It is unclear what exactly is reflected in these costs, as for example Greece is (at least partly) driven by counter-activations and the lack of an Intraday market. What fraction of the results is due to (divergent) market specificities and what fraction is actually the result of the implementation of the TERRE project? • It is unclear how counter-activations are included in the results: are they a benefit to BSPs (i.e. an increase in payment to BSPs), and if so, how come that the TERRE project would result in a reduction of BSP benefits in for example Greece, where the market would be driven by counter-activations?
Stakeholder 8	Seemed logic to us
Stakeholder 9	Please see answer to question 7.4.
Stakeholder 10	<p>More detailed information to assess the methodology would be welcome, but the assumptions explained in Chapter 6 and the definition of the counter-factual scenario look reasonable.</p> <p>Much more complex is the assessment of the results and their validity for 2018. In the Spanish case, for example, the evolution of GCT from H-4 to H-1 will change the</p>

	volumes of balancing energy and the remaining ATC for balancing markets. We understand it is complex to simulate the future behaviour of market participants, but the use of historical data in this case is misleading.
Stakeholder 11	
Stakeholder 12	Not Answered
Stakeholder 13	<p>The CBA should be dealt as a tool to assess the potential benefit of coupling the different Replacement Reserve markets. Its results are an indication of the impact of TERRE on the BSP activations, on the BRP costs and on the balancing prices per country. They are meant to show us the expected direction of TERRE's impact. The calculated benefits of 150 Mio EUR should be communicated in combination with an uncertainty which is in our opinion not insignificant</p> <p>The published results that can be summarised as reduction of activations, reduction of BRP costs, reduction of upward marginal prices and increase of downward marginal prices can be justified by the netting of the TSO's needs and by the utilization of the cross border ATC.</p>
Stakeholder 14	<p>impact on brp's: why is France not saving more money on implementing terre ?</p> <p>Upward imbalances in France in MWh seem to be quite low (level of switzerland!) only ten times less than italy and spain? half of portugal? what datas are that? in our opinion hard to believe to be realistic.</p>
Stakeholder 15	The costs of 25-30 Mio EUR cannot be commented. However, the modeled benefits of 150 Mio EUR should be communicated in combination with an uncertainty which is in our opinion not insignificant.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We believe that further details are necessary on the assumptions used in the CBA to identify generation and consumption units which will be used by BSPs to make bids in TERRE. This additional information is important in order for stakeholders to evaluate whether the impacts and benefits of the TERRE project envisaged in the analysis are realistic.</p> <p>In particular, we are surprised by the significant increase of the balancing activations in France (more than x3) presented in the analysis. At present, we, which is a large market participant in France, are unable to quantify in a precise way the volumes that would be made available in the form of the standard explicit offers required by TERRE. Indeed, this quantity will mostly depend on the local TSO-BSP arrangements mentioned in the previous sections (see Q3.3). Therefore, we wish to know the detailed assumptions used in the CBA regarding its own generation units.</p> <p>Furthermore, in order to assess the capability of the current power generation fleet to face the challenges related to the participation in the TERRE project, BSPs should be aware not only of the increase of the activated volumes but also on the expected number of additional activations, in order to assess whether these activations are compatible with physical constraints.</p> <p>As regards costs, we ask for further details on the coverage and allocation of the €25-30 million cost estimate for the implementation of TERRE by the TSOs. Moreover, the costs incurred by BSPs to update processes and IT systems should also be factored in the calculation of the total costs of the project (a detailed quantification of these</p>

	costs by BSPs will be possible only when local implementation arrangements will be available), as they are an integral part of the total cost of the project for the electricity system.
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	See answer to question 6.1
Stakeholder 21	Not Answered
Stakeholder 22	

6.3 Q 6.3 Do you think the conclusions of the Cost Benefit Analysis are valid for the expected market in 2018?

Stakeholder 1	No
Stakeholder 2	<p>In line with our comments in the answer to question 6.2, we have serious doubts about the validity of the results for 2018.</p> <p>Results for 2018 will depend on the evolution of ATC level, which in the case of Spain has duplicated in 2015, the development of the continuous intraday market, which again in the case of Spain will include the current Management of Deviation market that will disappear when ID GCT gets H-1, and the participation of RES in balancing markets, also recently approved in the case of Spain.</p>
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	
Stakeholder 6	They are limited due to the issues stated above.
Stakeholder 7	<p>We do not agree with the interpretation of TERRE project partners on the ability to reserve cross-border capacity for the purpose of exchanging balancing energy (point 3 of sub-chapter 6.4). The reservation of cross-border capacity is – in the current version of the NC EB as published by ACER – only possible for the exchange of balancing capacity and sharing of reserves. Any use of cross-border capacity for exchange of balancing energy can only be performed using capacity available after the cross-border intraday or cross-border transmission capacity reserved to exchange balancing capacity, as stated in Art. 50. As the TERRE project is – currently – only covering the exchange of balancing energy, we do not agree with the interpretation that additional ATC could be available to the TERRE project by reserving cross-border transmission capacity.</p>
Stakeholder 8	We think the results would be very similar
Stakeholder 9	Please see answer to question 7.4.

Stakeholder 10	See our response to question 6.2.
Stakeholder 11	<ul style="list-style-type: none"> • This can not be answered seriously. The CBA just gives an indication.
Stakeholder 12	Not Answered
Stakeholder 13	<p>The financial conclusions of the CBA can be used as an indicator for 2018. It is certainly not anticipated that the market results of 2018 will be identical to the ones of the CBA.</p> <p>The reasons mentioned in Article 6.4 like the change in bidding behaviour, changes in imbalance volumes and changes in balancing ATCs, together with the different wholesale price level of 2013, compared to our expectation of 2018, don't allow us to make safe estimations on the expected TERRE results.</p>
Stakeholder 14	Hard to anticipate the market behavior with TERRE implemented.
Stakeholder 15	We agree with the conclusion that the actual impact of TERRE, when the project goes live, will differ from the CBA results. We would have appreciated a more elaborated analysis of the uncertainties.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We believe that the conclusions of the CBA should be reviewed taking in due account additional elements:</p> <ul style="list-style-type: none"> - Regarding costs, the implementation costs incurred by BSPs should be taken into account in addition to the costs borne by TSOs; - Concerning benefits, the CBA shows that France plays a key role in balancing energy cross-border exchanges, given its central position as well as its generation mix. Nevertheless, we already identified the existence of technical constraints which can limit the ability of French market participants to make available through explicit offers all the capacity currently offered through implicit offers. Hence, the integration of these constraints could have a very significant impact on the result of the CBA. <p>We also wish to underline that substantial evolutions of the generation mix in Europe are ongoing, reflecting the evolution of electricity markets' conditions. Therefore, the power generation fleet in 2018 may significantly differ from the one of 2013 considered in the analysis. Moreover, the increasing participation of DSR in balancing markets will have an impact on the evolution of the mix of technologies used by BSPs to make balancing bids.</p> <p>Thus, we consider that the assumptions used in the CBA should be more detailed and additional work is required in order to improve the reliability of the results of the analysis.</p>
Stakeholder 18	Not Answered
Stakeholder 19	The results appear to make a case for implementation in 2018, subject to the delivery of the appropriate rules and IT systems.
Stakeholder 20	<p>On the qualitative assessment of TERRE project in 2018 we would like also to point out that:</p> <ol style="list-style-type: none"> 1. The change from pay as bid to pay as clear will not change market prices, as it has

	<p>been shown by the economic literature</p> <p>2. On the issue of imbalance volume, the analysis should take into account opposing factors. Available interconnection capacity near real time will be reduced if some bidding zone will move towards intraday continuous trading with gate closure near time of delivery. On the contrary, the deployment of variable RES could result in an increase of imbalances.</p> <p>3. Reservation of interconnection capacity could be detrimental for total social welfare, in fact the reduction of interconnection capacity in day-ahead and intraday could reduce price convergence and price discoverability.</p>
Stakeholder 21	Not Answered
Stakeholder 22	

6.4 Q 6.4 Do you have specific comments regarding chapter 6 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	see above
Stakeholder 2	No more comments.
Stakeholder 3	Not Answered
Stakeholder 4	As some TSOs will have balancing settlement and imbalance settlement systems and arrangements 'in house', presumably those costs will have been included in the local IT costs quoted for TERRE in section 6.2. However, in GB, we are not a TSO, take responsibility for those aspects and we imagine that our costs arising from TERRE have not been included in the Cost Benefit Analysis. However, we also imagine it is unlikely that our costs would change the end conclusion.
Stakeholder 5	
Stakeholder 6	N/A
Stakeholder 7	We have no further comments on this chapter.
Stakeholder 8	No comment
Stakeholder 9	<p>We acknowledge that the CBA is a challenging task and we welcome the significant effort made by the project team. We advocate further evolutions of this CBA:</p> <ul style="list-style-type: none"> - Refinement with the final design options and periodic assessment. - Inclusion of recent past years (not only 2013), for instance 2014 and 2015. - More detailed assumptions. - Simulation of scenarios. For example, regarding the changes in bidding behavior. - Deep analysis of the Spanish case (for example, maybe some future regulatory

	<p>changes in the intraday markets could lead to different results)</p> <p>We suggest the setting up of a task force focused on this matter, involving stakeholders, with access to the full detail of the CBA.</p>
Stakeholder 10	We do not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • Intraday trading has continuously grown since 2013 helping self-balancing On the other hand growing RES might have grown imbalances in the involved countries. It seems quite difficult to evaluate all impacts and to extrapolate them on 2018. • Reservation of CB capacity for balancing shall not reduce intraday trading volumes!
Stakeholder 12	Not Answered
Stakeholder 13	<p>In Article 6.2 it is unclear how the costs of TERRE will be allocated among the participants.</p> <p>In Article 6.4.2 it is mentioned that there are increased incentives on BRPs to be balanced (presumably in comparison to 2013). It is unclear to us if there is a coordinated effort of the involved TSO's to give incentives for self-balancing to the BRPs by providing the appropriate price signals. A harmonization of the imbalancing schemes within the TSO's involved in TERRE would be helpful.</p> <p>In Article 6.4.3 the possibility to reserve XB capacity by TSOs for the purposes of exchanging balancing energy is described. This possibility is given to the TSOs by the GL EB. We generally think that withholding capacity from previous market segments for an optional use in TERRE is something that should be used only in extreme situations and would have, therefore, no significant impact on TERRE. In any case a transparent communication of the TSO is required.</p>
Stakeholder 14	'--
Stakeholder 15	<ul style="list-style-type: none"> • 6.1: For the CBA marginal pricing has been applied in all bidding zones. Thus the annual benefit of 150 Mio EUR communicated in the conclusion cannot be related to the actual system. • 6.2: How are the costs of TERRE allocated among the members? • 6.4. In case of reservation of XB capacity for exchanging balancing energy a transparent communication by the TSO is required and should be used only in extreme situations. • Reservation of XB capacity for balancing shall not reduce intraday trading volumes
Stakeholder 16	Not Answered
Stakeholder 17	<p>Paragraph § 6.4-2 suggests that increased incentives on BRP to be balanced will result in a reduction of the volume of residual balancing performed by TSOs. We wish to highlight that the main lever to reduce TSOs balancing need is to speed up the communication of information on BRPs imbalances. For BRPs, a fast communication stream is essential for accurate forecasts which are a necessary condition to contribute to a reduction of TSO's balancing need.</p>
Stakeholder 18	Not Answered

Stakeholder 19	No comment.
Stakeholder 20	
Stakeholder 21	Not Answered
Stakeholder 22	Overall, the proposed CBA is excessively focused on “static effects” and does not take into consideration any dynamic effect potentially arising from TERRE’s deployment. An extended analysis could be useful to better focus the expected results. Moreover, the absence of any analysis regarding national-specific effects linked, for example, to different TSO-BSP settlement methods, significantly undermines the CBA itself.

7 Timing

7.1 Q 7.1 What are your views on the reduction of XB scheduling step for balancing?

Stakeholder 1	It is difficult to answer because we have no news from our TSO (see 7.2.5 (the description of the procedure for the activation of the local unit is out of the scope of this document and is the responsibility of each TSO). The situation is not clear. For us is interesting the reduction of the XB Scheduling Step and the consequent increase of the transacted balancing volumes through TERRE.
Stakeholder 2	It is enough with an hourly scheduling step, mainly because for most TSO imbalance needs are easy to assess in an hourly basis, allocating local products inside the 1-hour period if necessary. Anyway, we don’t see any problem in using a 15-min scheduling step.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We are in favour of any increase in the granularity of the cross-border scheduling step, given that it is implemented for both the Intraday and Balancing timeframe. BRPs should have a similar ability to self-balance their perimeter as TSOs have to solve any residual imbalances.
Stakeholder 8	We agree
Stakeholder 9	Please see answer to question 4.1.
Stakeholder 10	We are in favour of increasing the granularity of the cross-border scheduling step, given that it is implemented for both the intraday and balancing timeframes.
Stakeholder 11	Activation duration and XB scheduling should have identical time resolution. A harmonization simplifies the calculation algorithm and increases the transparency. Thus if activation duration of 15 min are accepted in TERRE, the XB scheduling must be adapted accordingly.

Stakeholder 12	Not Answered
Stakeholder 13	Reducing the XB scheduling step (from 1 hour to 15 minutes) so that it will have the same resolution with the minimum activation duration (15 minutes) is a prerequisite for the increase of the balancing volumes through TERRE and a higher efficiency. Therefore we support any initiatives between the involved TSO's to reduce the XB scheduling step between them.
Stakeholder 14	one hour scheduling step seems to be ok for a start
Stakeholder 15	We think that activation duration and XB scheduling should have identical time resolution. A harmonization simplifies the calculation algorithm and increases the transparency. Thus if activation duration of 15 min are accepted in TERRE, the XB scheduling must be adapted accordingly
Stakeholder 16	Not Answered
Stakeholder 17	<p>We are in favour of a progressive approach to the reduction of XB scheduling steps. A reduction to a 30 minutes scheduling step could be initially adopted, when compatible with national scheduling and ISP arrangements.</p> <p>As this development will impact BSPs and BRPs processes and IT systems, a timely communication on the roadmap for the implementation of these changes is necessary.</p>
Stakeholder 18	Not Answered
Stakeholder 19	We recognise that the local constraints require an XB step for scheduling.
Stakeholder 20	<p>As explained throughout the document and indicated in figure 7-2 pag. 55, the current XB scheduling step of 1 h adopted in most borders of TERRE region (including the Italian ones) involves that each TSO can satisfy only a part of its Imbalance Need (namely the hourly blocks) through XB products. In other words only local BSPs can satisfy the "quarterly blocks" of the Imbalance Need. This represents a strong barrier preventing the export of flexibility from one country to another, that would disadvantage foreign BSPs. There must be a level playing field. Hence, we deem the adoption of a XB Scheduling Step of 15 minutes of outmost importance before the TERRE project goes live.</p> <p>At the same, it must be noted that a shorter scheduling step require increased coordination of capacity calculation.</p>
Stakeholder 21	
Stakeholder 22	Not Answered

7.2 Q 7.2 What are your views on the interactions between the TERRE process and the XB intra-day market?

Stakeholder 1	We need a clearly separation between XB ID and TERRE flexibility market
Stakeholder 2	They are correct as referred in the document, opening the balancing market driven by TERRE after the closing of the intraday market, 1 hour before real time.

Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	<p>In general any reservation of transmission capacity should be avoided. Hence it should be ensured that XB-exchange of balancing energy does not reduce the availability of transmission capacity for the XB-ID market.</p> <p>A crucial criterion to prevent negative effects between ID and reserve market is to have the TERRE CGT after the ID CGT. This would allow market participants to offer their capacity at the ID market and balance their portfolio first before submitting their bids to the reserve market.</p>
Stakeholder 7	<p>We agree that the GCT of the TERRE platform can only be after the cross-border Intraday has been closed. In this way, market parties can first exhaust all opportunities to balance and optimize their portfolio themselves. Only after this last cross-border market has been closed, can market parties choose to offer any remaining capacity to the TERRE platform.</p> <p>A point of attention for us is the limited time that will be available to market parties to optimize and finalize their bidding between the closure of the cross-border Intraday market and the GCT of TERRE. This is especially a risk in case the XBID project has to take some time after the closure of the cross-border Intraday to resolve the open bids and offers, and since the TERRE tendering gate (which is currently not yet fixed at H-Xmin, but further away from real-time then H-45min) takes additional time. This would allow very – even too – little time (between a couple to 10 minutes) for market parties to submit or update their offers. We therefore ask that:</p> <ul style="list-style-type: none"> • Stakeholders are kept involved in the further development of the exact timing of the TERRE processes between H-1 and real-time. This is also linked to the potential format(s) of the offers, as explained in question 3.6. • Some processes of the tendering phase – between H-Xmin and H-45min – are performed in parallel to the pre-tendering phase; specifically the calculation of the imbalance needs and the calculation/update of the ATC could be performed while market participants still submit or update their offers.
Stakeholder 8	<p>We support the approach favoured by the TSOs of having the TERRE GCT after the closing of the intraday market. This would best allow market participants to adjust positions on the intraday market and improve its liquidity. We nonetheless remark the limit time given to BSPs to prepare and submit bids for TERRE between the intraday GCT and the TERRE GCT. The exact timing of the TERRE GCT is not yet set (between one hour and 45 minutes before real time). Considering the update of national schedules following the XBID computation process, this could mean an extremely short time that may make it difficult – if not impossible – for BSPs to adjust and submit their bids.</p> <p>We understand there is no easy solution to this problem. We therefore request that:</p> <ul style="list-style-type: none"> • Market participants are kept involved in further developments on the exact timing of the TERRE processes between H-1 and real-time.

	<ul style="list-style-type: none"> • Some processes of the tendering phase – between H-Xmin and H-45min – are performed in parallel to the pre-tendering phase; specifically the calculation of the imbalance needs and the calculation/update of the ATC could be performed while market participants still submit or update their offers.
Stakeholder 9	Please see answer to question 7.4.
Stakeholder 10	<p>We support the approach favoured by the TSOs of having the TERRE GCT after the closing of the intraday market. This would best allow market participants to adjust positions on the intraday market and improve its liquidity. We nonetheless remark the limit time given to BSPs to prepare and submit bids for TERRE between the intraday GCT and the TERRE GCT. The exact timing of the TERRE GCT is not yet set (between one hour and 45 minutes before real time). Considering the update of national schedules following the XBID computation process, this could mean an extremely short time that may make it difficult – if not impossible – for BSPs to adjust and submit their bids.</p> <p>We understand there is no easy solution to this problem. We therefore request that:</p> <ul style="list-style-type: none"> • Market participants are kept involved in further developments on the exact timing of the TERRE processes between H-1 and real-time. • Some processes of the tendering phase – between H-Xmin and H-45min – are performed in parallel to the pre-tendering phase; specifically the calculation of the imbalance needs and the calculation/update of the ATC could be performed while market participants still submit or update their offers.
Stakeholder 11	<ul style="list-style-type: none"> • We strongly support the actual concept of TERRE, with a clear separation of intraday trading and TERRE activations. This concept has to apply to borders within the TERRE project (e.g. SP-FR) and outside of the TERRE project (CH-D). Potential future changes in XB lead time have to be considered by TERRE, to guarantee this separation. • Harmonizing TERRE and Intraday Trading approach with Germany seems quite a challenge and a point to check the whole approach. At the moment we see no interferences.
Stakeholder 12	Not Answered
Stakeholder 13	TERRE project shows, in its current form, no overlap with the XB intraday markets of Switzerland and its neighbouring countries (including DE/AT that don't participate in TERRE). This quality of TERRE is highly appreciated and it should be maintained in the future, in case a further reduction of the XB intraday scheduling lead time is achieved. It is important that this feature is guaranteed not only for the TSOs participating in TERRE but also for the ones of DE and AT.
Stakeholder 14	Intraday Gate should not close 90min before delivery. The opposite, intraday trading should become closer to real time 30min to 15min before delivery.
Stakeholder 15	We strongly support the actual concept of TERRE, of a clear separation of intra-day trading and TERRE activations. This concept has to apply to borders within the TERRE project (e.g. SP-FR) and outside of the TERRE project (CH-DE). Potential future changes in intraday GCT have to be considered by TERRE, to guarantee this separation.
Stakeholder 16	Not Answered

Stakeholder 17	<p>It is important that the interactions between TERRE exchanges and the XB intraday market ensure a smooth process for schedules' reviews, adaptation of offers and their activation in order to allow market participants to optimise their participation in energy and balancing markets (see Q 7.3 and Q 7.4).</p> <p>An hourly fixing, as scheduled for the go-live of TERRE, seems to be in line with this requirement. Yet, a change in the timing/rhythm of the process would require a new assessment (see Q 7.3).</p>
Stakeholder 18	Not Answered
Stakeholder 19	TERRE should provide an efficient approach towards TSO balancing after gate closure for the XB intra-day market.
Stakeholder 20	<p>The introduction of an intraday market with gate closure near real time reduces the needs and the possibility of applying TERRE. In fact, increased cross-border intraday trade can reduce not only imbalances and counter activations, but also interconnection capacity available for TERRE exchanges.</p> <p>Intraday market gate closure should be before Balancing market gate closure, overlapping of these two should not be allowed</p>
Stakeholder 21	
Stakeholder 22	Not Answered

7.3 Q 7.3 What are your views on the frequency of the clearing (one single clearing per hour)?

Stakeholder 1	According to the products
Stakeholder 2	One single clearing per hour is fine.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	<p>Overlaps between balancing and intraday markets should be avoided as well as a proper handover of information is achieved for operating local balancing markets and setting imbalance prices.</p> <p>If the delivery periods go beyond one hour the clearing should be consistent. This would reduce the clearing processes per day and thereby the administrative burden of market participants.</p>
Stakeholder 7	<p>Given the current schedule step of one hour, the proposed frequency of the clearing is logical. If the schedule step would be further reduced, the frequency of the clearing should be reconsidered to ensure that overlap between balancing and the (cross-border) Intraday are avoided.</p> <p>However, it should be recognized that an hourly clearing – and potentially even more</p>

	frequent in the future – may be operationally intensive for market parties. To mitigate this somewhat, the validity period of bids should not be limited to 60 minutes (see our response to question 3.2).
Stakeholder 8	The proposed frequency of the clearing is consistent with the current schedule step of one hour. If the schedule step would be further reduced, the frequency of the clearing should be reconsidered to ensure that overlaps between balancing and the (cross-border) intraday market are avoided.
Stakeholder 9	Please see answer to question 7.4.
Stakeholder 10	<p>The proposed frequency of the clearing is consistent with the current schedule step of one hour. If the schedule step would be further reduced, the frequency of the clearing should be reconsidered to ensure that overlaps between balancing and the (cross-border) intraday market are avoided.</p> <p>However, it should be recognised that an hourly clearing – and potentially even more frequent in the future – may be operationally intensive for market participants. To mitigate this somewhat, the validity period of bids could be extended beyond 60 minutes, as referred to in our answer to question 3.2.</p>
Stakeholder 11	<ul style="list-style-type: none"> • We believe that already a single clearing per hour is challenging enough to start TERRE.
Stakeholder 12	Not Answered
Stakeholder 13	<p>A higher clearing frequency would lead to overlapping delivery periods with more than one marginal price for every 15 minutes. This would add to the operational complexity of TERRE and would make the BSP participation more challenging. Moreover it would probably make the price signal to the BRPs less clear. The added value of such development, given the current 1 hour scheduling step, would also be doubtful. Therefore, we support maintaining the proposed clearing frequency.</p> <p>We would, nevertheless, be open to such a change in order to face the future challenges of a reduction of the market time resolution or the intraday gate closure time.</p>
Stakeholder 14	'--
Stakeholder 15	At the current status of the project we believe that the efforts should be concentrated on a harmonization of the XB scheduling steps. Increasing the clearing process should be reconsidered in a later stage. We believe that already a single clearing per hour is challenging enough to start Terre.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We agree with the choice to start the implementation of TERRE with one single clearing per hour.</p> <p>We support further investigations on the opportunity to increase the frequency of clearings if this can improve the effective use of Replacement Reserve products. Nevertheless, such an evolution should be treated as a major change of the TERRE design requiring a new implementation plan. The increased frequency of clearing (e.g. two clearings per hour) would imply significant changes in BSPs' processes and could possibly lead to additional time constraints requiring further analyses (see Q7.4 & Q14).</p> <p>In the case of two clearings per hour, our preliminary analyses point out possible time constraints due to the following problems:</p>

	<p>- Activations from each half hourly clearing will impact the offers for the following half hourly clearing (some offers may not be available anymore, or some new offers may be available), resulting in the need for an additional time period before the next TERRE Gate Closure Time (GCT);</p> <p>- Activations from each clearing will also impact generation schedules to be updated at the next Intraday GCT (beyond lead time for changes), resulting in the need for an additional time period of about 10 minutes between the reception of activation orders and the next Intraday GCT.</p> <p>- As mentioned at Q7.4, a time period between Intraday GCT and TERRE GCT will also be needed (5 minutes minimum).</p> <p>If this timing is not granted, schedules feasibility and bids' firmness could not be guaranteed.</p> <p>The proposed evolution in terms of frequency of the clearing should also be consistent with the evolution in the number of gate closures in intraday markets.</p>
Stakeholder 18	Not Answered
Stakeholder 19	This is a pragmatic approach towards the initial delivery of TERRE but should remain under review.
Stakeholder 20	<p>We agree with one single clearing per hour but we would like that ENTSO-E confirms: the number of prices and if there would be 4 prices and 4 volumes for each hour. In addition, it is important to clarify which price would be paid to BSP if they offered 15', 30', 45', or 60' delivery period.</p> <p>In addition, we would like to have additional information on how would "linking offers in time" be treated in the price setting mechanism.</p>
Stakeholder 21	
Stakeholder 22	Not Answered

7.4 Q 7.4 Do you have specific comments regarding chapter 7 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	
Stakeholder 2	No more comments.
Stakeholder 3	Not Answered
Stakeholder 4	<p>Section 7.2.4 notes that TERRE Results will be communicated between H-35 and H-30 minutes. Does this mean that local fall-back arrangements can be activated if TERRE Results are not received by H-30 minutes?</p> <p>It is important to have across TERRE agreement as to when 'late' TERRE results can be ignored by all the local arrangements and this needs to be harmonised to ensure</p>

	that the money flows work correctly. For example, it will not work if one TSO is expecting to be paid by TERRE and another TSO has ignored the TERRE results because they arrived 'too late'. See also our answer to Question 4.4.
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	<p>The TERRE project has made a choice to use a Standard Product with a minimum delivery time of 15 minutes but a scheduling step of 1 hour. Linking bids allows market parties to offer a block of 1 hour that can be transferred cross-border and as such used for the cross-border delivery of RR as envisaged by the TERRE project. We appreciate the use of 15 minute product, as it is both future-proof for any changes to the scheduling step and allows for local use of shorter products. On the other hand, the fact that 15 or 30 minute products would currently not be eligible to be used for cross-border delivery of RR energy seems to be an inefficiency of the TERRE platform. We would therefore ask TSOs to analyse the possibility to combine two or more offers of a duration that is shorter than 1 hour into a 1 hour block so the energy could be delivered cross-border in line with a schedule step of 1 hour. We acknowledge that this may further increase the complexity of the algorithm with a potential impact on the required timing. However, the opportunities offered by such combination should be weighed against the impact on the timing, and the results of such analysis presented transparently.</p>
Stakeholder 8	No other comments
Stakeholder 9	<p>Certain key parameters of the project (X, duration of the clearing) are not decided yet. They should be consulted in the context of the TERRE project, despite of further harmonization actions will be taken in the context of the GL EB. Please see answer to Q 0.</p> <p>Pre-tendering phase: H-X should last 15 minutes at least.</p> <p>Tendering phase:</p> <ul style="list-style-type: none"> - Each TSO should inform BSPs in real time whether their offers shall be considered as "unavailable" in TERRE (see subchapter 3.1.4.1). - We wish to know how "XB Bilateral Agreements" participate in the identification of available tenders, as showed in the graph of chapter 8. <p>Clearing phase:</p> <ul style="list-style-type: none"> - The algorithm takes into account "offers and Imbalance Needs, the ATC, requirements and other constraints". Are "other constraints" those listed in subchapter 4.3.2? - We think that the reduction of the duration of the clearing phase would be a positive target for expanding the pre-tendering phase. No further details are given in the document about the factors contributing to this potential reduction. <p>Results communication and verification phase: NTC should be maximized in order to maximize Residual ATC.</p>

Stakeholder 10	We do not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • A BSP gets activated on the last 15 minutes of an hour (starting at H+45min). When does it receive the activation from the TSO? At H-30min or at H+15min?
Stakeholder 12	Not Answered
Stakeholder 13	<p>7.2.1: The Pre-Tendering phase between H-60 min and H-x min corresponds to the time between the GCT and the submission of the TERRE bids. As we understand x will be between 60 min and 45 min. The handling of the intra-day trades and the assessment of the available capacity of TERRE has to be computed in a rather short time frame.</p> <p>7.2.3: The fallback procedure is as described in 4.2.8 the procurement and activation of balancing energy at national level. A precise reference is necessary in this sub-chapter</p>
Stakeholder 14	<p>how does the communication take part ? activation price can be different to offer price as well as for the quantity (=divisible offer).</p> <p>who does the border-nomination if offer is in switzerland and the activation is needed in spain ?</p>
Stakeholder 15	<ul style="list-style-type: none"> • 7.2.1: The Pre-Tendering phase between H-60 min and H-x min corresponds to the time between the GCT and the submission of the TERRE bids. As we understand x will be between 60 min and 45 min. The handling of the intra-day trades and the assessment of the available capacity of TERRE has to be computed in a rather short time frame. • 7.2.3: The fallback procedure is as described in 4.2.8 the procurement and activation of balancing energy at national level. A precise reference is necessary in this sub-chapter.
Stakeholder 16	Not Answered
Stakeholder 17	<p>The proposed TERRE timeline does not provide enough detail on the deadlines concerning the interactions between BSPs and TSOs during the TERRE process. The definition of these deadlines, e.g. the RR balancing energy GCT, seems to be postponed at a later stage. Yet, we believe that these additional specific deadlines should be rapidly set in order to accelerate the participation of BSPs in TERRE by enabling them to start without delay the adaptation of their processes. In particular we suggest to address the following issues:</p> <ul style="list-style-type: none"> - Following Intraday Gate Closure Time, a time period (5 minutes minimum) will be necessary to compute and submit standard bids, following the changes of units' schedules and before the RR balancing energy GCT (H-X). If this period before the RR balancing energy GCT is not granted, the limited time allowed for scheduling and market would result in additional constraints for the participation in intra-day and balancing markets. It is therefore essential to specify the "H-X" deadline presented in the timeline (see §§ 7.1 & 7.2.1). - The activation process is not described and this is a major issue for us, as the results of the CBA show a significant increase of balancing activations in France. To ensure the actual delivery at H, activation orders from TSO must be received no later than H-30'.

Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	
Stakeholder 21	<p>Cross Border Scheduling Step (par. 7.3.1):</p> <p>as explained throughout the document and indicated in figure 7-2 pag. 55, the current XB scheduling step of 1 h adopted in most borders of TERRE region (including the Italian ones) involves that each TSO can satisfy only a part of its Imbalance Need (namely the hourly blocks) through XB products. In other words only local BSPs can satisfy the “quarterly blocks” of the Imbalance Need. This represents a strong barrier preventing the export of flexibility from one country to another, that would disadvantage foreign BSPs. There must be a level playing field. Hence, we deem the adoption of a XB Scheduling Step of 15 minutes of outmost importance before the TERRE project goes live.</p>
Stakeholder 22	Not Answered

8 TERRE Platform - High Level Functional Architecture

8.1 Q 8.1 Do you have specific comments regarding chapter 8 content? (Please indicate sub-chapter reference when possible)

Stakeholder 1	no
Stakeholder 2	No specific comments.
Stakeholder 3	<p>Compared to day-ahead and intraday time frames, TERRE time frames approach near real-time windows. This coupled with a large geographical area opens up performance implications for rapid clearing, publication and exchange of data between the entities – TERRE, BSP, TSOs, etc. The common solution should be a proven platform for meeting such challenges.</p>
Stakeholder 4	<p>We note from Figure 8-1 that the TERRE Settlement Module has no outputs and the TERRE Platform High Level Functional Architecture therefore covers only the system operation aspects of TERRE.</p> <p>All the post-event settlement aspects (billing and money flows and their timing) will need to be defined as part of the TERRE project and communicated to us so that we can fulfil our remit to operate the balancing and imbalance settlement arrangements in GB, including invoicing BSPs for moneys owed to TERRE TSOs.</p> <p>The most important questions from our GB balancing and imbalance settlement perspective for TERRE to answer are:</p> <ul style="list-style-type: none"> ● What is the Gate Closure Time for BSPs to submit TERRE Product Bids to local TSOs?

	<ul style="list-style-type: none"> • What is the agreed TERRE treatment of ramps? • When are the TERRE Product acceptances, including volumes and clearing prices, made known to us so that we can calculate the GB imbalance price? • When are TERRE results deemed to be 'late' or 'missing', so that later data from TERRE for that particular 15 minute period can be ignored by the TERRE TSOs (and no dispatch will be required and no payments are required to be made to or from TERRE in respect of that 15 minute period)? • Are the TERRE Product submissions made available for publication on local information platforms, such as the one we administer and, if so, when? • Are the GB TERRE Product acceptances made available for publication on local information platforms such as the one we administer and, if so, when? (See also our thoughts in answer to consultation Question 11.1.) • When are the payment details for TERRE Product acceptances issued (it is possible that we may be tasked with making settlement to the GB BSPs)? • When are the TERRE Product acceptances settled, i.e. how many days after acceptance are payments due in respect of those acceptances? • What happens if a party (TERRE TSO or a TERRE BSP for example) defaults on its TERRE payment obligations? How is settlement then managed? I.e. what are the TERRE default and credit arrangements? • Will TERRE do any recalculations of payments, clearing prices, etc. and, if so, under what circumstances? Will there be planned reconciliations (recalculation and payments for the same billing period later) and if so, on what timetable and will interest be applied to payments that are due and have been recalculated?
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We have no comments on this element.
Stakeholder 8	No comment
Stakeholder 9	Please see answer to Q 7.4.
Stakeholder 10	We have not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • No comment
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	'--

Stakeholder 15	The high level description does not allow to make specific comments or remarks on the Functional Architecture of the TERRE platform.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We do not have specific comments on this chapter, but we invite you to refer to the answer to question 7.4 regarding our position on the timeline of the TERRE process (RR balancing energy GCT, activation timing, etc.) and to the answers in section 3 regarding the bidding format proposed by TSOs.</p> <p>We also wishes to highlight the importance to make available sound fall-back procedures at national level when the TERRE clearing process fails.</p>
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	We don't have any specific comment from the one already described above
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

9 Available Transmission Capacity

9.1 Q 9.1 Do you agree with the proposed methodology for the calculation of available transmission capacity used by TERRE solution for both AC and DC borders? If not, what would be your proposal?

Stakeholder 1	For DC yes. For AC we should consider the flexibility of PST's.
Stakeholder 2	Yes, we do.
Stakeholder 3	Yes
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	<p>We would like to clarify the distinction between AC and DC borders. The proposed methodology for the calculation of ATC for DC borders, with the use of a pre-defined maximum ramp rate, is only acceptable for DC links between two distinct synchronous zones and when defined by the technical capabilities of the DC link itself. In this regard, the cited example of the IFA cable is acceptable. However, for DC links within a synchronous zone, as for example between Spain and France, any limit on the ramping rate should be grounded in technical or dynamic grid constraints. This implies that for such borders no pre-defined maximum ramping rates should be used as they may vary depending on the prevailing state of the grid.</p>

Stakeholder 8	No comment
Stakeholder 9	<p>We support no cross-border reservation for TERRE.</p> <p>Regarding ramping constraints in DC links, the CBA should show their effects, and periodic assessment shall be performed and published, as they constitute a hinder in the optimization in the reserve exchange. Ramping constraints could never affect the bids of the BSPs, as they are exogenous constraint for them.</p> <p>TERRE ATC should be maximized regarding the NTC available.</p>
Stakeholder 10	<p>Regarding the proposed methodology for the calculation of ATC at DC borders, we would like to stress that the use of a pre-defined maximum ramp rate is only acceptable for DC links between two distinct synchronous zones if such ramp rates are defined by the technical capabilities of the DC link itself. It would not be acceptable if system ramping constraints were translated in a ramp rate for the DC link.</p> <p>In this regard, the cited example of the IFA cable is acceptable. However, for DC links within a synchronous zone, as for example between Spain and France, any limit on the ramping rate should be justified by technical or dynamic grid constraints. This implies that for such borders no pre-defined maximum ramping rates should be used as they may vary depending on the prevailing state of the grid.</p>
Stakeholder 11	<ul style="list-style-type: none"> • No comment
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	'--
Stakeholder 15	We agree with the proposed methodology for the calculation of available transmission capacity used by TERRE for both AC and DC borders. A prerequisite is that the methodology should be in line with already used procedure to calculate available transmission capacity.
Stakeholder 16	Not Answered
Stakeholder 17	<p>We suggest to clarify that the Available Transfer Capacity (ATC) after the intra-day market used for cross-border exchanges in the framework of TERRE is bilaterally calculated by the concerned TSOs for each border and does not apply to single AC links as in the case of DC links.</p> <p>Moreover, we believe that transparency and solid justifications should be provided by the concerned TSOs when imposing predefined maximum ramp rate to power flow variations on direct current interconnectors. For instance, 100 MW/min on IFA corresponds to 1000 MW, taking into account the duration of the -5/+5 minutes ramp around the hour used by TSOs. Therefore, we ask for further explanations on such constraints.</p>
Stakeholder 18	Not Answered
Stakeholder 19	We agree with the proposed methodology for AC and DC borders
Stakeholder 20	The document does not accurately describe how interconnection capacities are updated near real time. On this issue, it is important to recognise that un-updated ATC

	calculations could deliver results that are far from the current physical flows on the grid, hence TERRE could activate results that are unfeasible. In order to avoid this situation that could undermine the integration of balancing markets, it is important that TSOs introduce calculation methods that are able to describe how interconnection are used near time of delivery and how their usage is changed due to modification of production and consumption of main nodes of the interconnected grid.
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

9.2 Q 9.2 Do you have specific comments regarding chapter 9 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	see above
Stakeholder 2	No specific comments.
Stakeholder 3	N/A
Stakeholder 4	Section 9.2 introduces the concept of 'Physical Feasibility' in relation to DC interconnectors. As we are tasked with calculating imbalance volumes for the GB market, we need to understand in more detail how 'Physical Feasibility' will be applied in practice. For example, will it be treated as a constraint that the activating TSO must follow and so the dispatch instruction will follow that constraint, or is it something more complex that we need to consider in our imbalance volume calculations, such as a limit on the imbalance volume that we calculate?
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We have no further comments on this chapter.
Stakeholder 8	No comment
Stakeholder 9	
Stakeholder 10	We do not have further comments.
Stakeholder 11	• No comment
Stakeholder 12	Not Answered
Stakeholder 13	No further comments
Stakeholder 14	how does borders like italy, spain or uk get nominated with terre ? there's no existing capacity platform like switzerland-France for those countries
Stakeholder 15	No comment

Stakeholder 16	Not Answered
Stakeholder 17	We wish to highlight the importance of a fast implementation of the Target Model (set by Regulations 714/2009 CE and 2015/1222 UE) for capacity calculation in the intraday timeframe. The Target Model foresees the elaboration of a methodology for a coordinated recalculation of cross-border capacity after the day-ahead timeframe with the objective to make additional capacity available for intraday markets (not only the residual capacity available after Day-Ahead). This evolution could also contribute to increasing the cross-border capacity available for balancing energy exchanges in the framework of TERRE with positive effects on the overall social welfare.
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

10 Governance

10.1 Q 10.1 Do you have specific comments regarding chapter 10 content? (Please indicate sub-chapter reference when possible)

Stakeholder 1	no
Stakeholder 2	No specific comments.
Stakeholder 3	Not Answered
Stakeholder 4	<p>As we have set out in our answers to the other questions in this consultation, it is vital to the overall success of TERRE that non-TSO central service providers (such as is – we are responsible for balancing and imbalance settlement in GB) are included in the detailed design of TERRE, and any subsequent changes, so that our local systems are ready in time to interface with TERRE from Day 1 and are able to continue to align with TERRE thereafter.</p> <p>We very much welcome the public meetings that have been held by TERRE TSOs to date, but we think that this will not be sufficient going forwards as we will need detailed information on interfaces with TERRE, and to be notified of any changes of design as soon as they are proposed and then agreed, so that we can notify our TSO of the impacts and timing implications. Without this in-depth involvement in the ongoing development of TERRE, the risk increases of not delivering the local arrangements for which we are responsible to time. This in turn increased the risk of a delay to TERRE as a whole. Under the current GB arrangements, while the GB TSO can propose changes to balancing settlement and imbalance settlement, it is not responsible for making those changes that are approved by our NRA or for operating the settlement arrangements in GB. That responsibility falls to us</p>

	<p>We also have some questions on the ongoing change process and its governance as follows.</p> <p>In addition to the governance of the initial TERRE design and its implementation, what are the governance arrangements for the enduring operation and change management of TERRE?</p> <p>Will defining this be part of Project TERRE now?</p> <p>As actual operational experience of TERRE is built up, issues to be resolved, and improvements that can be made, will be identified. How will such issues and changes be progressed, including coordination of change with the live local arrangements?</p>
Stakeholder 5	Not Answered
Stakeholder 6	It is helpful in terms of aiding understanding of the governance arrangements. Clearly these are not directly provided for under any existing legislation and it will good to understand how this would develop when the EB GL is in place.
Stakeholder 7	As the TERRE project is a European pilot project and will become a CoBA under the NC EB, we ask that a framework for the inclusion of stakeholders will be created. While ad-hoc workshops, information sessions and implementation roadmaps on a national level are useful and welcomed by us – especially for the operational implementation and any changes to the current balancing market such stakeholder involvement is crucial – they should not substitute for a structural framework for stakeholder involvement on a project level. Such a ‘user group’ should ensure a structural involvement of stakeholders in the further development and evolution of the TERRE project. It should also function as a tool for transparency on decisions and performance, as well as a platform for stakeholders to put forwards questions, suggestions and requests.
Stakeholder 8	We believe that the TERRE project being the sole pilot project focusing on RR, it will have a decisive effect on the implementation of related provisions in the Electricity Balancing guideline. While we welcome the type of ad-hoc workshops that have been organised in the past to inform market participants of developments in the project, a more structured stakeholder engagement platform that allows two-way communication in the final stages of the project design and throughout its implementation would be necessary.
Stakeholder 9	Please see answers to Q 0 and Q 1.1.
Stakeholder 10	In line with our introductory statement, we believe that the TERRE project being the sole pilot project focusing on RR, it will have a decisive effect on the implementation of related provisions in the Electricity Balancing guideline. While we welcome the type of ad-hoc workshops that have been organised in the past to inform market participants of developments in the project, a more structured stakeholder engagement platform that allows two-way communication in the final stages of the project design and throughout its implementation would be necessary.
Stakeholder 11	<ul style="list-style-type: none"> • No comment
Stakeholder 12	Not Answered
Stakeholder 13	No further comments

Stakeholder 14	'--
Stakeholder 15	No comment
Stakeholder 16	Not Answered
Stakeholder 17	<p>We welcome the commitment of the TERRE TSOs to involve stakeholders at regional and national levels across the different project stages. As already mentioned, the contribution of stakeholders during the design and implementation phase of the project is of paramount importance for the following reasons:</p> <ul style="list-style-type: none"> - Though sometime perceived by TSOs as time consuming, stakeholder involvement proved to be effective to ensure the feasibility and the timely implementation of regional and European projects (e.g. Day-ahead Market Coupling, Flow-Based) by contributing to defining the right design at an early stage; - A good and early visibility on all the main features of TERRE is necessary in order for BSPs to develop the tools, define the processes and update the IT systems required to participate in the mechanism. This process will take at least 18 months for us. <p>For these reasons, we suggest to “institutionalize” stakeholders’ involvement through the creation of a “Stakeholder Committee” (along the lines of the CWE Consultative Group for Flow-Based) cooperating with the TERRE Steering Committee and TERRE Working Groups during the project design phase and, after the go-live, throughout the implementation phase and for further developments of the mechanism. The creation of such a committee would also favour a continuous sharing of the experiences gained by BSPs and TSOs in implementing TERRE. Such committee would consistently and usefully complement the Balancing Stakeholder Group (BSG) at European level, which provides a more general overview on all pilot projects.</p>
Stakeholder 18	Not Answered
Stakeholder 19	We believe that market participants should be more actively involved in the development and maintenance of Project TERRE and TERRE members.
Stakeholder 20	It is important to ensure that in the Steering Committee (SC) all stakeholders are represented, hence BSPs and BRPs should be allowed to participate.
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

11 Transparency

11.1 Q 11.1 Do you have specific comments regarding chapter 11 content?

Stakeholder 1	no
Stakeholder 2	TSOs should submit data not only to the ENTSO-E Transparency Platforms. Integration of prices, volumes and assigned offers should be done in every RR local market, and be published according local market rules.

Stakeholder 3	Not Answered
Stakeholder 4	<p>The TERRE platform must also provide data sufficient for the settlement of imbalances at local level to the local market operators, such as us. Such TERRE data would include clearing price(s) for the GB Bidding Area and GB TERRE acceptance volumes. We would also publish this data to the extent required by our local, NRA-approved, rules.</p> <p>Article 4(5) of the quoted Regulation on Transparency (543/2013) also allows that: ‘without prejudice to the obligations of the TSOs and of the ENTSO for Electricity laid down in paragraph 1 and Article 3, data can also be published on TSOs’ or other parties’ websites.’</p> <p>As we also operate the GB transparency platform where all Specific Product acceptances are already published, for a full picture we would expect to receive and propose to publish TERRE Product acceptances taken from GB-based BSPs too, if this approach was approved by our NRA.</p>
Stakeholder 5	Not Answered
Stakeholder 6	We would support full transparency of TERRE information including details of offers made into the mechanism, those accepted, clearing prices, TSO imbalance needs as well as volumes and prices of activated reserves.
Stakeholder 7	<p>We ask that TERRE platform members will provide the necessary transparency during the implementation phase on:</p> <ul style="list-style-type: none"> • If so chosen (see our response on question 3.8), the methodology for the elastic balancing need; • The methodology to convert CDS bids (see our response on question 3.9); • The optimization between bid formats and required time for the algorithm (see our response on question 7.2). <p>And after the go-live of the TERRE project, on-going transparency on:</p> <ul style="list-style-type: none"> • Unavailable bids; • Unforeseeable Accepted/Rejected Offers; • Any limits on ramping rates for DC links within the synchronous zone (see our response on question 9.1); • If so chosen to be kept (see our response on question 4.2), the amount of counter-activations.
Stakeholder 8	See our response to question 10.1 and various transparency requests throughout this document.
Stakeholder 9	<p>We suggest the following additional publications at XB level no later than one hour after the operating period:</p> <ul style="list-style-type: none"> - Imbalance needs per TSO, both elastic/inelastic - Volumes of unavailable offers (unshared/restricted), as defined in chapter 3.1.4.1

	<ul style="list-style-type: none"> - The occurrence of indeterminacies described in chapter 5.6 (only netting of needs) - TERRE ATC considered every time unit, and constraints of the clearing (example: ramping constraints in DC links) <p>Additionally, there should be detailed quarterly reports at stakeholder's disposal.</p>
Stakeholder 10	See our response to question 10.1 and various transparency requests throughout this document.
Stakeholder 11	<ul style="list-style-type: none"> • We expect full transparency regarding unshared and restricted offers as described in sub-chapter 3.1.4.1.
Stakeholder 12	Not Answered
Stakeholder 13	It is unclear to us which information presented in Annex 7 (at XB level/at national level/both) is to be submitted from TERRE to the ENTSO-E transparency platform.
Stakeholder 14	<p>will there be made data transparent like counter activations (neeting) or margin price calculations ? how and when ?</p> <p>We expect the transparent publication of all bid offer curves of all bidding zones close to real time (max. 30min. delay) including unforeseen activated bids etc.</p>
Stakeholder 15	We expect full transparency regarding unshared and restricted offers as described in sub-chapter 3.1.4.1.
Stakeholder 16	Not Answered
Stakeholder 17	<p>As stated in the document, TSOs should ensure the compliance with the transparency obligations set by Article 17 of the Regulation on Transparency (543/2013).</p> <p>Nevertheless, TSOs should ensure a proper level of transparency on:</p> <ul style="list-style-type: none"> - The methods used to calculate the imbalance needs submitted to the TERRE platform; - The algorithm of the CMO; - The availability and use of interconnections; - The timely publication of the activated volumes and prices (starting from H-30' and not in H+1) in order for market participants to anticipate the imbalance price level and the size and direction of imbalances. This kind of information is needed for BRPs to foresee imbalance costs. <p>We finally wish to highlight the need to ensure the confidentiality of the data on BSPs' bids processed by the TERRE platform.</p>
Stakeholder 18	Not Answered
Stakeholder 19	No comment
Stakeholder 20	<p>We think that TERRE project should fully respect transparency information contained in Electricity Balancing Guidelines, and especially article 8.</p> <p>Duplication of data submission should be avoided, existing data sources such as</p>

	those provided under Financial Regulation/Transparency Platform and existing national arrangements should be considered.
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

12 Harmonization Issues

12.1 Q 12.1 Which features (if any) of local balancing market design needs to be harmonized for an efficient functioning of the TERRE project? If several, please rank the first three you consider the most important to harmonies.

Stakeholder 1	as much as possible: first of all product specification, activation procedure, activation time, system/plattform
Stakeholder 2	<p>It seems evident that the higher harmonization the better performance and higher efficiency of TERRE.</p> <p>But taking into account the differences among the local balancing markets, we consider that the first priority should be the harmonization of ID/Balancing timing, the features of the products to be contracted and the imbalance needs.</p> <p>TIMING</p> <p>Gate Closure of XB ID must be set at H-60 min. in order to give the time for TERRE processes. Market participants cannot be active with the same resources in two markets for the same period of time and overlapping of ID and Balancing must be avoided.</p> <p>With this timing, market participants will be active in the ID market up to H-60 min and will send the balancing energy offers after the ID GCT, between H-60 min and H-X min.</p> <p>PRODUCTS</p> <p>Definition of a cross border product and format of balancing offers. The formats of balancing offers have to provide flexibility to use all of the technically available resources, but should not collapse the algorithm or provide non-transparent (or counter-intuitive) results.</p> <p>IMBALANCE NEEDS</p> <p>We consider that TSOs have to publish an inelastic volume to be procured according to the application of System Operation Procedures, but not elastic volumes. TSOs have to use all the resources (regulated assets) to guarantee and minimize the needs but must not compete with BSPs in order to provide the balancing energy because that operation would be against the unbundling principle.</p> <p>The next step would be the harmonization of pricing and settlement rules to guarantee a fair competition among BSPs for providing the same service.</p>

Stakeholder 3	Not Answered
Stakeholder 4	<p>The most important harmonisation decisions to make from our perspective as the GB balancing and imbalance settlement administrator are (and we apologise that there are more than three):</p> <ul style="list-style-type: none"> • A decision across TERRE on when TERRE acceptances can be ignored because they have arrived 'too late'. It is important for payment and imbalance settlement purposes that all TERRE TSOs harmonise on this point otherwise some TERRE TSOs will be expecting payments which other TERRE TSOs are not expecting to make or vice versa. • A decision on the settlement treatment of ramps, whether this is to be harmonised at all and, if so, how; or whether it is to be left to local arrangements to decide. As noted in our answer to Question 3.5 and for the reasons given in that answer, we suggest that consideration is given to treated ramps as zero-priced contracts and not as imbalances by TERRE Member States. • Decisions on what happens in the event of a default or late payment on a TERRE payment obligation, e.g. by a TERRE TSO or a TERRE BSP. • A decision on the Gate Closure time for BSPs to submit TERRE Product Bids to their local TSO – it seems possible that TERRE BSPs may wish to harmonise on this and, if harmonisation is agreed, we need to know what that Gate Closure time will be. <p>Beyond this, all aspects of the design of TERRE, including the decisions on harmonisation, need to be decided as soon as possible and communicated to stakeholders so that we can design and implement the local arrangements on time.</p>
Stakeholder 5	Not Answered
Stakeholder 6	<p>As we mention above, we would be concerned if TERRE was driving harmonisation outside of the requirements of the EB GL. Regardless of an European or regional approach the following features should be harmonized first:</p> <ul style="list-style-type: none"> - Pricing rules - Settlement rules - Transparency rules
Stakeholder 7	<p>As already mentioned in previous answers, we consider it imperative that local rules are aligned in order to provide a level playing field and fair competition between BSPs of different countries. The most important – though not only – ones are:</p> <ul style="list-style-type: none"> • Pricing rules: <ul style="list-style-type: none"> o whether BSPs are settled according to a Pay-as-Bid or a Pay-as-Cleared scheme has impact on bidding behaviour and should thus be harmonized. o Price floors and caps should be removed, as they limit how BSPs may bid compared to BSPs in other countries. • Settlement rules: whether or not ramping rates are included in the remuneration of

	<p>BSPs has an impact on the pricing of bids and should thus be handled the same for all BSPs.</p> <ul style="list-style-type: none"> • Penalties: the impact of failing to deliver balancing bids is integrated in the pricing of bids and should thus be the same for all participants. <p>we ask TSOs to make a proposal for aligning such local rules across countries participating to the TERRE project and presenting them to NRAs to ensure the necessary changes can be implemented before the TERRE project goes live.</p>
Stakeholder 8	<p>As already mentioned in previous answers, we consider necessary for local rules to be harmonised in order to provide a level-playing field and fair competition between BSPs of different countries. Examples include:</p> <ul style="list-style-type: none"> • Pricing rules: <ul style="list-style-type: none"> o whether BSPs are settled according to a Pay-as-Bid or a Pay-as-Cleared scheme has an impact on bidding behaviour and should thus be harmonised. o Portfolio bidding should be adopted as a general rule, excluding unit bidding that still takes place in several countries. o Price floors and caps should be removed, as they limit how BSPs may bid compared to BSPs in other countries. • Settlement rules: whether or not ramping rates are included in the remuneration of BSPs has an impact on the pricing of bids and should thus be handled the same for all BSPs. • Penalties: the impact of failing to deliver balancing bids is integrated in the pricing of bids and should thus be the same for all participants. <p>We thank ? TSOs to take an active role in harmonising RR product features to the fullest extent possible. We see a danger in non-harmonised rules and features practically excluding bids from use in certain markets, thereby weakening the optimality and economic efficiency of reserves exchanges at a regional level. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered.</p>
Stakeholder 9	<ol style="list-style-type: none"> 1. Standardization of the products shall be maximized in terms of geographical scope, but also in terms of “use” (by minimising specific products not shared in TERRE) 2. Simplicity in bidding, clearing and settling 3. Common methodologies and rules applicable to all the TSOs involved
Stakeholder 10	<p>As already mentioned in previous answers, we consider it necessary for local rules to be harmonised, based on an appropriate cost-benefit analysis, in order to provide a level-playing field and fair competition between BSPs of different countries. Examples include:</p> <ul style="list-style-type: none"> • Pricing rules: <ul style="list-style-type: none"> o whether BSPs are settled according to a Pay-as-Bid or a Pay-as-Cleared scheme has an impact on bidding behaviour and should thus be harmonised.

	<p>o Price floors and caps should be removed, as they limit how BSPs may bid compared to BSPs in other countries.</p> <ul style="list-style-type: none"> • Settlement rules: whether or not ramping rates are included in the remuneration of BSPs has an impact on the pricing of bids and should thus be handled the same for all BSPs. • Penalties: the impact of failing to deliver balancing bids is integrated in the pricing of bids and should thus be the same for all participants. <p>We encourage TSOs to take an active role in harmonising RR product features to the fullest extent possible. We see a danger in non-harmonised rules and features practically excluding bids from use in certain markets, thereby weakening the optimality and economic efficiency of reserves exchanges at a regional level. NRAs should actively support this harmonisation process, and market participants should be consulted on the orientations considered.</p>
Stakeholder 11	<ul style="list-style-type: none"> • Harmonization of negatives prices between the different balancing markets • Removal of caps and floors has an important contribution to the harmonization issues • Bidding structures including the max/min sizes and offer types must be identical for all bidding zones.
Stakeholder 12	
Stakeholder 13	<p>Harmonization of negatives prices between the different balancing markets</p> <p>Removal of caps and floors has an important contribution to the harmonization issues</p> <p>Bidding structures including the max/min sizes and offer types must be identical for all bidding zones.</p>
Stakeholder 14	<p>All parameters needs to be harmonized</p> <p>Caps, Floors in price</p> <p>Products (divisible, non divisible etc.)</p> <p>Regulatory issues</p>
Stakeholder 15	<ul style="list-style-type: none"> • Harmonization of negatives prices between the different balancing markets • Removal of caps and floors has an important contribution to the harmonization issues • Bidding structures including the max/min sizes and offer types must be identical for all bidding zones.
Stakeholder 16	Not Answered
Stakeholder 17	The harmonisation of price caps and floors for balancing energy markets will improve the functioning of the TERRE project by avoiding possible discrimination of market participants located in different bidding zones. Furthermore, we believe that these

	caps and floor, if applied, should be large enough to enable balancing markets to accurately reveal the value of the service provided in different electricity system conditions and especially in strained situations.
Stakeholder 18	Not Answered
Stakeholder 19	<p>As noted in Q3.2 and 3.5, the degree of local features should be minimised in order to best promote standardisation. That said, Project TERRE should be flexible enough to recognise the specific conditions that exist within individual markets. There should be no reason to harmonize markets simply to implement project TERRE without a clear benefit. Nonetheless, we list below the crucial elements that we believe are necessary for harmonisation.</p> <p>Pricing rules – i.e. whether BSPs are settled according to a Pay-as-Bid or a Pay-as-Cleared scheme has an impact on bidding behaviour and should thus be harmonised. Furthermore, price floors and caps should be removed, as they limit how BSPs may bid compared to BSPs in other countries.</p> <p>Settlement rules - whether or not ramping rates are included in the remuneration of BSPs has an impact on the pricing of bids and should thus be handled the same for all BSPs.</p> <p>Penalties - the impact of failing to deliver balancing bids is integrated in the pricing of bids and should thus be the same for all participants.</p>
Stakeholder 20	<p>We think that it is important to harmonise:</p> <ol style="list-style-type: none"> 1. Price caps and floors 2. Possibility to place portfolio bids 3. Harmonization of intraday markets and balancing philosophy
Stakeholder 21	Not Answered
Stakeholder 22	

12.2 Q 12.2 Do you share the position from TERRE TSOs (i.e. the caps and floors in balancing energy markets should be removed by the entry into force of TERRE)?

Stakeholder 1	yes
Stakeholder 2	We consider that harmonization of pricing rules, including caps & floors, is a need to guarantee a level-playing field for competition. However, we also think that negative prices are not the real value of balancing energy, but the result of a market price distortion caused by regulatory interventions, i.e. to set a regulatory payment for production apart from the market price. NRAs should support this necessary harmonization processes but taking into account these effects in the market prices and analyzing possible solutions.
Stakeholder 3	Not Answered

Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	Yes, although the inclusion of elastic imbalance needs seems to effectively introduce caps and floors into the TERRE mechanism.
Stakeholder 7	We consider that removing the caps and floors in all participating balancing energy markets is required in order to have a level playing field between the BSPs of the different countries.
Stakeholder 8	Yes, see our responses to questions 3.2 and 12.1. It is a obvious case that needs harmonization
Stakeholder 9	Floors in balancing offers could be removed if the only driver in bidding at negative prices is the reflection of variable costs of reducing scheduling and the design of both XB and national balancing markets are well fitted for this. They cannot be removed if other distortions exist, as renewables support mechanisms.
Stakeholder 10	Yes, see our responses to questions 3.2 and 12.1.
Stakeholder 11	• We agree
Stakeholder 12	
Stakeholder 13	We support the position of the TERRE TSOs regarding the removal of caps and floors in the balancing energy markets by the entry of TERRE into force.
Stakeholder 14	Yes, there should not exist caps and floors not even on high levels.
Stakeholder 15	We fully support the concept of harmonization of the market conditions between the bidding zones participating to TERRE.
Stakeholder 16	Not Answered
Stakeholder 17	We share TSOs' expectation and we also consider that the removal of caps and floor in balancing energy markets at European level should be carefully assessed taking into account the possible impacts on the functioning of national balancing markets.
Stakeholder 18	Not Answered
Stakeholder 19	As noted in Q3.2. we fully support and encourage the removal of caps and floors.
Stakeholder 20	Yes, we agree with the need to remove (or harmonise) caps and floors.
Stakeholder 21	Not Answered
Stakeholder 22	No. We believe that the harmonization of price caps and floor cannot be taken as a corollary to pilot project but should instead be correctly dealt with at the NRA level, taking into consideration all the relevant national features.

12.3 Q 12.3 In case this cannot be done before the entry into force of EB GL, do you agree on the transitional application of the solution through settlement? Or which is your view regarding a backup solution?

Stakeholder 1	it is ok
Stakeholder 2	The full harmonization of local balancing energy markets in the short term is not a realistic scenario and transitional solutions that allow implementing progressively the XB Balancing Market are welcome.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We consider that the proposed transitional methodology may offer a solution for the TSO-TSO settlement, but does not guarantee that BSPs of different countries can compete on a level playing field in the TERRE platform. Diverging local rules will create different bidding behaviour and possibilities, distorting a correct comparison of balancing bids on the TERRE CMOL. As the only way to achieve a fair competition between BSPs is a correct alignment of local rules, we reiterate its request that such alignment is implemented before the TERRE project goes live.
Stakeholder 8	We do not think the transitional arrangement is an acceptable solution for the reasons explained in our responses to questions 3.2 and 12.1. TSOs should work on removing price caps/floors to ensure that reserves exchanges are most optimal and economically efficient at a regional level. This process can be started as of now and should be strongly supported by NRAs .
Stakeholder 9	We agree on the transitional application of the solution through settlement. We consider that the local floor system price reflects the cost of balancing better than the local marginal balancing price that can be far from cost of balancing and could not provide enough incentives to parties to balance.
Stakeholder 10	We do not think the transitional arrangement is an acceptable solution for the reasons explained in our responses to questions 3.2 and 12.1. TSOs should work on removing price caps/floors to ensure that reserves exchanges are most optimal and economically efficient at a regional level. This process can be started as of now and should be strongly supported by NRAs as a no-regret measure.
Stakeholder 11	<ul style="list-style-type: none"> • We agree on the transitional application of the solution through settlement.
Stakeholder 12	
Stakeholder 13	It is important that harmonization issues do not result in a delay or postponement of TERRE's implementation. Therefore, we support the interim solution through settlement.
Stakeholder 14	No, the harmonization has to take place before any implementation of Terre due to non-discrimination of any BRP.
Stakeholder 15	The interim solution proposed is a national re-adjustment. According to the consultation document this will not affect the other TSOs. Under this circumstances we agree on the interim solution proposed to avoid potential delays to the TERRE project.

	However, a prerequisite to this readjustment is an agreement of the concerned TSO with their NRAs. How to handle a refusal of the concerned NRA?
Stakeholder 16	Not Answered
Stakeholder 17	We believes that the envisaged transitional solution, though not optimal, would allow a timely implementation of the project before the harmonisation of price caps and floors by the TSOs participating in TERRE.
Stakeholder 18	Not Answered
Stakeholder 19	We would support transitional arrangements for early implementation of TERRE.
Stakeholder 20	It is important that cap and floor prices are harmonized/removed before the introduction of TERRE in order to assure a level playing field between market participants
Stakeholder 21	Not Answered
Stakeholder 22	We believes that a “solution through settlement” could be a legitimate tool identified by the relevant NRAs to deal with the above mentioned harmonization issues.

12.4 Q 12.4 What is the minimum amount of time that market participants need to update your RR balancing offers after receiving the results of the cross-border intra-day (XBID) process?

Stakeholder 1	it depends on many factor (system-people-time), difficult to answer 5Min.
Stakeholder 2	15 minutes is a good first approach, but it is necessary to see how the intraday market develops.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	It is not possible for us to define a minimum amount of time required to update RR balancing offers. This depends on the (allowed) complexity of the bidding strategy, in part dependent on the available bidding formats. In order to ensure that BSPs can make the best possible offers to the TERRE platform, the time available between receiving the results of XBID and the GCT of TERRE should be maximized. This can be done by performing some processes in parallel instead of sequentially and by adapting the complexity of the bidding format depending on the required time for the clearing algorithm (see our answer to question 7.2).
Stakeholder 8	As mentioned in our response to question 7.2, the precise time available for market participants to adjust their offers is not yet set, but the consultation document suggest an extremely short time that may make it difficult – if not impossible – for BSPs to adjust and submit their bids. Market participants should be involved in discussions on how to extend this time as much as technically possible.
Stakeholder 9	Please see answer to Q 7.4.

Stakeholder 10	As mentioned in our response to question 7.2, the precise time available for market participants to adjust their offers is not yet set, but the consultation document suggest an extremely short time that may make it difficult – if not impossible – for BSPs to adjust and submit their bids. Market participants should be involved in discussions on how to extend this time as much as technically possible.
Stakeholder 11	<ul style="list-style-type: none"> • It is difficult to estimate the IT complexity of the participation in TERRE, therefore only a rough estimation could be made. • Updating our RR balancing offers is depending on the complexity of our pool of plants, on the complexity of the offers and of the IT platform and it is depending on all our other intraday activities. We assume a time between 15 and 30 minutes.
Stakeholder 12	
Stakeholder 13	It is difficult to estimate the IT complexity of the participation in TERRE, therefore only a rough estimation could be made. We believe that a period of 10 to 20 minutes for the update of the RR offers after receiving the results of the cross border intraday process would be sufficient.
Stakeholder 14	<p>5min</p> <p>Bidding should anyway be possible to make several hours before the settlement algorithms of Terre starts.</p> <p>Intraday Market should in any case not be negative influenced by TERRE (not in gate closure nor in liquidity and x-boarder coupling)</p>
Stakeholder 15	This is mainly depending on the process/platform to create and update TERRE bids. The more efficient and user friendly this is created to less time is needed by the BSP to update a balancing offer. In an ideal case this can be done within less than 10 minutes.
Stakeholder 16	Not Answered
Stakeholder 17	As explained in answer to question 7.4 the minimum amount of time that we need to update RR balancing offers after receiving the results of the cross-border intra-day (XBID) process and after the update of units' schedules is 5 minutes.
Stakeholder 18	Not Answered
Stakeholder 19	The precise time available for market participants to adjust their offers is not yet set, but the consultation document suggest an extremely short time that may make it difficult – if not impossible – for BSPs to adjust and submit their bids. Market participants should be involved in discussions on how to extend this time as much as technically possible.
Stakeholder 20	We consider that the desirable minimum amount of time would be 30', maybe 15' could be assumable, but not so sure on the later.
Stakeholder 21	Not Answered
Stakeholder 22	

12.5 Q 12.5 Do you consider there are other key issues that need to be harmonized to avoid significant distortions between BSP across TERRE Member States?

Stakeholder 1	For sure but too long and expensive to detail now...
Stakeholder 2	No more comments.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We reiterate our strong view that an alignment of local rules is necessary to ensure a level playing field between BSPs of different TERRE Member States. This includes - as previously stated – settlement, pricing and penalties. It is imperative that any harmonization of these elements includes processes between TSO and BSP; the interim solution proposed by TERRE is insufficient.
Stakeholder 8	Please refer to our response to question 12.1
Stakeholder 9	The possibility to migrate to a TSO-BSP marginal settlement in countries with a pay as bid balancing market should be explored.
Stakeholder 10	We refer to our response to question 12.1.
Stakeholder 11	<ul style="list-style-type: none"> • Additionally to the points listed in Q12.1, a harmonization of the scheduling steps would simplify the implementation of the TERRE project. This point has been addressed in chapter 7. • The harmonization of the ramp settlement would also be of importance in order to avoid distortions between the BSPs across TERRE members
Stakeholder 12	
Stakeholder 13	It is difficult to estimate the IT complexity of the participation in TERRE, therefore only a rough estimation could be made. We believe that a period of 10 to 20 minutes for the update of the RR offers after receiving the results of the cross border intraday process would be sufficient.
Stakeholder 14	Harmonization only price and processwise or on the regulatory side as well? Prequalification of plants, obligations to deliver bids, offers. Forced activation in case of lack of offers? (emergency concepts)
Stakeholder 15	Additionally to the points listed in Q12.1, a harmonization of the scheduling steps would simplify the implementation of the TERRE project. This point has been addressed in chapter 7.
Stakeholder 16	Not Answered
Stakeholder 17	We have not identified other issues that need to be harmonised to avoid distortions between BSPs across TERRE bidding zones. In particular, we believe that the harmonisation of Imbalance Settlement Periods (ISP) should not be considered a prerequisite for the implementation of TERRE.

	However, when implementing local rules in each TERRE Member States, the consistency between these rules should be guaranteed. We do not require full harmonisation of local rules but we draw TSO's attention on the need to avoid distortions between market players.
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	The principle elements that should be harmonized have been described in answer 12.1
Stakeholder 21	Not Answered
Stakeholder 22	

12.6 Q 12.6 Do you have specific comments regarding chapter 12 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	see above: this is the key challenge!!
Stakeholder 2	No specific comments.
Stakeholder 3	Not Answered
Stakeholder 4	
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We have no further comments on this chapter.
Stakeholder 8	No other comment
Stakeholder 9	
Stakeholder 10	We do not have further comments.
Stakeholder 11	No comment
Stakeholder 12	
Stakeholder 13	No further comments
Stakeholder 14	'--
Stakeholder 15	No comment

Stakeholder 16	Not Answered
Stakeholder 17	It would be good to have an even rough estimate of the financial consequence of the local implementation of caps and floors.
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	We consider the higher the harmonization the easier to ensure a level playing field, though particularities should always be evaluated
Stakeholder 21	Not Answered
Stakeholder 22	

13 Project Implementation Plan

13.1 Q 13.1 Do you have specific comments regarding chapter 13 content?
(Please indicate sub-chapter reference when possible)

Stakeholder 1	no
Stakeholder 2	No specific comments.
Stakeholder 3	The timelines presented in the implementation plan are reflective of a project of this size. As there are many entities involved, the complexities of implementation only increase. The approach to testing, i.e. staggered/parallel appears to be a good fit. For the iterative development phase, caution should be exercised to choose the appropriate level of iteration from the agile to waterfall spectrum.
Stakeholder 4	<p>We believe that the 'System Architecture and Interfaces Specification'; the Functional Specification and any other documents that will impact how we might design our local arrangements should be released to us as soon as possible.</p> <p>We also are seeking information on the parallel run, end to end testing and to what extent we can be involved in this.</p> <p>In more detail, we have the following questions:</p> <ul style="list-style-type: none"> ● Who is producing the 'System Architecture and Interfaces Specification and how will this be reviewed with stakeholders? o We also note that the Specification needs to be maintained in parallel with the Functional Specification, i.e. it will need to evolve and be shared with affected stakeholders whose systems are impacted ● How and by whom is the business model design documented? In particular who will document assumptions about what happens in the local arrangements and how that interacts with the TERRE processing and how will this be shared with the local arrangements? o We are making assumptions locally about what central TERRE is doing and what we

	<p>are doing. But we need to make sure that they align with the central TERRE assumptions and may need to discuss them with you if they do not.</p> <p>o The RFP and functional design will focus on what the new TERRE platform needs to deliver, but there is also a need to document the overall market impact.</p> <p>o In particular we will need to define the content and meaning of various data feeds to and from the central TERRE arrangements, and key processes that happen locally (e.g. currency conversion). We need to define what we expect to receive from TERRE and what TERRE expects from us.</p> <ul style="list-style-type: none"> • There is no information about what is intended for the parallel run. Parallel run normally means run new solution alongside old solution and see if comes up with the same answers. What is the old solution in this case? Is this really end to end testing? Or if not, end to end testing is also required. • End to end testing should involve the local arrangements that interface with TERRE as well as the TERRE central systems and not all of these are operated by the TERRE TSOs. How will we validate whether the TERRE system is doing what we expect? • If the design continues to develop beyond this first NRA approval, what will drive the phases of iteration? Will the appointed service provider drive this? How will the local stakeholders/arrangements be included to ensure that we are ready for the final approved design too? • How will the acceptance criteria and test scenarios be set for the whole TERRE solution (including the local arrangements and non IT business processes, not just the TERRE platform)?
Stakeholder 5	Not Answered
Stakeholder 6	As stated in question 0, we have been left with very little time in the consultation process to comment on such complex issue and that the process as set out seems to have no reliance on or interaction with the development of the EB GL.
Stakeholder 7	As we have mentioned in several questions, it is imperative that local rules for e.g. pricing and settlement are harmonized before the TERRE project goes live. Otherwise, BSPs will not be able to compete fairly when put on the same CMOL. To this end, the Project Implementation Plan should also include a track to develop a harmonized set of local rules, to be consulted with stakeholders and submitted for approval to NRAs. In this way, the impact of aligning the local rules on the overall progress of the TERRE project would be clarified.
Stakeholder 8	Provided that TSOs and NRAs work in parallel with the project implementation to harmonise diverging market rules and features as mentioned in our response to question 12.1, we have no comment on the planning of the project.
Stakeholder 9	<p>Please see answers to Q 0 and Q 1.1 and the following specific comments:</p> <ul style="list-style-type: none"> - Subchapter 13.1 – paragraph 1: “in line with the RR CoBA implementation requirements of the current draft GL EB”. The TERRE pilot project should provide a gap analysis of the project against de CoBA requirements. The aim of this should be to show the evolution path of the implementation according to the GL EB, rather than demonstrating that TERRE is almost fully aligned with the CoBA requirements. As mentioned in Q 0, ‘quick wins’ should be implemented in TERRE to identify solutions for the final balancing market model.

	<p>- Subchapter 13.1 – figure 13-1: if the TERRE project will aim to provide a pilot experience, the development and integration test could be shortened.</p> <p>- Subchapter 13.2 – paragraph 4 (last): the consultation on implementation envisaged prior to the go-live should allow stakeholders to assess the “Parallel Run Phase” in a quantitative and qualitative way.</p> <p>- Subchapter 13.5 – paragraph 1: please specify the scope of the so-called “iterations” in the implementation activities.</p> <p>- Subchapter 13.5 – paragraph 2: periodic public reports on the Integration Tests would be of the interest of stakeholders.</p>
Stakeholder 10	<p>Provided that TSOs and NRAs work in parallel with the project implementation to harmonise diverging market rules and features, based on an appropriate cost-benefit analysis, we have no comment on the planning of the project.</p> <p>In line with our general remark on the short period of time for consultation and due to the fact that this is the first of a series of consultations, we expect that there will be further consultation on design aspects of the TERRE project. The roadmap presented foresees a consultation on implementation in 2018 but market participants should be able to have a say on the final draft design proposal.</p>
Stakeholder 11	<ul style="list-style-type: none"> • We would appreciate to have more time for a feedback in such an important consultation.
Stakeholder 12	Not Answered
Stakeholder 13	<p>13.2: Within the legal activities the liability of BSP, BRP, TSO and TERRE must be discussed.</p> <p>13.3: Beginning of 2018 TERRE will submit to the NRAs the Implementation for approval. Is previously a consultation of the other stakeholder planned?</p>
Stakeholder 14	'--
Stakeholder 15	<ul style="list-style-type: none"> • 13.2: Within the legal activities the liability of BSP, BRP, TSO and TERRE must be discussed. • 13.3: Beginning of 2018 TERRE will submit to the NRAs the Implementation for approval. Is previously a consultation of the other stakeholder planned? • We would appreciate to have more time for a feedback in such an important consultation.
Stakeholder 16	Not Answered
Stakeholder 17	<p>As already mentioned, we strongly believes that a clear view on all the arrangements envisaged at regional and national level for the implementation of TERRE is necessary for BSPs to properly prepare their participation in the new mechanism. Cooperation Agreement documents (eventually with some masked confidential data), IT Requests for Proposal (RFP) and Functional Specifications should be made public.</p> <p>For this reason, the next consultation on TERRE implementation seems to come too late (Q2 2018) in the process, as IT systems update and the adaptation of the relevant processes need to be finalised far in advance in order to respect the go-live</p>

	<p>deadline. Once their internal adaptation process has started, stakeholders should have the guarantee that the design of the mechanism is firm. Any significant change in the design would lead to additional costs and delays.</p> <p>We also wish to highlight that:</p> <ul style="list-style-type: none"> - First, given the delay of 18 months necessary for us to be ready to participate in TERRE, any planning modification requiring to anticipate the capability of BSPs to make standard offers (as it seems to be envisaged for the parallel run) should be properly discussed with market participants to verify its feasibility; - Second, TSOs should quickly disclose the envisaged requirements for BSPs to take part in the testing and parallel run phases. <p>In particular we consider that, if TSOs wish to start the parallel run in Q1 2018, 6 months prior to the go-live of the project, they should communicate the main technical specifications and implementation solutions (including local arrangements and the requirements for testing and parallel run), in mid-2016 with minimal evolutions throughout the following 18 months.</p>
Stakeholder 18	Not Answered
Stakeholder 19	<p>We note the project timescales are ambitious but achievable, and rely on close collaboration of TSOs and NRAs to work in parallel with the project implementation to harmonise divergent market rules and features. Furthermore we believe that sufficient time is required to develop, test and trial IT systems solutions, which the project plan will need to accommodate.</p> <p>The Project Implementation Plan foresees just one further consultation in 2018 on the implementation of TERRE in 2018. In line with our comments in Q0 regarding the short time period for this (first) consultation, we do expect there will be further timely consultations on specific detailed design elements as the project progresses. In particular, the question of how the algorithm will work has not yet been addressed and this is of crucial interest to stakeholders.</p> <p>We expect market participants to be able to comment on the final, detailed design proposal before implementation.</p>
Stakeholder 20	Considering the depth of document, we consider that available time to answer future consultations should be extended in order to better analysis the effect of the proposed changes
Stakeholder 21	Not Answered
Stakeholder 22	Not Answered

14 Possible evolutions

14.1 Q 14.1 Do you have specific comments regarding chapter 14 content?

(Please indicate sub-chapter reference when possible)

Stakeholder 1	no
Stakeholder 2	No specific comments. We consider that main objective is to go-live in Q3 – 2018, and the possible changes of this market will depend on the evolution of the European electricity market.
Stakeholder 3	Given the pace of evolution in EU markets, it is paramount to have a performance-proven and accurate solution that is capable of adapting to new processes and products. And as important is the ease of flexibility in making these changes.
Stakeholder 4	<p>We note that it is possible that the scope of TERRE will expand in future to additional processes. This implies that the initial design of TERRE, including the local arrangements that interface with it should be built with future flexibility in mind.</p> <ul style="list-style-type: none"> • How is the TERRE Project going to design in the flexibility for different processes and products? RFP respondents need some idea of the type of flexibility needed. E.g. are the timings the same or different? How similar is the data content? Which processes will be common and which are product-specific? • How will local arrangements be involved in these decisions so that they are equally flexible to future change? There is a danger that if such decisions are not shared and consulted upon, the central TERRE systems will be able to flex, but the local arrangements that are essential for a successful TERRE operation into the future will not be. • This is another example of the importance of ensuring that those who are not TSOs but who design, build and operate the local systems that interface with TERRE are fully included in the design of TERRE throughout the initial TERRE Project and as it continues to evolve on an ongoing basis.
Stakeholder 5	Not Answered
Stakeholder 6	N/A
Stakeholder 7	We appreciate the fact that the TERRE platform is designed sufficiently flexible to accommodate other balancing products and platforms. However, as the TERRE platform is focussed on RR, with long lead-times and the optimization of social welfare (instead of cost minimization of activated bids), it does not seem suitable for shorter balancing processes such as manual Frequency Restoration Reserves (mFRR). We assume that the flexibility also extends to these elements of the algorithm and such extensions will in any case be subject to the implementation processes foreseen in the NC EB.
Stakeholder 8	No other comments
Stakeholder 9	Please see answer to Q 0.
Stakeholder 10	We do not have further comments.
Stakeholder 11	<ul style="list-style-type: none"> • No comment

Stakeholder 12	Not Answered
Stakeholder 13	We support the change of processes that will further allow TERRE to run sequentially to the established intraday markets (including those of DE and AT) and not competitive to them. Therefore, a possible introduction of additional clearings could be discussed as one of the solutions to the aforementioned challenges.
Stakeholder 14	---
Stakeholder 15	An adaption of the TERRE products to potential evolutions of Market Time Resolution or intra-day Gate Closure Time must be conducted, to avoid an impact of TERRE on intra-day trading.
Stakeholder 16	Not Answered
Stakeholder 17	As already mentioned, we are in favour of a gradual adaptation of TERRE to the evolutions which will occur in the intra-day markets but we believe that such evolutions should be treated as major changes of the TERRE design requiring a new and detailed implementation plan. Stakeholders should also have enough visibility on the medium-term evolutions of the project in order to be able to identify technical solutions compatible with the developments foreseen after the first implementation phase. This transparency on the envisaged medium-term planning contributes to reducing future adaptation costs and to speeding up the transition towards new arrangements.
Stakeholder 18	Not Answered
Stakeholder 19	No comment.
Stakeholder 20	It will be important to expand the TERRE project to Replacement Reserve capacity. In fact, given the short time between the activation of the product and FAT of TERRE product, only running power plants (or very fast power plants) can deliver the product. On the contrary, allowing the participation of power plants that are not running, it will increase competition and efficiency.
Stakeholder 21	Not Answered
Stakeholder 22	At this stage of the design phase, we believe it is still early to discuss a potential extension of the pilot project