



## **EASE contribution to DG Energy's Public Consultation on a new Energy Market Design (15.07.2015)**

8 October 2015

EASE appreciates the opportunity to participate in the European Commission DG Energy *Public Consultation on a new Energy Market Design* from 15.07.2015 (deadline 08.10.2015).

Referring document: [COM\(2015\) 340 final: Launching the public consultation process on a new energy market design](#)

Further to be considered: [COM\(2015\) 339 final: Delivering a New Deal for Energy Consumers](#)

### **Questionnaire's recipient:**

Members of the EASE STC and STC Working Group on Market Design

## **Commission's Questionnaire**

For the following questions please refer to document pages 1 to 8.

### **Section 1. A Vision for the Transition of the Electricity System**

#### **Section 2. Delivering the New Electricity Market for the EU**

- 1) Would prices which reflect actual scarcity (in terms of time and location) be an important ingredient to the future market design? Would this also include the need for prices to reflect scarcity of available transmission capacity?**

Yes. The market should be able to signal scarcity, by appropriate prices. Therefore, ideally, it should be free from interference, including price caps. This will ultimately lead to appropriate, timely and better regional investments. If price spikes are not possible (because it is deemed not acceptable to expose end-users to such a risk), then Capacity Remuneration Mechanisms (CRM) could be a sustainable, long-term way to complement energy-markets and signals.

Prices need to reflect the physical limitations of the grid in order to deliver optimal locational signals for investment, consumption and production.

**2) Which challenges and opportunities could arise from prices which reflect actual scarcity? How can the challenges be addressed? Could these prices make capacity mechanisms redundant?**

Prices which reflect actual scarcity open opportunities for much needed investment and can allocate resources where they are most needed. These prices are attractive for e.g. arbitrage business models which are not attractive today despite their benefit of supporting grid stability; an additional degree of flexibility is provided to the system by matching supply and demand at different time scales.

The challenge is to create rules – market and regulatory – with a long-term view and which are sufficiently clear and consistent. Capacity must be provided and this could be done either by electricity only markets or by Capacity Remuneration Mechanisms (CRMs). EASE does not have a specific preference for one or the other, but wishes to highlight that technological neutrality is essential for any of these measures. This will allow Energy Storage devices to participate.

**3) Progress in aligning the fragmented balancing markets remains slow; should the EU try to accelerate the process, if need be through legal measures?**

The integration of balancing markets is a key component towards achieving the Energy Union. However, the need for aligned balancing markets would be significantly reduced if the volatility issue could be solved at its origin and RES were asked to balance their feed-in (steady and schedule-defined feed-in rather than volatile feed-in).

Furthermore, national balancing market designs currently differ across Europe and are operated differently according to local specificities (e.g. the national energy mix). This differentiation justifies a particular attention to the costs and benefits related to each market integration and harmonisation solution in view of creating a European balancing market. Therefore, a solid and robust cost-benefit analysis (CBA) should be conducted with the aim of identifying a clear case for a pan-European harmonisation of some aspects of balancing markets. A sufficient implementation period should be allowed when harmonisation turns out to be necessary.

In addition to balancing market integration, EASE also stresses that ancillary services should be open to all participants that can add flexibility. Means that go beyond the currently existing conventional generators should be accepted, including means such as energy storage in a technology neutral way.

**4) What can be done to provide for the smooth implementation of the agreed EU wide intraday platform?**

Since intraday platforms are already in place and working in several Member States, the most natural step is to continue the progressive integration of such platforms – starting with neighbouring Member States and aligning them via common market nomenclatures, measures (time, size, etc) and products. Such an initiative is already ongoing on an EU level (ID Market Coupling project) but should be supported and intensified.

**5) Are long-term contracts between generators and consumers required to provide investment certainty for new generation capacity? What barriers, if any, prevent such long-term hedging products from emerging? Is there any role for the public sector in enabling markets for long term contracts?**

Long-term contracts that are properly tendered and administered can be an effective way to reduce overall costs by allowing further financial players into the market and creating predictability for producers. This should not be limited to traditional or existing energy generation but open to all means that can provide the desired service without impacting the existing wholesale market.

Under the conditions of intermittent RES, long-term contracts between generators and consumers will become more important in order to maintain a reliable energy supply. The critical barrier is that market participants do not yet have a clear picture of the regulatory framework. The public sector can make sure rules are clear and stable, enabling a proper allocation of risks to long-term contract participants.

Regulations at Member State level hampering long-term contracts should therefore be reviewed while ensuring that there is no abuse of dominant position.

**6) To what extent do you think that the divergence of taxes and charges levied on electricity in different Member States creates distortions in terms of directing investments efficiently or hamper the free flow of energy?**

Today, generators and consumers are defined entities with defined rights, responsibilities and duties. Storage is both a consumer (charging) and a generator (discharging). This leads to storage operators often having to pay double fees, levies and taxes for both the charging and discharging of energy, preventing storage projects from being economically viable and thus rolled out on the market. It also prevents storage to be operated in line with system needs. The issue is linked to the fact that a regulatory definition of storage is missing – especially on an EU level. Storage is treated differently across the different Member States, which leads to further distortions in the allocation of storage.

**7) What needs to be done to allow investment in renewables to be increasingly driven by market signals?**

The marginal cost of producing renewable electricity is nearly zero. The challenge is therefore to provide confidence for the investor that an acceptable return on the up-front capital investment over the lifetime of the asset will be achieved. Aligning to market signals suggests that at times there will be an adequate return (when market prices are high) and at other times an inadequate return (when market prices are low). Energy storage potentially allows this problem to be mitigated by de-coupling the time of generation from the time of consumption. The market signals need to reflect the importance of energy storage, and to that end allow more renewables to be connected to the grid when they are being produced, even though the real-time market price for consumption may not support that.

Other than narrow areas of critical importance, alternatives to the current subsidies for RES should be found and these should be harmonised at EU level.

Renewable subsidies for mature technologies should be eliminated and non-discriminatory access to technologies which can facilitate the economic growth of renewables (like energy storage) should be facilitated with market based regulation.

**8) Which obstacles, if any, would you see to fully integrating renewable energy generators into the market, including into the balancing and intraday markets, as well as regarding dispatch based on the merit order?**

Obstacles include the renewables subsidies themselves. Every generator should be subject to all market rules, meaning that balancing obligations should also apply. In the past, it was not compatible to have RES and dispatchable power generation. This has shifted now since the dispatchability can be achieved by including Energy Storage devices or by pooling the different generation technologies. But given the current design of RES subsidies there is no such need as to be dispatchable.

It should also be recalled that being subject to “standard balancing responsibilities” is one of the pre-conditions to grant operating aid to RES industry pursuant to the EC “Guidelines on State aid for environmental protection and energy 2014–2020”. Another hampering point is the lack of open access to balancing market players. For example, in a number of cases traditional base-load generators are required to reduce their load below optimal levels in order to provide ancillary services to the grid. It may be more cost-effective and have less environmental impact to specify the ancillary services needed and let the market decide on how to provide these. One of the solutions includes energy storage or demand-side management, which will allow for dispatchability of intermittent suppliers.

**9) Should there be a more coordinated approach across Member States for renewables support schemes? What are the main barriers to regional support schemes and how could these barriers be removed (e.g. through legislation)?**

Yes. A more coordinated approach would make RES-based power supply more efficient. Current market distortions caused by uncoordinated RES support should be reduced.

It should be noted that the “Guidelines on State aid for environmental protection and energy 2014–2020” already constitute a very efficient vector of harmonization of national support schemes and setting conditions that should in principles facilitate the integration of RES production in the market after a transitional period.

Furthermore, the EU Emission Trading System (ETS) is the main common European instrument that drives investment in low-carbon technologies including RES investment. It seems to constitute the best way to obtain a well-coordinated approach among Member States and to develop a market-based and coherent renewables development policy at EU level.

**10) Where do you see the main obstacles that should be tackled to kick-start demand response (e.g. insufficient flexible prices, (regulatory) barriers for aggregators / customers, lack of access to smart home technologies, no obligation to offer the**

**possibility for end customers to participate in the balancing market through a demand response scheme, etc.)?**

In general, we support the Commission looking at the market barriers to demand-side participation, but since most of the time this is equivalent to energy storage (e.g. switching off a fridge which has stored enough coldness, switching on a home heater in order to store the heat, drawing on home batteries that balance PV generation...) it is important to also consider those obstacles in the context of the participation of energy storage in the different markets. The obstacles depend on the exact point in the system where/ when demand response is integrated.

The current regulatory framework – i.e. the network codes – is evolving and is progressively recognising the use of limited-energy resources for the provision of reserves. In particular the NC LFCR in Art. 45.6 is asking for a FCR-providing unit (Frequency Containment Reserve, formerly Primary Reserve) to fully activate its FCR capacity continuously for a time period of not less than 30 min. This is the first time that a duration limit has ever been set by ENTSO-E, and is proof that TSOs are finally ready to accept and integrate innovative resources such as energy storage devices as grid service providers.

We believe that more can be done, in particular taking into account that in the majority of EU Member States the upholding of FCR full activation is currently required for a period of at least 15 min. Technical rules and potential market designs regarding ancillary services (including FCR) need to be shaped in such a way that, without discrimination, every energy storage technology meeting the actual requirements is encouraged to participate. Furthermore, TSOs should take into account the benefits and capabilities of novel technologies such as more innovative energy storage technologies, including the design of new services that are needed for the system.

The creation of very short balancing products would allow for more balancing resources to be available and increase the flexibility of the grid. Therefore a specific market that rewards fast reacting ancillary services should be considered. If we consider intra-day trading, then the demand response needs to be integrated via 24/7 traders, virtual power plants, industrial consumers, etc., which will present an entry hurdle for small players. The market has traditionally relied on large centralised plants to provide demand response, market signals and contracts are therefore constructed to suit large assets. Small-scale actors need to aggregate their capacity to provide a meaningful demand response. A level playing field needs to be created so that such aggregation can be adequately rewarded to incentivise the consumer to want to be involved and to deliver an adequate return to the aggregator for the investment required in addition to the consumers' normal equipment (specifically Heat Ventilation and Air Conditioning and energy storage appliances). It is also necessary to recognise the role of system flexibility and therefore a clear definition, one that includes spatial and temporal constraints, is needed.

For the following questions please refer to document pages 9 to 12.

### **Section 3. Stepping up Regional Cooperation in an Integrated Electricity System**

**11) While electricity markets are coupled within the EU and linked to its neighbours, system operation is still carried out by national Transmission System Operators (TSOs). Regional Security Coordination Initiatives ("RSCIs") such as CORESO or TSC have a purely advisory role today. Should the RSCIs be gradually strengthened also including decision making responsibilities when necessary? Is the current national responsibility for system security an obstacle to cross-border cooperation? Would a regional responsibility for system security be better suited to the realities of the integrated market?**

No comment

**12) Fragmented national regulatory oversight seems to be inefficient for harmonised parts of the electricity system (e.g. market coupling). Would you see benefits in strengthening ACER's role?**

The mandate of ACER is to support an EU-wide coherent market integration, ensuring a consistent regulatory framework and its enforcement across different Member States, thus creating a level playing field for stakeholders that avoids discrepancies across Europe. It is crucial ACER make full use of the provisions, tools and powers that was given to it under the Third Energy Package in order to accomplish its mandate.

**13) Would you see benefits in strengthening the role of the ENTSOs? How could this best be achieved? What regulatory oversight is needed?**

The ENTSOs have been tasked by Regulation (EC) N°714/2009 to carry out a certain number of missions. All these tasks require transparent processes and taking into account market needs.

However, greater regional cooperation and coordination between TSO's and regional entities is needed for optimal grid management, especially since the integration of decentralised, locally produced renewable energies is posing significant challenges to grid management at transmission and distribution levels and this trend is expected to grow in the coming years. Additionally, the TSO-DSO interface requires more attention in order to ensure that the European public interest is properly served and that the ENTSOs' operations are undertaken in an efficient and transparent manner.

ENTSO-E's work on cost-benefits analyses (CBA) is a fundamental point, and EASE stresses the importance of the ongoing ENTSO-E / EASE discussion on how storage should be dealt with in such CBAs. This work will allow to propose valuation methods common with the ones used for networks - this contributes to creating a level-playing field for storage assets.

**14) What should be the future role and governance rules for distribution system operators? How should access to metering data be adapted (data handling and ensuring data**

**privacy etc.) in light of market and technological developments? Are additional provisions on management of and access by the relevant parties (end customers, distribution system operators, transmission system operators, suppliers, third party service providers and regulators) to the metering data required?**

Currently there are significant differences in the way distribution utilities operate across Europe. In the interest of facilitating market integration and creating a level playing field, Distribution System Operators (DSOs) should have a homogenised framework, applicable across Member States. DSOs currently serve unmanaged loads using traditional infrastructure, but their future role as market facilitator could be a more active one. EASE stresses the need to adopt a market approach when discussing Energy Storage and demand-side response (DSR), and the need to look at ways to create market solutions, if these are not available.

In the case that market solutions are not available, DSOs should be allowed to operate Energy Storage and DSR resources to minimise the cost of resolving constraints and ensuring network security – as in the case of TSOs, without hampering markets. We believe this task is feasible without necessarily requiring the attribution of new competences to DSOs which should allow and facilitate access to data. EASE stresses the need to allow 3rd parties to provide energy storage services to the distribution network.

**15) Shall there be a European approach to distribution tariffs? If yes, what aspects should be covered; for example tariff structure and/or, tariff components (fixed, capacity vs. energy, timely or locational differentiation) and treatment of self-generation?**

More cost-reflective distribution tariffs including a fixed component (€/MW) should be considered.

EASE supports that distribution tariffs must be part of the “appropriate price signals” that should be sent to the consumers. In this respect, it would be very useful to have a clear definition of tariff categories and to precise explicitly that the structure of network tariffs should include critical peak pricing rates or real-time pricing rates, which enhance arbitrage opportunities for storage operators throughout the year. Such distribution tariffs should be coordinated with system energy prices, as it would reinforce the price signal to the customer and bring simplicity, in order to preserve the intelligibility of energy offers proposed by suppliers.

Seasonal time of use-tariff structures with higher costs during yearly peak times (typically in winter only) that apply to demand and generation are used in the UK providing a strong incentive for flexibility providers. This structure might also enhance arbitrage opportunities for storage operators throughout the year and would contribute to a cost-effective balancing of the system.

**16) As power exchanges are an integral part of market coupling – should governance rules for power exchanges be considered?**

No comment.

For the following questions please refer to document pages 13 to 15.

#### **Section 4. A European Dimension to Security of Supply**

##### **17) Is there a need for a harmonised methodology to assess power system adequacy?**

EASE recognises the importance of ENTSO-E's mission on this point, and as storage can contribute to system adequacy, ensuring coherent methods would be useful for a better understanding of storage value in the different Member States.

##### **18) What would be the appropriate geographic scope of a harmonised adequacy methodology and assessment (e.g. EU-wide, regional or national as well as neighbouring countries)?**

The appropriate geographic scope might depend on several aspects, especially on the specific type of adequacy risks and needs. The increasing penetration of RES and of cross-border exchanges require the extension of the geographical scope to an area as large as possible. Regional and cross-regional adequacy assessments are thus needed to identify most risks and needs, which cannot be fully accounted for on national basis.

##### **19) Would an alignment of the currently different system adequacy standards across the EU be useful to build an efficient single market?**

EASE recognizes that full harmonisation might be complex and not reachable, but a certain level of coherency should be sought. As storage can contribute to system adequacy, coherent adequacy standards would be useful for a better understanding of storage value across the different Member States.

##### **20) Would there be a benefit in a common European framework for cross-border participation in capacity mechanisms? If yes, what should be the elements of such a framework? Would there be benefit in providing reference models for capacity mechanisms? If so, what should they look like?**

Capacity mechanisms are being implemented across Europe with little coordination and this can potentially distort national electricity markets. A common European framework for cross-border participation in capacity mechanisms could be introduced if oriented towards the following objectives: the selection of the most competitive capacity whose location allows to fulfill the identified capacity needs; and the fair allocation of the costs induced by capacity mechanisms among European consumers.

New technologies such as energy storage need to be fully understood to create the right conditions for their participation in capacity mechanisms. In the specific case of energy storage, key issues that need to be addressed are de-rating factors and penalties for non-delivery. As capacity markets are a good tool to provide long-term views, it will be very important to allow all market participants (traditional generators, new generators, or new

technologies including storage products) to have access to the market on a non-discriminatory, technology neutral, open-access basis – especially as assets such as energy storage present a very high availability rate and would be highly valuable contributors.

**21) Should the decision to introduce capacity mechanisms be based on a harmonised methodology to assess power system adequacy?**

Yes, the introduction of capacity mechanisms, where required, should be based on adequacy assessments.

The elaboration of a harmonised methodology and criteria for joint assessments of generation adequacy at regional and European level is a valuable instrument to accurately consider the contribution of foreign capacity and interconnections to security of supply in a given area.

As already stated, all capacity markets should allow a non-discriminatory participation of energy storage.

**General comments:**

- EASE would like to stress that the future governance framework of the Internal Energy Market needs to incorporate regulatory changes creating a separate asset category and rules for electricity energy storage systems. This is necessary due to their dual generation and demand nature. The new asset category should recognise the contribution energy storage systems will make to system security, loss reduction and the provision of other ancillary services on the T&D networks.
- In terms of regulatory oversight and the future role of ACER, EASE thinks the procurement of ancillary services and the way tariffs for transmission network use of system charges are estimated and applied, must also be made transparent across Europe to provide the right investment signals for providers of flexibility (i.e. energy storage and DSR operators).

Thank you for your contribution!