



Integrated Single Electricity Market (I-SEM)

**High Level Design for Ireland and Northern
Ireland from 2016**

Draft Decision Paper

SEM-14-045



ESB Consultation Response

25 July 2014

General Comments

ESB welcomes the opportunity to respond to the High Level Design (HLD) Draft Decision Paper.

The decisions included in this consultation represent a fundamental and profound change, not only to the systems and processes of the electricity market (encompassing energy trading arrangements and capacity remuneration), but also with regard to the philosophy that underpins the operation of the market. In effect it signals a move from one of “regulated competition” to a much more liberal market enterprise. As a consequence electricity prices at a wholesale level will be much more volatile in a market which will be much more dynamic.

Notwithstanding the fact that the Target Model is driving much of the change for I-SEM, ESB would urge the RAs to give due consideration to whether the changes proposed are appropriate for a small electricity system in transition to decarbonisation. We draw on the case of Electricity Market Reform in GB which appears to be moving away from a liberal market based regime to one that is fundamentally more regulated and we ask that consideration be given to an impact assessment which models the likely profile of wholesale prices, assesses the costs associated with these changes and the associated public policy issues (against the status quo of the existing market). While we recognise the EU drive behind these proposals we nonetheless believe that such an impact assessment would be worthwhile.

Holistic Approach to Market Design

As noted in our response on the HLD consultation, a market design which will be required to integrate high levels of intermittent RES penetration, must also consider how participants are compensated across a range of factors, namely: availability (Capacity), dispatchability (flexibility), deliverability (MWh) and environmental credentials (low carbon). In this regard we welcome the RAs decision to co-ordinate, to some degree, the timing of the market design and system services consultations, and urge further emphasis in this regard as the process moves forward.

Given the broad thrust of the Draft Decision, as well as the proposed DS3 System Services Procurement Design (currently under consultation) – i.e. preference for more market based mechanisms of remuneration for Energy, Capacity and Services – we would call for even greater co-ordination of the initiatives going forward. We are concerned that without careful co-ordination and a holistic solution the potential for unintended consequences is greatly increased. The aim here is to have a fair price for wholesale electricity; fair in that it should provide affordable electricity to the customer, but also provide a reasonable return on efficient investment for the industry. Therefore, it is important that the market design changes do not result in undermining the remuneration adequacy as well as placing additional pressures on system flexibility as a consequence of the market driven nature of the regimes proposed. System services are a key part of the market design and becoming an increasingly more valuable service and a potentially greater source of revenue for market participants as their traditional role changes to facilitate the accommodation of a politically determined level of intermittent generation (namely wind).

Market Power Mitigation

As also noted in our response to the HLD consultation, Market Power Mitigation measures are a key concern for ESB. ESB is concerned that, as the proposals represent a much more dynamic market than exists currently, which creates greater risks for all parties, that market power mitigation might further amplify the risk facing ESB. Yet due to the continuing vertical separation of our businesses ESB is not in a position to implement the same risk management capabilities as other market participants. This is of particular concern given that ESB will be competing directly with two of the

UK's Big 6 and yet may have less degrees of freedom than either of them. We are disappointed that the draft decision has not been more forthcoming on the likely outcome of the RAs considerations on this matter. ESB believes that all market participants would benefit from this issue being addressed by regulators as early as possible and should not be left until (the latter stages of) the detailed design phase. It is therefore extremely difficult for ESB to assess, in full, the RAs' preferred HLD without insight on this matter and our comments are based on the assumption that:

- a) Advice will be given by the RAs on the philosophy underpinning bidding (e.g. value based, profit maximisation etc.);
- b) Market power mitigation measures whether structural (through vertical separation) or behaviour (through bidding controls/principles) will be applied equally on all participants.

As also discussed in our response to the HLD consultation ESB is of the strong opinion that further asymmetric regulation of ESB is unfair and unnecessary. The design of a market should ensure that no party or parties can practice market power in any element of the market. Market power in a market with such specific segments (as in electricity markets) is not solely an outcome of scale but also from engagement at the margin – which can be exercised by any participant. In this regard ESB welcomes the following elements of the draft decision that supports this approach and create a transparent market design:

- A strong and robust Day Ahead Market (DAM)
- Unit based participation in Day Ahead, Intraday and Balancing markets
- Exclusive routes to market for all participants
- Mandatory participation in the balancing market
- Centralised capacity remuneration mechanism
- Reliability options acting as a price cap on the energy price thus removing supplier exposure to scarcity rents

Forward Liquidity

Volatility (against gas price movement) will become a new feature of I-SEM and as such the ability for retailers to hedge their demand positions in the forwards market will become critical to the commercial viability of, in particular, stand alone supply companies. ESB welcomes the RAs desire to encourage forward liquidity and is willing to provide liquidity solutions in conjunction with liquidity provisions from other participants. Under the current market, ESB provides effectively 100% of the forward liquidity, yet has less than 40% of the retail market and just over 40% of the generation market. ESB believes that this is disproportionate and should not be continued into the new market. In addition, forward liquidity, as a key element of the detailed design, must be afforded urgent status in the next phase of the project, due to the fact that retail operations seek to hedge positions at least 18 months ahead of real time (and for some customers up to 3 years out). Reduced liquidity is already being seen in the forwards market with the withdrawal of Interconnector Capacity Auctions beyond September 15. ESB's retail business is the largest stand alone mass market supply business in the market and, as such, has the greatest exposure to risk in this respect. It should also be noted further that any lack of liquidity will lead to higher prices in forwards contracting, all of which have to be passed on to the customer.

Energy Trading Arrangements

ESB broadly welcomes the RAs preferred high level design of Option 3, (noting the modifications proposed). ESB is supportive of a market design that retains a strong emphasis on a centralised market, as the best means to achieving a liquid and robust Day Ahead price. In order to best achieve this, given the decision to make the DAM non-mandatory, would seek that the REFIT reference market is defined as the DAM.

ESB is also strongly supportive of initiatives to bring all generation into the market with full balance responsibility, but would also welcome careful consideration of how imbalance settlement is priced to ensure that all participants are incentivised to forecast accurately, in order to minimise the impact of balancing costs on consumers and to ensure efficient trading across the Interconnectors. This should take in to account the discrepancy between the contracted positions and the metered supply – and not undermine a signal by including the fortuitous position of the system demand position when allocating penalty prices. On a cautionary note however, stand alone supply companies will be exposed to increased risk in relation to imbalances in terms of an increased level and volatility of balancing costs. To meet customer expectations suppliers may be obliged to factor in a risk premium to cover this risk. This is not desirable from a customer supplier or market perspective given a national need to be competitive internationally and should be factored into the impact assessment.

Capacity Remuneration Mechanism

ESB welcomes the draft decision identifying the need for and the proposal to include a CRM in the I-SEM High Level Design. The RAs' recognition of the need aligns with our consultation response that a CRM is a necessity in a small market as it not only affects the confidence of investors in the energy sector but also the confidence of Foreign Direct Investors, in manufacturing and industry in the Irish economy as a whole, who rate secure and reliable electricity systems highly as a core element in their investment decision process.

We are however, disappointed that the Draft Decision on the type of CRM has chosen to ignore the bulk of responses from industry and opted for a quantity based rather than price based mechanism. Given the level of uncertainty that exists as a result of the changes being undertaken in the market, ESB believes that due to the profound nature of the changes proposed to capacity mechanism, the retention of the current CRM (in some form) at least for a 5 year transition period could ease the transition to the I-SEM by maintaining at least some regulatory certainty. The current price based CRM has successfully incentivised new entry, while ensuring sufficient levels of generation adequacy in the SEM. ESB believes that the success of the current CRM should not be undervalued as it has achieved, by in large, what other markets are trying now to achieve through the introduction of CRMs. We would remind the RAs that it is not very long since capacity margins in Ireland were at a level requiring emergency back-up generation. In a small market, it would not take many plant closure decisions to return us to a similar status.

Therefore, in recognition of the direction of travel of electricity markets in general and capacity remuneration schemes specifically, as well as the potential for customers to benefit, ESB gives its guarded support to the Draft Decision on Reliability Option (on the basis that they are physically backed contracts), notwithstanding the following additional caveats/concerns.

- Under the Reliability Option design, we believe that there is a risk capacity prices will fall significantly from existing levels and potentially result in hasty plant closures within SEM. This may be the intention of the RAs however, we believe that the potential for the creation of security of supply issues will increase as a result. It may also prematurely remove plant that would be necessary for the provision of DS3 services, so these products too must be

priced competitively. We would urge the RAs to consider the HLD decision in full recognition of these concerns.

- We do not agree that Reliability Options are as “straightforward and understandable” as expressed by the RAs in their Draft Decision Paper. Indeed ESB would argue that they are a potentially complex solution to the generation adequacy or “missing money” issues. On paper Reliability Options may appear straightforward, however experience has shown, that the detailed design becomes either overly complex, (as amendments and improvisations are made) or implementation costs escalate significantly.
- We would also have serious concerns around the timeframe for implementation of Reliability Options within the 2017 window. Again, experience of Reliability Options in the Americas has demonstrated a lead time of 3-4 years from High Level Design Decision to implementation of the rules. This further emphasises the need for a transitory period for capacity remuneration to be included as part of the HLD Decision. Noting also that implementation of a new capacity regime by 2017 is not a requirement under the EU Target Model.

We would urge that the RAs, should they pursue this CRM Reliability Option, look in detail at the design changes made recently to the ISO-NE Reliability Option mechanism, as well as experiences from other markets, in order to benefit from lessons learned and to ensure mistakes are not replicated. Additionally, careful consideration should be given to the design of supplier and Reliability Option interactions in order to ensure the optimum value for money for customers who ultimately are paying the capacity costs. The CRM should be structured in such a way as to provide maximum transparency to all stakeholders.

Given the tight timescales for implementation of I-SEM, ESB urges the swift establishment of the next phase of the project, ensuring appropriate project structures and processes that will be necessary to commence the detailed design phase are established as soon as possible. In this context how the RAs intend to engage with industry is also paramount.

The following sections document ESB’s comments in relation to the specific decisions within the Draft Decision Paper.

Specific Comments I-SEM Draft Decisions

DECISION 1: I-SEM ENERGY TRADING ARRANGEMENTS

Forward Market

(i) The I-SEM will have only financial trading instruments for within zone trading

ESB supports this proposal to continue with the existing financial only forward trading arrangements, in conjunction with the draft decision for the Day Ahead Market to be the exclusive route to a physical contract nomination. This continuity should assist in the transition to I-SEM.

(ii) Subject to further discussions and agreement with other neighbouring markets, Cross-Zonal trading will be supported only by Financial Transmission Rights (FTRs)

ESB supports this proposal, in conjunction with the draft decision for the Day Ahead Market to be the exclusive route to a physical contract nomination. This decision will ensure interconnector trades are on a level playing field with other participant trades in the forward timeframe.

Since forward trading, both within and cross zonal, will typically commence as early as 18 months in advance of real time, it is important that the detailed design and implementation associated with the forwards market is prioritised to allow this early hedging to be facilitated in the transition to the I-SEM.

Day-Ahead Market

(iii) The European Day Ahead Market will be “exclusive” route to a physical contract nomination

ESB supports the proposal to make the European Day Ahead Market the exclusive route to a physical contract nomination in conjunction with the draft decisions related to Financial Forward Markets. This will ensure that the transparency that exists in the SEM will continue into the I-SEM and mitigate market power concerns.

ESB also supports a liquid DA market, and consider that the best way to achieve this is through mandatory participation.

If the SEMC opt for a non-mandatory DAM then participation at the DA stage can be encouraged by:

- ensuring the DAM is used as the reference for forwards market and CRM Reliability Options
- ensuring the BM is less attractive to trade in on a large volume basis
- setting the DAM as the reference to renewable support subsidies such as REFIT in Ireland and the EMR CfD in Northern Ireland

ESB believes that a failure to incentivise participation in the DA market could be detrimental for customers as highlighted in the following table.

Impact of non-mandatory participation in DAM		
Timeframe	Generation mix	Outcome
DA Schedule	Low wind participation	High DA Price High Interconnector Imports Scheduled High Volumes of thermal plant scheduled
Balancing/Real time dispatch	High Wind participation	Balancing Price Low TSO must move large volumes of thermal plant from DA contracted positions High balancing costs (and potentially inefficient interconnector) flows leading to higher costs for consumers

In addition, ESB does not support mandatory participation rules for some participants only.

In the DAM participants will be using new bid structures and taking more responsibility for commitment and scheduling decisions via their bids into Euphemia algorithm. Confidence in the Euphemia algorithm will also effect liquidity in the forward timeframes. Testing and trialling of the Euphemia algorithm will therefore be very important and it is crucial that market participants are given timely and sufficient opportunity to be involved in any testing processes and that the testing of Euphemia is fully robust.

(iv) Unit-based participation for generation in general, with (gross portfolio) aggregation for DSU, demand and (some) variable renewable generation

ESB supports the proposal for generation participation to be on a unit basis. This will ensure transparency in the market and mitigate any market power concerns. ESB also support aggregation of variable renewable generation, and consider that this facility should be open to all and not just “some” such generation. To do otherwise would be discriminatory.

Intraday Market

(v) Continuous intraday trading will be the exclusive route to Intraday physical nominations (with scope to introduce periodic implicit auctions as/if these develop at the European level)

ESB supports the proposal to make the Shared Order Book Function the exclusive route to a physical contract nomination. An exclusive market will benefit market transparency and mitigate any market power concerns, as well as concentrating liquidity which will be critical given the potential for low volumes..

(vi) Unit-based participation for generation in general, with (gross portfolio) aggregation for DSU, demand and (some) variable renewable generation

ESB supports the proposal for generation participation to be on a unit basis. This will ensure transparency in the market. ESB also supports aggregation of variable renewable generation, and consider that this facility should be open to all and not just “some” such generation. To do otherwise would be discriminatory.

Balancing (or process for reaching feasible dispatch)

(vii) Starting point for dispatch is detailed and feasible production plans required for all market participants following DAM

ESB supports this proposal

(viii) Mandatory participation in Balancing Mechanism (BM) after DA stage

ESB supports this proposal.

Clarity is required on the TSOs ability to take BM actions prior to gate closure

(ix) Unit-based participation in BM for generation in general

ESB supports this proposal. Unit-based participation will ensure transparency and mitigate against any market power concerns. However, portfolio aggregation for variable renewable generation should also be facilitated.

(x) Marginal pricing for unconstrained energy balancing actions

ESB supports this proposal.

It is essential that there is full transparency around the “flagging and tagging” TSO process since decisions made in relation to this will impact system imbalance prices.

(xi) Pay as Bid for non-energy actions (possibly combined with local market power mitigation measures)

ESB supports the proposal to have Pay as Bid for non-energy actions. ESB considers that a Bidding Code of Principles, or similar, applied to all market participants, is the best way in which to mitigate any local market power issues.

Imbalance

(xii) Unit-based

ESB supports the proposal for unit-based balance responsibility. However for variable renewable generation aggregation should be allowed with balance responsibility on an aggregated level.

(xiii) Single imbalance price

ESB supports this proposal. A single marginal imbalance price should incentivise participants to forecast and manage their position at the DA and ID stages on the proviso that the reference price for any renewable support subsidies is linked to the DAM.

(xiv) Route to market for small players

ESB supports the proposal for the introduction of an aggregator of last resort, or similar, as a transitional mechanism to ensure a route to market for small IPPs. It is important that such a mechanism does not block the natural emergence of aggregator roles in the market over time.

Other complementary actions to support I-SEM efficiency:

(xv) Encouragement of forward financial market liquidity

Forward liquidity is an important design area for the I-SEM and work on this should be prioritised in the next phase of the Market Integration project. Any liquidity promotion measures that are part of the I-SEM arrangements should be applied proportionately to all market participants.

(xvi) Facilitation of centralised forward trading platform

ESB support the facilitation of a centralised forward trading platform. As with the DA and Intraday trading platforms, such a centralised route to forward trading will increase transparency in the I-SEM and concentrate liquidity at one site.

DECISION 2: THE I-SEM WILL INCLUDE A CRM

ESB support the proposal for the inclusion of a CRM as part of the I-SEM arrangements. ESB strongly believes, as detailed in our High Level Design consultation response, that a CRM is a necessity in a small market such as I-SEM in order to provide the necessary confidence to investors in this and other sectors.

DECISION 3: QUANTITY BASED CRM

The I-SEM will have a quantity based Capacity Remuneration Mechanism

ESB's preference is for a price based CRM for the I-SEM. The current price based CRM has successfully incentivised new entry, while ensuring sufficient levels of generation adequacy in the SEM. ESB believe that the success of the current CRM should not be undervalued as it has achieved, by in large, what other markets are trying now to achieve with the introduction of CRMs. The current price based scheme could still be adapted to address the concerns that exist with it, in particular with regards to the exit signal, which it can be argued is not rapid enough. As commented by ESB in the CPM Mid Term Review, an appropriate performance management regime based on the technical ability of the plant to deliver the contracted services could be the basis for ensuring that continually non-performing plant, would effectively see an exit signal through reduced payments, whilst, more reliable generators receive greater income and potential new investor see the signal responding only if there is a 'real' adequacy problem.

If the SEMC does ultimately decide on a quantity based mechanism, then a transition mechanism will be required given that:

- The nature of the changes are so profound that some degree of regulatory stability is necessary;
- Sufficient (3-4 year) lead time for capacity auctions will be required and;
- In order for market participants to formulate a bidding strategy in the Auction for Reliability Option Auctions a firm Trading and Settlement code and System Services regime will need to be in place.

During this transition period the existing scheme can be modified. For example the Ancillary Services revenues could be adjusted to reflected DS3 payments and similarly the inframarginal rent revenue could be adjusted to reflect new bidding arrangements and rules.

Cross-border participation in the new CRM should only be introduced when reciprocal arrangements are in place with neighbouring markets. Such mutual arrangements should be managed in conjunction with RAs, TSO, MO etc. in neighbouring markets.

DECISION 4: THE I-SEM CRM WILL BE BASED ON RELIABILITY OPTIONS

The form of CRM will be Reliability Options issued by a central party.

ESB has concerns about the Reliability Options which are outlined below. The detailed design phase for the CRM will be important to ensure such issues are addressed.

- Without a physical element, obligation or penalty, the RO will not solve the “missing money” problem this will lead to security of supply concerns as generators are inadequately remunerated
- The interaction the ROs have with the forward trades and the impact this will have on forward liquidity
- The potential that basis risk is introduced depending on what the reference price is defined as
- The additional complexity that the ROs appear to introduce for unclear benefit
- The un-capped liability risk that may exist
- The participation of renewable generation in the scheme. Since renewable generation is an increasing and substantial portion of the I-SEM generation portfolio it is important that its capacity value (albeit limited capacity value) is captured, especially as we wish to integrate RES into the markets more fully. It is not clear that the RO arrangements would facilitate this.