

Submission by Bord na Móna

on

Integrated Single Electricity Market (I-SEM)  
Consultation Paper

SEM-14-008

**4<sup>th</sup> April 2014**

## 1 CONSULTATION QUESTIONS

### 1.1 RESPONDENT DETAILS

COMPANY	Bord na Móna
CONTACT DETAILS	<a href="mailto:john.macnamara@bnm.ie">john.macnamara@bnm.ie</a>
MAIN INTEREST IN CONSULTATION	Investor, generator and participant in the All Island Market

### 1.2 GENERAL COMMENTS

#### 1.2.1 Introduction

Bord na Móna (BnM) welcomes the opportunity to participate and contribute towards the transition of the Single Electricity Market (SEM) to the Integrated – SEM (I-SEM) to ensure compliance with the European Target Model (ETM). In particular, BnM welcomes the opportunity to respond to SEM-14-008 “*Integrated Single Electricity Market (I-SEM) - High Level Design for Ireland and Northern Ireland from 2016*”, the Consultation Paper.

BnM is particularly conscious of the responsibility on all market participants, regulators and stakeholders to ensure that the market design which is ultimately delivered strikes the balance between consumer protection, revenue adequacy for providers and compliance with European expectations.

In addition, the High Level Design (HLD) stage of the I-SEM process affords an opportunity to realign elements of the wider market arrangements outside the four main trading timeframes, including but not limited to, revenue adequacy, capacity remuneration and priority dispatch.

#### 1.2.2 Background

It is interesting to note that for each of the Energy Market Options outlined in the Consultation Paper, respondents are reminded that the SEMC ‘*primary duty is to protect the long and short term interests of consumers on the island of Ireland*’. It would be churlish to point out that the Regulatory Authorities (RAs) also have legal duties to their licensees<sup>1</sup>. However, Bord na Móna’s primary concern is that the I-SEM delivers a market redesign where Revenue Adequacy is afforded to investors and generators alike, and where the future market arrangement respects the basis upon which existing investment decisions were made. During the productive and informative bilateral meeting with the RAs, Bord na Móna made the point that in the current SEM, total revenues are earned through three distinct (albeit related) streams –

<sup>1</sup> Section 9(4) of the 1999 Electricity Act (Ireland)

Energy, Capacity and System Services. Notwithstanding the fact that the present consultation relates to the HLD stage of the market restructuring, there is no guarantee that a Capacity Remuneration Mechanism, of any hue, will be present in 2017 and System Services revenues are outside the scope of this Consultation Paper. Therefore, it is easy to appreciate the dilemma that Bord na Móna (and indeed other market participants) face when evaluating and responding to this Consultation.

In an attempt to minimise the risk associated with these unknowns and out of scope externalities, Bord na Móna approached this submission from the viewpoint of creating an overarching principle which implicitly encompasses the formal qualitative assessment (*SoS, Stability, Efficiency, Practicality, Equity, Competition, Environment, Adaptive and IEM*) detailed in the Consultation Paper. This overarching principle can be simply described as ensuring a ‘Route to Market to provide Revenue Adequacy’ for our generation assets while remaining mindful of the drivers of consumer protection and European market integration.

‘Route to market’ can mean different things to different participants and even to signify different things to a given market participant for each of the different classes of generation assets under their stewardship. In this sense a ‘route to market’ to ensure revenue adequacy for peaking units will centre around revenue derived primarily from capacity remuneration, secondly from the sale of flexible products and system services and thirdly, earnings from energy production.

Conversely, a baseload plant producing a combination of RES-E and conventional power will in the first instance require a market design which respects the SEMC’s definition of absolute Priority Dispatch as provided for in Directive 2009/28/EC. Secondly, such a baseload plant will require opportunities to enter into off-take arrangements to satisfy REFiT requirements. As well as a functioning and liquid forwards and day-ahead market (DAM), earnings from capacity should provide the element of revenues to cover long run costs which in the presence of regulatory imposed price caps will not be delivered by scarcity rents.

Similarly, RES-E produced by intermittent assets will require a liquid market to sell power, a market which must also provide the basis for a robust reference price for REFiT/FiT-CfDs. In addition, wind generation requires an intra-day market (IDM) which is sufficiently liquid to facilitate position adjustments as pre-delivery forecasts are refined.

In responding to the formal questions contained in the Consultation Paper, Bord na Móna has attempted to frame our responses in light of the various ‘Route to Market’ concerns which are briefly described above. In this response ‘Route to Market to provide Revenue Adequacy’ includes but is not limited to capacity remuneration<sup>2</sup>, respect for the absolute definition of Priority Dispatch, liquid future markets, robust DAM, responsive IDM (which implicitly raises concerns over market power issues), remuneration for flexibility and system services, as well as reflective and achievable reference prices for generation underpinned by RES support schemes.

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<sup>2</sup> Including winds contribution to system security

However, it is important to realise that not all of the concerns can be easily quantified, given the structure and terms of reference of the Consultation itself and hence Bord na Móna requests that that the information provided in this submission be seen as equivalent to a ‘minded to’ position which is subject to modifications as additional information emerges.

### 1.2.3 Hybrid Plant

It is acknowledged in the Section 1.2.1 above that BnM recognises its obligation to constructively contribute to an effective I-SEM process. However, there is also the commercial imperative on BnM to ensure that market arrangements do not have unintended consequences that may discriminate against BnM.

In this regards, BnM broadly welcomes the Regulatory Authorities commitment to respect the ‘absolute’ definition of Priority Dispatch (PD), as per SEM-11-062 whereby economic factors are only taken into consideration in exceptional circumstances.

The SEMC decision paper SEM-13-006 introduced a ‘qualifier’ to the general applicability of an ‘absolute definition’ of Priority Dispatch for plants producing renewable electricity in a hybrid plant co-firing renewable and non-renewable feedstocks. The SEMC decision stepped outside Directive 2009/28/EC – ‘A Directive for the Promotion and Use of Energy from Renewable Sources’ and introduced an additional assessment for carbon emission against an ‘administrated’ reference plant as a pre-requisite in reaching Hybrid plant status, although to date the actual calculation methodology has not been published. For the record, Bord na Móna fully endorsed<sup>3</sup> the general philosophy of the SEMC in that the “*definition/application of ‘hybrid’ should not serve to result in generators using minimal amounts of renewable fuel to secure priority dispatch status and a perverse incentive in this regard*”. Bord na Móna continues to believe in a transparent, predefined, and regulatory stable ‘de minimis’ proportion of RES-E as the “*sole criterion for hybrid plant qualification, and recommends that the ‘de minimis’ threshold could be set somewhere within the range 15% to 30%*”.

It is interesting to note that in the fourteen months since the publication of SEM-13-006 and despite the opening of the REFiT 3 support scheme (November 2011) for Biomass co-firing at Peat stations, not one MW of RES-E from a REFiT 3 - Hybrid station has been produced. In contrast, the second progress report submitted (February 2014) by the Irish Government to the EU Commission under Article 22 of the same Directive 2009/28/EC expressly includes and arguably relies upon the delivery of REFiT 3 - Hybrid’ RES-E to meet binding 2020 RES targets. The root cause to this distinct lack of progress in achieving stated Government policy can be traced back to SEM-13-006. The regulatory uncertainty with this decision is a barrier to delivery. The potential for ‘dispatchable’ delivery of approximately 10% of Ireland’s 2020 RES-E target is being forfeited. Given the direction of travel of the

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<sup>3</sup> Bord na Móna submission to SEM-12-056

SEM, where currently all volumes are cleared ex-post and all RES imbalances are socialised, to a likely scenario where there will be liquid trading in numerous timeframes and where RES generators will assume balance responsibilities, it is possible that in the absence of a recalibrated SEM-13-006 that the associated regulatory uncertainty will not facilitate an environment where the full potential for the use of energy from Renewable sources can be exploited.

Take for example Option 3, a co-firing Peat / Biomass plant would be generating essentially three different ‘flavours’ of electricity; REFiT supported RES, Hybrid criterion RES (over and above that supported by REFiT) and power from Peat. Under REFiT 3 rules the Power Purchase Agreement (PPA) associated with the REFiT supported RES must be signed for a 15 year period, however the delivery of this power (given the relative cost of Biomass) requires such plants to operate with PD, but because of the lack of visibility of the qualifying criteria over the contract period, it is questionable as to whether a prudent generator would enter into such a contract.

The I-SEM process thankfully provides an opportunity to re-align the delivery of dispatchable RES-E from Hybrid plants. In decision SEM-13-006, the SEMC had the foresight to indicate that “[A]n assessment of the potential impact on this decision will be evaluated in the event of changes to the SEM made as a result of the EU target Electricity Model<sup>4</sup>.”

Bord na Móna would respectfully request that such an assessment be acknowledged at this High Level Design (HLD) stage so that a realignment of SEM-13-006 can be included as a work stream during the detailed design process.

#### 1.2.4 Capacity Remuneration

While it is generally accepted that in theory over the long run an Energy Only (EO) market and a market with Capacity Remuneration Mechanism should deliver similar results in terms of generation adequacy and returns on investment. It is a matter of fact that politically and technically, EO markets are difficult to successfully implement.

Perhaps one area of the Consultation Paper where there is room to further develop the high level thinking relates to rationale as to why a Capacity Remuneration Mechanism (CRM) is needed as well as the proven benefits such a mechanism brings the totality of electricity stakeholders on the island of Ireland. Section 10.3.3 of the Consultation Paper bullet points a number of challenges in ensuring adequate remuneration for capacity in an EO market but fails to fundamentally address what a CRM ultimately delivers. Bord na Móna is of the opinion that the deliverable is simply generation adequacy which is *firm capacity*<sup>5</sup>; this is not flexibility, nor the potential of IC flows in times of scarcity but *firm capacity*.

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<sup>4</sup> Decision Paper SEM-13-006 at pp 13

<sup>5</sup> For the avoidance of doubt ‘firm capacity’ includes the capacity credit from indigenous wind units

In pure economic theory adequacy or *firm capacity* has public good characteristics (being both ‘subtratable’ and ‘non-excludable’) which according to the textbooks suggest that it is likely to be underprovided in a pure market system. On the practical side, the SEM, since it’s ‘Go Live’ has had a reasonable well functioning CRM inherently incorporated into the energy market and marshalled by BCoP, whereby the SMP recoups short run marginal costs and the capacity mechanism ensures long run costs are met. This mechanism has encouraged investment in conventional and RES generation, ameliorated ‘missing money’ concerns, and provided consumers on an island, off an island off a continent with a SoS level (although lower than our neighbours) commensurate with typical expectations for a developed economy.

While on paper capacity margins on the island of Ireland can, in aggregate, be described as reasonably comfortable at this moment in time (and notwithstanding issues relating to transmission infrastructure and localised concerns in Northern Ireland), it is reasonable to conclude that unlike other areas in Europe, the presence in the SEM of a reasonably well-functioning mechanism for firm capacity has prevented a capacity crunch while ensuring that plants which made investment decisions (which fundamentally delivers a degree of public good) are afforded an opportunity to earn a reasonable return on their investment.

This outcome should be assessed against the counterfactual, i.e. a small relatively isolated power system with an EO market. In this regard, Bord na Móna has collaborated with the Electricity Association of Ireland (EAI), other industry participants and consultants Frontier Economics in modelling the probable consequences of such arrangements. The output from this study has been submitted to the RAs as part of this consultative process by the EAI; therefore it would be superfluous to repeat here the details of the investigation save to paraphrase the conclusion that “...relying on an energy only market in small systems may expose investors to significantly greater risk, and result in much higher required rates of return. This in turn implies higher prices for customers and the likelihood of periods of much tighter plant margins<sup>6</sup>.”

Bord na Móna’s thinking and outlook concerning CRMs has been informed by both theoretical considerations and the practical experiences as a market participant and investor. Bord na Móna has reached the conclusion that in the round, island of Ireland electricity stakeholders are better served by the presence of a capacity mechanism which delivers a degree of certainty, reliable firm capacity, investor confidence, and system security. In this regard, Bord na Móna favours a Long Term Price Based CRM. Bord na Móna is acutely aware that the evolution of the I-SEM suggests that the existing BCoP will be substantially modified to facilitate the new trading arrangements. The current BCoP provides checks and balances to ensure that there is no possibility of any generator being over-compensated by the existing CRM. Therefore, should the SEMC agree to adapt a Long Term Price Based mechanism Bord na Móna would expect (and contribute towards the detailed development of) a ‘ruleset’ which would govern such a mechanism. It would be expected that such a ruleset would be developed from an agreed set of principles, including but not limited

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<sup>6</sup> Frontier Economics - “Benefits of a capacity remuneration mechanism in the SEM” April 2014

to revenue adequacy (for existing and new investor, including wind), transparency, equity and fairness.

### 1.2.5 Outstanding Issues

While appreciating the enormity of the task in redesigning the SEM, a market which has performed reasonably well (and has been endorsed by independent academic and economic commentators<sup>7</sup>), the Consultation Paper, perhaps purposely, has been silent on a number of pertinent areas. While at this stage in the consultation process Bord na Móna is not proffering solutions as how these issues (and it is not suggested that this is an exhaustive list) be addressed, it is felt that it would be remiss of the organisation not to bring these issues to the attention of the RAs and SEMC.

#### *Existing Regulatory Decisions*

Notwithstanding the earlier comments and formal request regarding the re-examination of the definition and qualifying criteria for Hybrid plant status, which we felt merited a subsection of its own, there are a number of existing regulatory decisions specific to the SEM that although not formally addressed (and perhaps this is appropriate at the HLD stage) in this Consultation Paper will have a major bearing on ‘Route to Market to provide Revenue Adequacy’ in the redesigned I-SEM.

In particular these include, but are not limited to, the hierarchy for priority dispatch including the relative position of the ICs, procedures pertaining to TSO instructions to move away from firm positions (under difference connection agreements), the continued publication of the full gambit of system / market data, so – so counter trading, etc.

#### *Impact, from a European perspective, of the market redesign on exist arrangements*

It can be acknowledged that, RES support schemes are based upon policy objectives enacted by Governments decisions, and therefore the design of such schemes are generally outside the remit of the RAs and SEMC. However, as new ‘Guidelines on State Aid for Environmental Protection and Energy 2014-2020’ are under development, Bord na Móna would urge the RAs and SEMC to take cognisance of the treatment of existing approved support schemes in the I-SEM redesign. In particular, Bord na Móna would suggest that the I-SEM be designed in such a manner that existing schemes can seamlessly transition into the new market arrangements. In the absence of a seamless transition, and given particular scenarios where material amendments (of the support schemes) are necessary in order to incorporate these existing support schemes into the new market arrangements, such scenarios could result in the unappealing vista of the respective Governments having to seek EU Commission approval for such modifications. In addition to the inevitable investment lacuna that would arise (as the 2020 targets approaches) as ‘state aid’ clarification is sought from Brussels, there is also the prospect of existing schemes that are operational and approved under the 2008 Guidelines being required to be re-approved

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<sup>7</sup> For example; -“Reforming Competitive Electricity Markets to Meet Environmental Targets, Prof David Newbery (August 2011)” and Devitt C., Diffney S., FitzGerald J., et al, Economic and Social Research Institute (January 2011)

under the 2014 version of these Guidelines. Such retrospective approval if required, and potential modifications of existing terms and conditions could threaten the business case and viability of those participants and send a very negative signal to prospective RES-E investors in the I-SEM.

*Cost Benefit Analysis*

Bord na Móna, as contributing members of the EAI and IWEA is aware that submissions from these organisations, call *inter alia*, for a comprehensive cost benefit analysis (CBA) to accompany the decision making process. Logic would suggest that any and all counterfactuals used in such analysis should as a pre-requisite be capable of being described as compliant with the European Target model.



PURPOSE OF THE DOCUMENT (SECTION 1)

Question	Answer
<p>1. Which option for energy trading arrangements would be your preferred choice for the I-SEM market, and why?</p>	<p>In the first instance it must be reiterated that it is difficult to assess the various energy market options presented in isolation from the other revenue streams in the market in terms of capacity, renewable support schemes and ancillary services.</p> <p>It is critical that the physical realities of the power system are kept at the forefront of the High Level Design process while at the same time aiming to reach an enduring solution which is compliant with the ETM (European Target Model) and ensuring the provision of secure, reliable and affordable electricity to consumers on the island of Ireland as well as achieving the goals of national and European energy policy.</p> <p>BnM favours a final design option which is transparent, compliant and provides a ‘Route to Market’ and Revenue Adequacy for all generation assets in a fair and equitable manner, outlined in section 1.2 above while ensuring that the interests of the consumer are also protected.</p> <p>BnM is of the opinion that for the I-SEM to succeed a market should at the very least have the following characteristics and component elements– capacity remuneration, respecting absolute priority dispatch for <i>all</i> renewable generation, a liquid futures market, a robust DAM, a responsive IDM, value reflective earnings for flexibility and system services and a strong achievable reference price to facilitate CfDs trades and the administration of RES support schemes.</p> <p>Examining the four Options presented in the Consultation Paper, it is conceivable that Option 1 and 4 can in theory be modified and constructed, <i>vida infra</i>, to deliver a sustainable I-SEM.</p> <p>However, Bord na Móna is of the opinion that of the options presented, Option 3 is the most capable (notwithstanding some modification and clarifications, see response to question 13) of delivering a market design which addresses the issues discussed above, meets the RA’s evaluation criteria and is compliant with the ETM.</p>

<p>2. Is there a requirement for a CRM in the revised HLD, and why?</p>	<p>Yes.</p> <p>The SEM, since it's 'Go Live' has had a reasonable well functioning CRM inherently incorporated into the energy market and marshalled by BCoP, whereby the SMP recoups short run marginal costs and the capacity mechanism ensures long run costs are met. This mechanism has encouraged investment in conventional and RES generation, ameliorated 'missing money' concerns, and provided consumers on an island, off an island off a continent with a SoS level (although lower than our neighbours) commensurate with typical expectations for a developed economy. While on paper capacity margins on the island of Ireland can, in aggregate, be described as reasonably comfortable at this moment in time (and notwithstanding issues relating to transmission infrastructure and localised concerns in Northern Ireland), it is reasonable to conclude that unlike other areas in Europe, the presence in the SEM of a well functioning mechanism for firm capacity has prevented a capacity crunch while ensuring that plants which made investment decisions (which fundamentally delivers a degree of public good) are afforded an opportunity to earn a reasonable return on their investment. This outcome should be assessed against the counterfactual, i.e. a small relatively isolated power system with an EO market. In this regard Bord na Móna worked with the Electricity Association of Ireland (EAI) and consultants Frontier Economics in modelling probable consequences. The output from this study has been submitted to the RAs as part of this consultative process; therefore it would be superfluous to repeat here the details of the investigation save to paraphrase the conclusion that <i>"...relying on an energy only market in small systems may expose investors to significantly greater risk, and result in much higher required rates of return. This in turn implies higher prices for customers and the likelihood of periods of much tighter plant margins."</i></p> <p>BnM fully accepts that a key objective of the CPM should ultimately lead to positive outcomes for the consumer with respect to the absolute level of cost and volatility in the medium to long term.</p>

	<p>A new I-SEM market which fails to incorporate a facility in which capacity is remunerated could also threaten investor confidence.</p> <p>CRMs that interfere with the market design must comply with the State Aid Guidelines. Capacity remuneration that is integral to market design does not, <i>ab initio</i>, constitute a State Aid. While the priority must be the development and implementation of the most application CRM for consumers and market participants on the island of Ireland, the I-SEM redesign process provides an opportunity to develop a sustainable <i>integrated</i> energy and capacity market which eliminates or at least minimises concerns over State Aid Guidelines.</p>
<p>3. If there is a requirement for a CRM in the revised HLD, what form would be your preferred choice for the I-SEM, and why?</p>	<p>Long Term Price Based CRM.</p> <p>BnM believes that a Long Term Price Based CRM is the optimal choice for a small market such as SEM which is isolated from mainland Europe in order to provide generation adequacy, ensure that long run costs are met, minimise long term costs for the system as a whole and protect consumers from price volatility.</p> <p>Bord na Móna is acutely aware that the evolution of the I-SEM suggests that the existing BCoP will be substantially modified to facilitate the new trading arrangements. The current BCoP provides checks and balances to ensure that there is no possibility of any generator being over-compensated by the existing CRM. Therefore, should the SEMC agree to adapt a long term price based mechanism Bord na Móna would expect (and contribute towards the detailed development of) a ‘ruleset’ which would govern such a mechanism. It would be expected that such a ruleset would be developed from an agreed set of principles, including but not limited to revenue adequacy (for existing and new investor), transparency, equity and fairness.</p>

TOPICS FOR THE HIGH LEVEL DESIGN OF ENERGY TRADING ARRANGEMENTS  
 (SECTION 4)

Question	Answer
<p>4. Are these the most important topics to consider in the description of the HLD for the revised energy trading arrangements for the single electricity market on the island of Ireland?</p>	<p>These topics are important and fundamental to the design of the Energy segment of the I-SEM. However as discussed in Section 1.2.2 above, BnM is of the opinion that the overarching design criteria should deliver a ‘Route to Market to provide Revenue Adequacy’ and as such requires that consideration of capacity remuneration and the provision of system services be appraised concurrently.</p> <p>In terms of the topics discussed in this section –</p> <p>At a high level BnM would favour Unit bidding in both the DAM and IDM. This provides greater transparency, price discovery, reduces the likelihood of market power abuse and facilitates a level playing pitch for all participants irrespective of scale.</p> <p>In addition, BnM sees the potential benefit and merit (in terms of liquidity) of mandatory participation in the DAM and exclusive trading in the IDM as described in Option 3. However, as detailed in response to Question 13, there are concerns as regards the robustness of the PCR algorithm and the price formation in the mandated volumes.</p>
<p>5. Are there other aspects of the European Internal Electricity Market that should form part of the process of the High Level Design of energy trading arrangements in the I-SEM?</p>	<p>It is important that the HLD of the SEM be looked at as a whole in terms of energy, capacity and system services (again the ‘Route to Market to provide Revenue Adequacy’ proposition discussed earlier.) BnM does not believe it is correct or appropriate to review/design these three constituent elements of the market in isolation. In order to fully consider and give a definitive endorsement on a preferred design option for the I-SEM <i>in toto</i>, participants need a full understanding of the inter-relationship between these revenue streams.</p>

SUMMARY OF THE OPTIONS FOR ENERGY TRADING ARRANGEMENTS (SECTION 5)

Question	Answer
<p>6. What evidence can you provide for the assessment of the HLD options with respect to security of supply, efficiency, and adaptability?</p>	<p><b>Security of Supply</b> – Security of Supply is vital in terms of the safe and secure operation of the system. Growing evidence from across Europe and past experience with the CPM in the SEM demonstrates the value to the consumer in terms of overall system security of a market design encompassing both an energy market and a capacity mechanism. In practice, long term SoS is best delivered with an effective capacity mechanism inherent in the market design.</p> <p><b>Efficiency</b> – As noted in Section 1.2.6, efficiency of the options can be best determined by a comprehensive CBA to accompany the decision making process. Logic would suggest that any and all counterfactuals used in such analysis should as a pre-requisite be capable of being described as compliant with the European Target model.</p> <p><b>Adaptability</b> – It is clear that whichever option for energy is chosen, this will lead to significant changes for all market participants in Ireland. The SEM design is such that it is unique in some respects within Europe and is significantly different from the current NWE market which serves approximately 75% of the demand in Europe. It is also noted that the SEM, under the CACM NC was granted a 2 year derogation to facilitate the adaption of the ETM on the island of Ireland. While no market design can be expected to last in perpetuity, querying market participants about the future adaptability of the new I-SEM suggests that either the ETM is a moving target and/or the 2 year derogation was not sufficient.</p> <p>In terms of the energy options contained in the Consultation Paper, it is difficult to see Option 2 in particular or Option 4, to a lesser extent, scoring favourably in terms of being adaptable to future changes.</p>

ADAPTED DECENTRALISED MARKET (SECTION 6)

Question	Answer
<p>7. Are there any changes you would suggest to make the Adapted Decentralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	<p>BnM is less disposed to Option 1 (Adapted Decentralised Market as an appropriate design for the energy market in I-SEM.</p> <p>Given the small size, relative isolation, the structure and nature of participants in the Irish market, it is suggested that a high degree of regulatory intervention (market maker obligations) and regulatory oversight (abuse of market power) would be necessary to ensure the efficient operation of such a design option. It would be difficult to see how this option could work in practical terms in Ireland without significant regulatory intervention (as suggested by the RAs in the I-SEM Consultation Paper). Without knowing the extent or nature of this intervention/oversight (this is not detailed in the Consultation Paper) BnM is less inclined consider this option as viable, in the absence of this information.</p> <p><b>BnM is less inclined to support this Option</b></p>
<p>8. Do you agree with the qualitative assessment of the Adapted Decentralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	<p>Much of the qualitative assessment of Option 1 is tempered on the ‘adaptations’ which may/would be required in the market to promote liquidity and avoid market power abuse. However, the extent of these adaptations or how much market regulation and oversight would be required is quite unclear from the paper. It is therefore difficult to assess this option without further detailed information.</p> <p>From an initial assessment it would appear that this option offers market participants the most freedom and choice in terms of their bidding structure, trading strategy and nominations. However, the island of Ireland itself is a unique market and the nature of the SEM would mean that there could potentially be the need for significant regulatory intervention and/or oversight in many or all of the timeframes in this option in order to ensure the market operated in a manner that is fair, equitable and promotes sustainable competition.</p>
<p>9. How does the</p>	

<p>Adapted Decentralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	<p>BnM believes that in theory given the open nature of this option for trading across all timeframes and in various formats that consumer welfare should be maximised. However, under this design option market participants (particularly larger players) are inherently provided with the opportunity to essentially exclude some of their generation from the market (or adapt other strategies bordering on the ‘gaming’ threshold) which could have negative consequence and deprive consumers of an efficient and competitive market. Regulatory intervention and/or oversight may help this, however it is unclear how such measures may work or be effectively implemented.</p>
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MANDATORY EX-POST POOL FOR NET VOLUMES (SECTION 7)

Question	Answer
<p>10. Are there any changes you would suggest to make the Mandatory Ex-post Pool for Net Volumes more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	<p>BnM does not believe that a Mandatory Ex-Post Pool for Net Volumes (Option 2) should be considered as a possible design for the I-SEM market. This option presents what essentially are two competing markets – A day-ahead market and an ex-post pool. It is difficult to see how both competing markets could work together.</p> <p>It could be expected that in practice, liquidity would tend to pool in either one or other of these markets – significantly reducing available liquidity in the other.</p> <p>The benefits of a pool market in terms of providing a strong reference price and a route to market could quickly be eroded if there is little liquidity.</p> <p>On the other hand, if the pool market dominates, it is likely that an undesirable outcome would be an illiquid DAM and sub-optimal IC flows.</p> <p>Given the two quite distinct market timeframes available, it is presumed that there will be different bidding rules and strategies employed within this option by various market participants. Simple bids could be submitted in the ex-ante markets, yet complex bids will be mandatory in the ex-post pool. Again this could lead to various problems, and the associated uncertainty for market participants in terms of where liquidity will gather and the robustness of any reference price.</p> <p>This option also allows for Portfolio bidding at the day ahead stage – this reduces the transparency and price discovery of the market and gives an advantage to larger players to be more <i>strategic</i> in terms of their bidding and participation in the market.</p> <p>The fundamental questions that need to be answered are whether significant regulatory intervention and/or oversight is needed to ensure liquidity in both competing markets and how could this be done efficiently and fairly? The HLD Consultation Paper does not examine this in detail.</p> <p>The Consultation Paper does, however, suggest that a 'regulated limit' could be imposed on the level of trading in the ex-ante markets. However, it is unclear from the</p>



	<p>Consultation Paper how this regulation would be implemented and policed. Given this lack of clarity and the uncertainty associated with this, BnM could not consider endorsing this option.</p> <p><b>BnM does not support this option.</b></p>
<p>11. Do you agree with the qualitative assessment of Mandatory Ex-post Pool for Net Volumes against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	<p>The qualitative assessment of Option 2 as presented in table 6 of the Consultation Paper indicates many possible weaknesses in this option. Bord na Móna, in addition for the reasons outlined in response to Question 10 above, does not believe the Mandatory Ex-Post Pool for Net Volumes (Option 2) is a viable Option for the I-SEM.</p>
<p>12. How does the Mandatory Ex-post Pool for Net Volumes measure against the SEM Committee's primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	<p>Bord na Móna would echo the SEMC concerns that this Option contains design elements that are 'unique worldwide' and hence it is very difficult to assess at a high level how consumers would be impacted by the implementation of this option.</p>

MANDATORY CENTRALISED MARKET (SECTION 8)

Question	Answer
<p>13. Are there any changes you would suggest to make the Mandatory Centralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	<p>BnM is broadly supportive of Option 3 for Energy Trading arrangements – Mandatory Centralised Market.</p> <p>We would, however, have some overlying concerns and request clarifications around some specific aspects of the Option, as described in the Consultation Paper.</p> <p>The first of these concerns, when assessed against our own ‘Route to Market to provide Revenue Adequacy’ criteria is that this option (as with all options) is presented in isolation from revenues arising from capacity remuneration and systems services. BnM acknowledges the statement in the consultation paper that <i>‘each of the CRM options presented could be implemented alongside any of the energy trading arrangements’</i>. It is however difficult to unequivocally endorse an energy option without fully understanding the inter-relationship between these potential revenue streams.</p> <p>Clarifications are also required around the form and nature of the bidding ‘code’ or the ruleset that may/may not be required for Option 3, particularly in the Mandatory Day Ahead Market. It is understood that Mandatory participation in the DAM means submitting bids for all expected availability of generation. However, the rules around pricing and bidding are less clear. BnM welcomes the concept of Mandatory DA participation to drive volumes into a given market, thus ensuring liquidity and a ‘Route to Market’ for all participants. However, in the absence of any details regarding price formation associated with these mandatory volumes, it would be remiss of BnM not to point out the obvious concerns for the potential gaming of prices which could subsequently occur. If this DAM is to be fully mandatory, it would be vital that this market timeframe delivers value for all market participants and the consumer in general.</p> <p>In terms of wind generation, it is stated in the Consultation Paper that <i>‘the enforcement of mandatory participation will be based on <u>best endeavours</u> [emphasis added] for wind’</i>. In the first instance, ‘best endeavours’ as a quasi legal term is notoriously ambiguous and can result in unrealistic obligations on parties committed to ‘best endeavours’.</p>

Clarity on exactly how this will be monitored and assessed in terms of forecasting wind generation and the timeframe around such forecasts being available to generators is required (we are aware that IWEA are exploring how this could be implemented in practice). Bord na Móna is acutely aware that renewable generation (primarily wind) will account for at least 40% of generated volumes post 2020. The I-SEM must therefore be designed to cater for this energy source being in the majority post 2020 and consideration of how this renewable generation will be treated in the market should be central to this design process. The increasing levels of renewable penetration are in line with Government(s) and EU policy and therefore priority must be given to ensure that this (or any chosen) option is suitable for this level of renewable generation to trade effectively.

BnM is also concerned at the comment in section 8.4.23 of the Consultation Paper which stipulates a route to market would be provided *‘assuming that the mandatory participation requirement can be effectively enforced’*. It would be interesting to discover under what circumstances the RAs see this being a problem or concern and what possible regulations may be put in place to counteract this.

Some concern has been aired regarding the EUPHEMIA algorithm and how sophisticated bids, with minimum income conditions (MICs) are executed. The EUPHEMIA public description caveats the performance of the heuristic approximations warning that sub-optimal outcomes are possible. Obviously, this becomes a concern for I-SEM participants under Option 3, as relative to other European users, all volumes will be effectively mandated, most likely via sophisticated bids, into the PCR. Should ‘in the money’ I-SEM bids be rejected by the algorithm, it is unclear what decisions and actions can be taken to rectify the sub-optimal schedule. It is suggested that rigorous testing should be completed at an early stage in the detailed design process to ensure that I-SEM bids (of any type) can be accommodated into EUPHEMIA in a manner that does not produce sub-optimal results, and if necessary draft contingencies if the propensity for such sub optimal outcomes could materially impact I-SEM participants.

**BnM is broadly supportive of Option 3, but has noted concerns and suggestions around this HLD option.**

<p>14. Do you agree with the qualitative assessment of Mandatory Centralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	<p>In terms of the qualitative assessment of the options against the HLD criteria, BnM believes that Option 3 performs most favourably above any of the other 3 options presented – notwithstanding our comments in response to Question 13 above.</p>
<p>15. How does the Mandatory Centralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	<p>Should Option 3 (or a modified version thereof) deliver an accessible, equitable, liquid sustainable wholesale market then it is probable that such characterises will also be in the best interests of consumers on the island of Ireland.</p>

GROSS POOL – NET SETTLEMENT MARKET (SECTION 9)

Question	Answer
<p>16. Are there any changes you would suggest to make the Gross Pool – Net Settlement Market more effective for the all I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	<p>Bord na Móna is less disposed to Option 4 (Gross Pool – Net Settlement) as an appropriate design for the energy market in I-SEM, although Bord na Móna does accept that Option 4 could in theory be adapted for use as the energy market in the I-SEM.</p> <p>The fundamental design feature of this option, which in essence separates IC flows from the ex-post pool present the potential for inefficient IC flows, which is the primary objective of the ETM.</p> <p>Despite the fact that this option could be interpreted as being most similar to the present SEM, BnM believes that this may oversimplify the reality as novel measures and additional regulatory interventions and/or oversight may be required to encourage liquidity into the non-pool markets.</p> <p>This Option presents a clear ‘route to market’ for participants (i.e. in the ex post pool) however this may lead to a lack of trading opportunities in the earlier financial ex-ante timeframes; and given that the IC flows are determined ex-ante there is the potential for serious inefficient sub-optimal flows on the IC. The underlying principle of the ETM is to deliver efficient cross border trade - it is difficult to see how this Option embraces this objective. In addition, such sub-optimal outcomes could also impact on curtailment levels of RES generation in the I-SEM with the potential impact on the achievement of mandatory 2020 targets.</p> <p>It is possible that if specific measures could be implemented to ensure liquidity in the ex ante markets, which would also facilitate efficient IC trades, BnM could re-evaluate our assessment of this option, However, there is insufficient information provided in the Consultation Paper to develop this thinking further.</p> <p>It would also appear from the description of this Option in the Consultation Paper that generators who contract in the earlier markets may have to carry a substantial volume risk into the ex-post pool.</p>

	<p><b>BnM is less inclined to support this Option.</b></p>
<p>17. Do you agree with the qualitative assessment of Gross Pool – Net Settlement Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	<p>Security of Supply – Given that the IC flows are not fully integrated into the pool process for dispatch, there is the possibility for inefficient flows here which may result in sub-optimal running of generation assets in the market.</p> <p>Stability – Noting that this market redesign is stemming from a need to comply with the European Target model, it could be argued that this option is somewhat disconnected from European markets in terms of limiting trade to only financial position on the forwards, DAM and IDM. It is possible that further European integration could trigger future modifications to the I-SEM should this Option (as described in the Consultation Paper) be implemented.</p> <p>Internal Electricity Market – In response to Question 16, BnM notes that this option may not fully embrace the philosophy of the IEM.</p>
<p>18. How does the Gross Pool – Net Settlement Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	<p>In theory, but noting the comments in response to Question 16, Option 4, could deliver outcomes similar to that of the SEM today. Today’s market, with supervision from SEMC and RAs, manifestly protects the long and short term interests of consumers on the island of Ireland.</p>

CAPACITY REMUNERATION MECHANISMS (CHAPTER 10)

Question	Answer
<p>19. What are the rationales for and against the continuation of some form of CRM as part of the revised trading arrangements for the I- SEM?</p>	<p>Bord na Mona believes that a Capacity Remuneration Mechanism is an essential aspect of the market in the SEM and have argued in Section 1,2.4 in responses to Questions 2 and 3 as well as citing the Frontier Economics study that a CRM will be an essential element of the new I-SEM. A capacity mechanism is essential to ensure generation adequacy as well as allowing participants to recover long run costs which would not be recoverable in an energy only market.</p> <p>An energy only market should not be considered as an option.</p>
<p>20. Are these the most important topics for describing the high level design of any future CRM for the I- SEM?</p>	<p>Yes, the topics in Sections 10.2 to 10.6 are representative of the more important topics for describing the HLD of any future CRM in the I-SEM. However, it was stated previously in this response that the success or otherwise of the new I-SEM is the based on the need to assess the options in the round and understanding the inter-relationship between potential income streams; the ‘Route to Market to provide Revenue Adequacy’ approach, or more succinctly an <i>Integrated</i> approach to market design.</p>

STRATEGIC RESERVE (CHAPTER 10.7)

Question	Answer
<p>21. Are there any changes you would suggest to make the design of a Strategic Reserve mechanism more effective for the I-SEM (for instance a different choice for one or more of the topic?)</p>	<p>A strategic reserve would not be an appropriate mechanism for the island of Ireland. As a strategic reserve only remunerates specific plant(s) deemed necessary for adequacy, there are a number of fundamental concerns.</p> <p>A Strategic Reserve, requires generators to recoup long run marginal costs from the wholesale market leading to greater volatility in prices, a fact exacerbated by the effective cap implicit in the design of a Strategic Reserve. In addition, Strategic Reserves can dampen entry and exit signals for new plant – particularly plant necessary to achieve environmental goals. As an option for capacity remuneration there are few examples of Strategic Reserves in power systems with high levels of intermittent renewable generation.</p> <p><b>BnM does not support this option.</b></p>
<p>22. Do you agree with the initial assessment of the strengths and weaknesses of a Strategic Reserve Mechanism? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable.</p>
<p>23. Would a Strategic Reserve Mechanism work or fit more effectively with a particular option for the energy trading</p>	<p>BnM does not believe that this option would fit effectively with any of the energy options provided, see response to Question 21 above.</p>



arrangements. If so, which one and why?	
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LONG-TERM PRICE-BASED CRM (CHAPTER 10.9)

Question	Answer
<p>24. Are there any changes you would suggest to make the design of a Long-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic?)</p>	<p>Bord na Móna favours a Long Term Price Based CRM.</p> <p>Bord na Móna is acutely aware that the direction of travel of the I-SEM suggests that the existing BCoP will be substantially modified to facilitate the new trading arrangements. The current BCoP provides checks and balances to ensure that there is no possibility of any generator being over-compensated by the existing CRM. Therefore, should the SEMC agree to adapt a long term price based mechanism, Bord na Móna would expect (and contribute towards the detailed development of) a ‘ruleset’ which would govern such a mechanism. It would be expected that such a ruleset would be developed from an agreed set of principles, including but not limited to revenue adequacy for existing and new investors (including wind), transparency, equity and fairness.</p> <p><b>Bord na Móna supports a Long Term Price Based CRM.</b></p>
<p>25. Do you agree with the initial assessment of the strengths and weaknesses of a Long-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable, although we would also refer to comments made in response to Question 24 above.</p>
<p>26. Would a Long-term price-based CRM work or fit more effectively with a particular option for the</p>	<p>Notwithstanding, the comments in response to Question 24 above, Bord na Móna is <b>confident</b> that an appropriate ruleset for a Long Term Price Based CRM could be developed for each of the Options outlined in the Consultation Paper.</p>

energy trading arrangements. If so, which one and why?	
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SHORT-TERM PRICE-BASED CRM (CHAPTER 10.10)

Question	Answer
<p>27. Are there any changes you would suggest to make the design of a Short-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	<p>As stated above, the primary objectives of a CRM (which are not however clearly delineated in the Consultation Paper) should be the provision of generation adequacy, firm capacity, a less volatile mechanism for generators to recover long run marginal costs, ameliorate concerns of ‘missing money’ as well as entry signals for new generation.</p> <p>A short term price based CRM for existing and new investors (including wind) is less likely to meet this range of objectives.</p> <p><b>BnM is less inclined to support this Option.</b></p>
<p>28. Do you agree with the initial assessment of the strengths and weaknesses of a Short-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable.</p>
<p>29. Would a Short-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	<p>Notwithstanding the comments in response to Question 27 above, Bord na Móna suspects that an appropriate ruleset for a Short Term Price Based CRM could be developed for each of the Options outlined in the Consultation Paper.</p>

QUANTITY-BASED CAPACITY AUCTION (CHAPTER 10.11)

<b>Question</b>	<b>Answer</b>
<p>30. Are there any changes you would suggest to make the design of a Quantity-based Capacity Auction CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	<p>As stated above, the primary objectives of a CRM (which are not however clearly delineated in the Consultation Paper) should be the provision of generation adequacy, firm capacity, a less volatile mechanism for generators to recover long run marginal costs, ameliorate concerns of ‘missing money’ as well as entry signals for new generation.</p> <p>A Quantity Based Capacity Auction may not meet this range of objectives.</p> <p>It is also possible that the administratively set tenor of the auctions and the associated penalties for non-delivery could be seen as too great a potential liability against the potential income received from participating in the auction.</p> <p><b>BnM is less inclined to support this Option.</b></p>
<p>31. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Auction CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable.</p>
<p>32. Would a Quantity-based Capacity Auction CRM work or fit more effectively with a particular option for the energy trading arrangements. If</p>	<p>Notwithstanding the comments in response to Question 30 above, Bord na Móna suspects that an appropriate ruleset for a Short Term Price Based CRM could be developed for each of the Options outlined in the Consultation Paper.</p>

so, which one and why?	
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QUANTITY-BASED CAPACITY OBLIGATION (CHAPTER 10.12)

Question	Answer
<p>33. Are there any changes you would suggest to make the design of a Quantity-based Capacity Obligation CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	<p>As stated above the primary objectives of a CRM (which are not however clearly delineated in the Consultation Paper) should be the provision of generation adequacy, firm capacity, a less volatile mechanism for generators to recover long run marginal costs, ameliorate concerns of ‘missing money’ as well as entry signals for new generation.</p> <p>A Quantity Based Capacity Obligation may not meet this range of objectives.</p> <p>Capacity Obligations are reasonably untested in markets with high levels of intermittent generation. Additionally, in markets where there are potential concerns over market power, Capacity Obligation could result in significant volatility in the clearing price.</p> <p><b>BnM is less inclined to support this Option.</b></p>
<p>34. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Obligation CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable.</p>
<p>35. Would a Quantity-based Capacity Obligation CRM work or fit more effectively with a particular option for the energy</p>	<p>Notwithstanding the comments in response to Question 33 above, Bord na Móna suspects that an appropriate ruleset for Quantity Based Capacity Obligations could be developed for each of the Options outlined in the Consultation Paper.</p>

trading arrangements. If so, which one and why?	
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CENTRALISED RELIABILITY OPTIONS (CHAPTER 10.14)

Question	Answer
<p>36. Are there any changes you would suggest to make the design of a Centralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	<p>As stated above the primary objectives of a CRM (which are not however clearly delineated in the Consultation Paper) should be the provision of generation adequacy, firm capacity, a less volatile mechanism for generators to recover long run marginal costs, ameliorate concerns of ‘missing money’ as well as entry signals for new generation.</p> <p>Centralised Reliability Options may not meet this range of objectives.</p> <p>As noted in the Consultation Paper, there is a fundamental concern that such a scheme may be perceived as a purely financial instrument divorced from the physical delivery which could have long term implications for generation adequacy.</p> <p><b>BnM is less inclined to support this Option.</b></p>
<p>37. Do you agree with the initial assessment of the strengths and weaknesses of a Centralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable, although given the relative novelty of such an option, the Consultation Paper would benefit from expanded and worked examples particularly in deriving the value (and subsequent remuneration) wind capacity brings to the system.</p>
<p>38. Would a Centralised Reliability Option work or fit more effectively with a particular option for the energy trading</p>	<p>Notwithstanding the comments in response to Question 36 above and the fact that such options are relatively new, Bord na Móna suspects that an appropriate ruleset for Centralised Reliability Options could be developed for each of the Energy Options outlined in the Consultation Paper.</p>

arrangements. If so, which one and why?	
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DECENTRALISED RELIABILITY OPTIONS (CHAPTER 10.15)

Question	Answer
<p>39. Are there any changes you would suggest to make the design of a Decentralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	<p>As stated above the primary objectives of a CRM (which are not however clearly delineated in the Consultation Paper) should be the provision of generation adequacy, firm capacity, a less volatile mechanism for generators to recover long run marginal costs, ameliorate concerns of ‘missing money’ as well as entry signals for new generation.</p> <p>Decentralised Reliability Options may not meet this range of objectives.</p> <p>As noted in the Consultation Paper, there is a fundamental concern that such a scheme may be perceived as a purely financial instrument divorced from the physical delivery which could have long term implications for generation adequacy.</p> <p><b>BnM is less inclined to support this Option.</b></p>
<p>40. Do you agree with the initial assessment of the strengths and weaknesses of a Decentralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>The comments detailed in the Consultation Paper are objective and reasonable, although given the relative novelty of such an option, the Consultation Paper would benefit from expanded and worked examples particularly in deriving the value (and remuneration) wind capacity brings to the system.</p>
<p>41. Would a Decentralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If</p>	<p>Notwithstanding the comments in response to Question 39 above and the fact that such options are relatively new, Bord na Móna suspects that an appropriate ruleset for Decentralised Reliability Options could be developed for each of the Energy Options outlined in the Consultation Paper.</p>

so, which one and why?	
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## IN SUMMARY

### Bord na Móna – Summary Position

Although not formally provided for in the Consultation response template, Bord na Móna feels it is beneficial to briefly recap on the submission -particularly in relation to topics outside the formal template questions.

- Bord na Móna welcomes the consultation process and appreciates the role and responsibilities of market participants in the I-SEM redesign process
- The submission makes the point that in the current SEM, total revenues are earned through three distinct (albeit related) streams – Energy, Capacity and System Services and that it is easy to appreciate the difficulty that Bord na Móna (and indeed other market participants) face when evaluating and responding to this Consultation.
- Bord na Móna, while being mindful of consumer protection and European market obligations have viewed the SEMCs evaluation criteria through a lens which focused on a ‘Route to Market to provide Revenue Adequacy’ and developed our thinking accordingly
- The SEMC’s commitment to reassess the potential impact of the Hybrid Plant decision is welcomed and Bord na Móna respectfully request that such an assessment be acknowledged at this High Level Design (HLD) stage so that a realignment of SEM-13-006 can be included as a work stream during the detailed design process
- A capacity mechanism (Long Term Price Based) to deliver generation adequacy, including the contribution from Wind, is in the best interest of I-SEM consumers and market participants
- Concerns were also raised regarding existing local regulatory decisions and how they may need to be modified in the I-SEM, EU impacts regarding state aid for RES support schemes and the advantage of carrying out a CBA which uses as the counterfactual(s) design options which are compliant with the ETM
- Bord na Móna is of the opinion that of the options presented, Option 3 is the most capable (notwithstanding some modification and clarifications, see response to question 13) of delivering a market design which addresses the issues discussed above, meets the RA’s evaluation criteria and is compliant with the ETM
- BnM is less disposed to Option 1 (Adapted Decentralised Market as an appropriate design for the energy market in I-SEM and to Option 4 (Gross Pool – Net Settlement) as an appropriate design for the energy market in I-SEM, although Bord na Móna does accept that Option 4 could in theory be adapted for use as the energy market in the I-SEM. BnM does not believe that a Mandatory Ex-Post Pool for Net Volumes (Option 2) should be

considered as a possible design for the I-SEM market. This option presents what essentially are two competing.

- Bord na Móna believes that a Long Term Price Based CRM is the optimal choice for a small market such as SEM which is isolated from mainland Europe in order to provide generation adequacy, ensure that long run costs are met, minimise long term costs for the system as a whole and protect consumers from price volatility
- A strategic reserve would not be an appropriate mechanism for the island of Ireland
- Bord na Móna is less inclined towards Short Term Priced Based CRMs, Quantity Based Capacity Obligations, and Centralised/Decentralised Reliability Options.