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# Retail Market Review: Intervention to enhance liquidity in the GB power market

## Consultation

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### Overview:

Following our Retail Market Review (RMR) in March 2011, we found that consumers were at risk from low wholesale power market liquidity, which was potentially acting as a barrier to entry and reducing the effectiveness of competition. We set out proposals to address this – a Mandatory Auction (MA) and Mandatory Market Making arrangements (MMM). Stakeholders agreed that it was appropriate for us to develop these proposals.

In this document we present our objectives for the wholesale market which, if met, would enable it to more effectively underpin competition. We also consider the impact which market developments have had on our objectives. We note improvements in the near-term market in late 2011. However the tools and signals which independent participants need to manage risk are still not fully available.

Our goal is to see that our objectives are met. Therefore we propose focussing on the development and delivery of an MA selling key longer-dated products. Since current signs of improvement could stall, or accelerate, we propose that the MA is adaptable. We could also develop our MMM proposals in the future.

In this document we invite discussion on our objectives, what needs to be done to meet them, and the MA we are proposing. We set out our intention to work with industry to get the details right and will now embark on a period of market testing and further design development.

The deadline for response to this consultation is **Tuesday 8 May 2012**.

# Context

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Ofgem's principal objective is to protect the interests of consumers, present and future<sup>1</sup>. In accordance with this objective, we are concerned with making sure that liquidity in the GB power market is sufficient to underpin competitive generation and supply markets.

Under the Third Package<sup>2</sup>, Ofgem also has a duty to promote the integrated European energy market. Ofgem considers that improvements to GB market liquidity are consistent with this objective, and is mindful of the need to promote integration when designing any interventions.

This consultation represents a further step in our ongoing liquidity project, in which we have been monitoring power market liquidity in Great Britain. We have always maintained that we would prefer to see industry initiatives deliver the required improvements; and we note that steps have been taken to improve liquidity in the near-term market. However, we are committed to take action in the event that insufficient or slow progress could be putting consumers at risk.

It also represents the development of one of the five workstreams initiated by the The Retail Market Review in March 2011. In this document we discuss our proposals to improve market liquidity (workstream two).

## Associated documents

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- GB wholesale electricity market liquidity: summer 2011 assessment, 22 June 2011, Reference: 82/11  
<http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf>
- Open letter: Ofgem's Retail Market Review – update and next steps (liquidity proposals), 22 June 2011  
[http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity\\_Annex%20One\\_Open%20letter.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity_Annex%20One_Open%20letter.pdf)
- The Retail Market Review: Findings and initial proposals, 21 March 2011, Reference: 34/11  
[http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/RMR\\_FINAL.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/RMR_FINAL.pdf)
- Liquidity Proposals for the GB wholesale electricity market, 22 February 2010, Reference: 22/10  
<http://www.ofgem.gov.uk/Markets/WhIMkts/CompanEff/Documents1/Liquidity%20Proposals%20for%20the%20GB%20wholesale%20electricity%20market.pdf>

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<sup>1</sup> This includes the interests of consumers in the fulfilment by Ofgem, when carrying out its functions as designated regulatory authority for Great Britain, of the objectives set out in Article 40(a) to (h) of the Gas Directive and Article 36(a) to (h) of the Electricity Directive.

<sup>2</sup> The term "Third Package" refers to Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 (Gas Directive) and Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 (Electricity Directive), concerning common rules for the internal market in natural gas and electricity respectively.

- Liquidity in the Great Britain (GB) wholesale energy markets, June 2009, 62/09  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=58&refer=MARKETS/WHLMKTS/COMPANDEFF>
- Energy Supply Probe — Initial Findings Report, October 2008, Reference:140/08  
<http://www.ofgem.gov.uk/MARKETS/RETMKTS/ENSUPPRO/Documents1/Energy%20Supply%20Probe%20-%20Initial%20Findings%20Report.pdf>

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# Executive Summary

It is important for consumers that the wholesale power market in GB is able to underpin competitive supply and generation markets. To do so, it needs to support reliable trading in key products and generate robust signals. In our view, it should deliver:

- Availability of products which support hedging
- Robust reference prices along the curve
- An effective near-term market.

We set out the market features we think would contribute to these objectives in figure one.

**Figure 1: Objectives for the GB wholesale power market and expected market features**

	<b>GB wholesale power market objectives</b>	<b>Possible market features</b>
<b>1</b>	<b>Availability of products which support hedging</b>	<ul style="list-style-type: none"> <li>• Range of longer-dated physical products strongly traded in the market – eg beyond 1 year ahead; and/or financial products widely traded, including by independent suppliers</li> <li>• Robust prices in longer-dated products</li> <li>• Reasonable and transparent trading terms</li> </ul>
<b>2</b>	<b>Robust reference prices generated along the curve</b>	<ul style="list-style-type: none"> <li>• Robust prices in longer-dated products</li> <li>• Narrow bid-offer spreads along the curve</li> </ul>
<b>3</b>	<b>Effective near-term market</b>	<ul style="list-style-type: none"> <li>• Significant trading in day-ahead volumes</li> <li>• Reasonable and transparent trading terms</li> <li>• Independents able to meet shaping requirements</li> </ul>

We have been actively monitoring the market since liquidity concerns were raised in 2008 and in this time we have witnessed some positive developments. Recently, near-term exchange-traded volumes have increased significantly, and we welcome the commitments which have been made to bring about these changes. The market appears to be moving towards achieving objective three, in terms of meeting changing supply and demand needs in the near-term.

While we recognise that these developments could, over time, lead to broader improvements, the recent evidence presented in chapter two continues to highlight that these improvements are yet to prove permanent or significant. We continue to be concerned that the market is not providing sufficient access to the range of traded products required by independents and therefore not meeting objective one. This includes products further along the curve, such as those beyond a month out and potentially up to three years ahead. In particular, longer-dated products are also thinly traded at present, which means the prices generated are difficult to rely on. While we recognise that uncertainty over key policy developments – such as the Government’s Electricity Market

Reform programme – may be inhibiting forward trading, we are concerned that the market is not currently meeting objective two.<sup>3</sup>

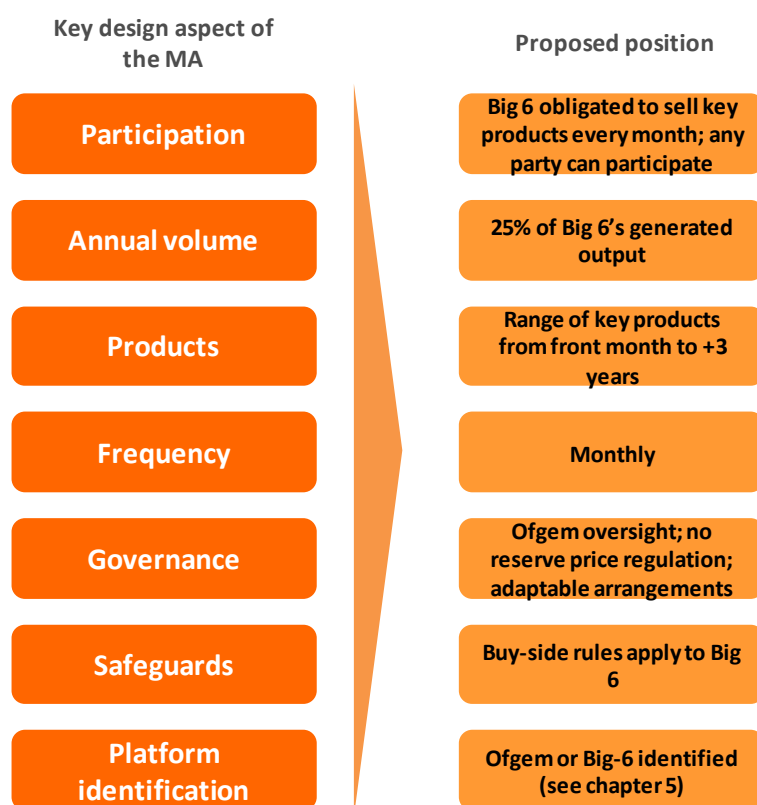
## Proposal for a Mandatory Auction

Since two of our objectives are not currently met by market developments, we consider that it remains appropriate for us to proceed with regulatory interventions. In March 2011 we presented plans for a Mandatory Auction (MA) and Mandatory Market Making (MMM) arrangements. In light of developments and stakeholder feedback, we consider that a strengthened and focussed MA is the mechanism best able to address these two objectives and therefore meet the needs of market participants.

Under our proposed MA arrangement, we would require that obligated parties<sup>4</sup> regularly sell specific, key products through the auction, with sufficient volume in each product to potentially meet demand and produce robust prices. By making sure that certain products are reliably and transparently traded, this intervention should significantly improve the availability of risk management tools and strengthen market signals, and by extension should help to facilitate more competitive generation and supply markets.

We envisage that requiring 25% of the obligated parties’ annual generation to be sold in this way would be sufficient to meet our objectives. We set out the rationale behind the MA mechanism and its design in chapters three and four.

**Figure 2: Key features of our proposed Mandatory Auction**



<sup>3</sup> More detail on the Government’s EMR programme can be found here: [http://www.decc.gov.uk/en/content/cms/legislation/white\\_papers/emr\\_wp\\_2011/emr\\_wp\\_2011.asp](http://www.decc.gov.uk/en/content/cms/legislation/white_papers/emr_wp_2011/emr_wp_2011.asp)

<sup>4</sup> Those parties with significant generation and domestic supply businesses – which currently in GB means those companies often referred to as the ‘Big 6’ – ie Centrica, SSE, E.ON, EDF, Npower and Scottish Power.

We recognise that there is a risk that the achievement of objective three may be threatened if recent improvements are not sustained. We are therefore keeping the options open of extending the focus of the MA to include near-term products, or further developing our MMM proposals.

## **Next steps**

The issues we are addressing are not straightforward. For example, a product may not be traded for numerous reasons and the gap in the market could be indicative of un-met demand or a genuine lack of interest. Therefore this document also signals our intention to work with industry to get the details of our MA proposals right.

## **Delivering an MA**

In addition to inviting views on our objectives and our proposed MA design features, we seek views on different approaches to delivering the MA. We set out two broad alternatives: that either Ofgem or the obligated parties lead the process of identifying the service provider or providers needed to run the MA functions. We intend to embark upon a period of market testing and will be looking to engage with stakeholders further on this issue.

## **Recognising further developments**

We have always maintained that market participants are best placed to determine and bring about necessary liquidity improvements. The MA is a regulatory tool which can directly support product availability and market signals, but we recognise that regulatory intervention carries risks.

For this reason, our proposal is intended to drive, and not preclude, further industry-led action. In setting out our objectives and how the MA would meet these, we invite discussion on how to make sure the market overall delivers what participants need to see. We want participants to be specific about their requirements. We would also like to explore how current or future industry-led change could impact how we ultimately design the MA and progress towards a more liquid market. The mechanism set out in this document is designed to be able to respond to positive or negative developments in the market.

# 1. Our objectives for liquidity

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## Chapter Summary

In this chapter we set out our objectives for the GB wholesale power market. We want to see the market develop the key features which we think are required for it to effectively underpin competition in generation and supply. These are: provision of a range of products which support hedging; the development of robust reference prices along the curve; and the development of an effective near-term market. These objectives will inform the ongoing development of our proposal for intervention.

**Question 1: Do you agree with the objectives we have identified?**

**Question 2: Do you think there are other objectives we should be considering?**

## Deriving our objectives

1.1. We want to see a wholesale market develop that is able to underpin competitive supply and generation markets. This should include providing the tools and signals that independent market participants need in order to operate effectively, and that the large vertically integrated companies need to compete with each other. Below we explain the functions of a liquid wholesale market, and why these are important for consumers. We then map these functions to the features the wholesale market needs to develop in order to fulfil its role effectively. These features form our objectives.

### Functions of a liquid wholesale market

#### *Enabling affordable energy supplies*

1.2. It is important that suppliers are able to enter the market and grow. New entry, or the credible threat of new entry, increases competition in the market since a new player may attract customers from existing players. This provides a pressure for companies to perform well – thereby helping to secure affordable energy supplies for consumers.

1.3. In response to our consultation in March 2011, the majority of stakeholders agreed that low liquidity constitutes a barrier to entry in supply. In short, if suppliers cannot access the products they need in the wholesale market, or cannot trust that the prices charged are robust, it is difficult for them to effectively manage risk.

1.4. Longer-term price risks are managed by buying products along the curve. This is known as hedging. If these products are thinly traded, then independent players are more exposed to price movements. For a supplier, this could affect their ability to offer competitive contracts to their customers. In our Summer 2011 market assessment, independent participants continued to raise concerns about the liquidity of longer-dated products<sup>5</sup>. A lack of trading in these products could also contribute to a lack of competition

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<sup>5</sup> GB wholesale electricity market: summer 2011 assessment, <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf>



between larger, vertically integrated, suppliers; in order to benefit from gaining customers it is important that you can effectively hedge their needs.

1.5. Risks are also faced in the near-term. In order for parties to remain balanced<sup>6</sup>, they need to be able to buy and sell electricity up to intra-day (ie for every half hour within the day). This helps them manage less predictable changes in demand or supply (eg those due to weather). Liquid near-term markets are therefore also important.

#### *Enhancing security of supply*

1.6. It is also important for consumers that the wholesale market supports sufficient investment in generation, since this is important for security of supply. A liquid market produces useful price signals – both in near-term and longer-term products. Without these signals, it is more difficult for generators to build a business case for an investment, since it is difficult to identify the likely price of their outputs.

1.7. The Government's Electricity Market Reform (EMR) programme outlines specific measures to secure low-carbon energy supplies for the GB consumer. These proposals further strengthen the importance of robust market signals. Under the proposed Feed in Tariff with a Contract for Difference (FiT with CfD), investment incentives paid to low-carbon generators are linked to a wholesale market reference price. For this to work well, wholesale prices must be robust. This provides further context for our objectives, which we discuss in chapter two.

#### **Key features of an effective wholesale market and our objectives**

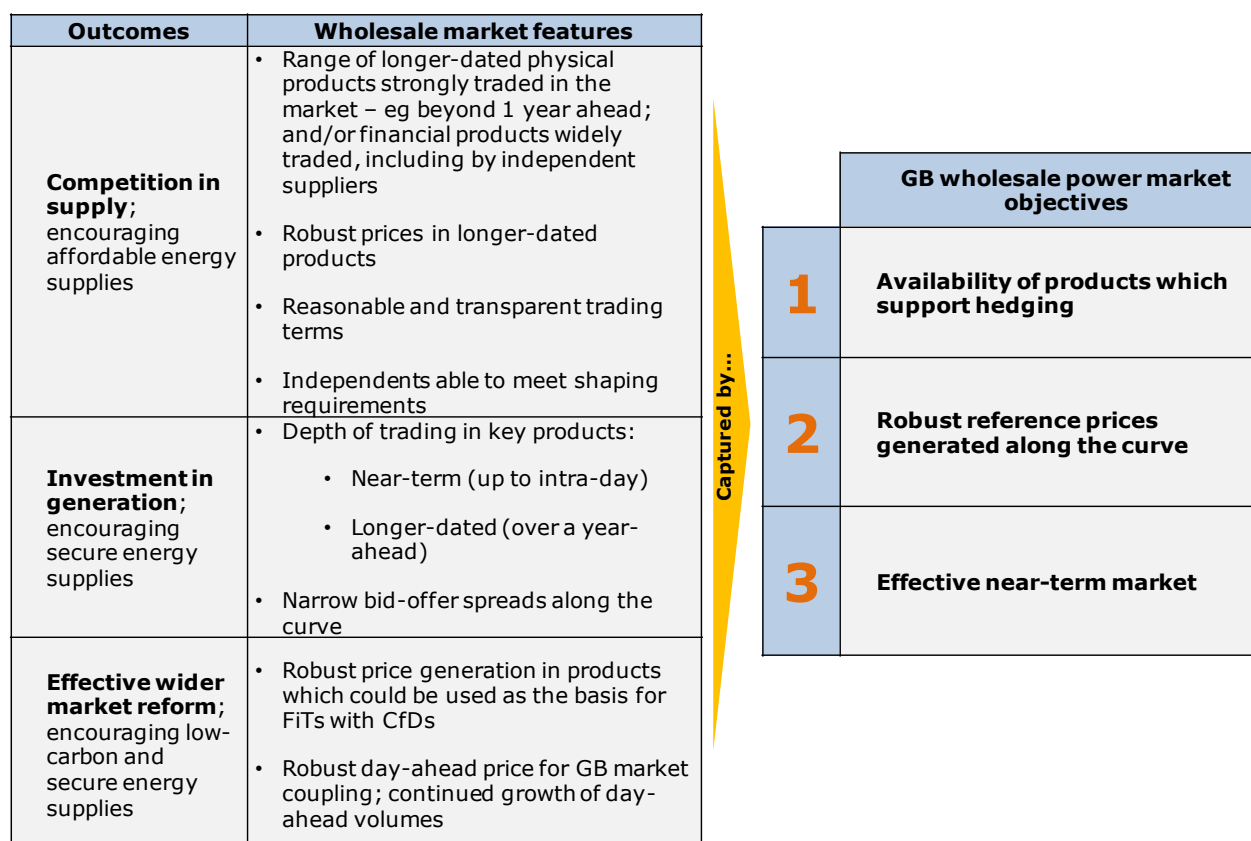
1.8. As outlined above, certain features of the market are especially important for the benefits of liquidity to be realised. In figure 3 we set out the features we intend to be captured in our headline objectives for the wholesale power market.

1.9. These features have been derived from conversations with stakeholders, responses to our March consultation and comments received at our stakeholder event on 22 July 2011. In particular, we have sought to establish which products are important for independent suppliers and generators. This work is discussed in appendix three and informs the indicative product list for the MA we present in chapter four.

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<sup>6</sup> Parties are out of balance if they fail to contract for all the electricity they produce or consume. If they are out of balance, they are exposed to the cash-out price. Participants are unlikely to be better off facing the cash-out price than they would have been if they had balanced their position. The cash-out price can also be volatile and unpredictable, so it can be difficult for participants to hedge the costs associated with imbalance.

**Figure 3: Deriving our wholesale power market objectives**



## Our monitoring framework

1.10. Since July 2010<sup>7</sup>, we have been monitoring the development of the market using a framework of eleven metrics which fall into three categories: high volumes in standard products; the availability of key longer-dated products and/or financial derivatives; meeting independent suppliers' and others' wholesale requirements.

1.11. This framework allows us to track the market's progress. In chapter two we provide an update of developments we have witnessed in each area since we conducted our Summer 2011 assessment<sup>8</sup>. This allows us to identify where there has been improvement – and where there remains indication that the market is not developing effectively.

1.12. It would not be advisable to set targets for the market under this framework. For example, while a growing level of churn may indicate that the market is becoming more liquid, it does not tell us that it is developing the specific features which will deliver the benefits of liquidity described above. However, we will continue to deploy this framework in order to assess the extent to which the market is developing towards meeting our objectives.

<sup>7</sup> GB wholesale electricity market liquidity: summer 2010 assessment, <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf>

<sup>8</sup> GB wholesale electricity market: summer 2011 assessment, <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf>

## 2. Market developments

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### Chapter Summary

In this chapter we look at how the market has developed since we published our March 2011 consultation document. It builds on our Summer 2011 assessment of the wholesale market, in which we applied our monitoring framework of eleven metrics. We note that there has been some progress towards meeting the objectives set out in chapter one but (i) progress is incomplete and (ii) must be sustained. Therefore it remains appropriate that we develop our proposal for intervention, yet also that any intervention is both focussed and adaptable.

**Question 3: Do you agree with our views on market developments since summer 2011?**

**Question 4: What specific further developments would be necessary to meet our objectives?**

**Question 5: Do you agree that objectives one and two are current priorities given market developments?**

### Market developments since Summer 2011

2.1. Since our Summer 2011 wholesale market assessment, we have continued to monitor the wholesale market to assess progress towards meeting our liquidity objectives. This allows us to see whether the picture we presented in July 2011 remains accurate. We note that steps have been made towards positive change (notably increased volumes traded day-ahead on exchanges), and we welcome the commitments which have brought these improvements about. However, our analysis also exposes where improvements are limited. In particular, trading along the curve remains thin and we have concerns that the market is not sufficiently delivering a range of products which support hedging and robust reference prices along the curve. Therefore our objectives one and two are not being met.

2.2. Additionally, key policy developments, such as the progress towards an integrated day-ahead market and the Government's Electricity Market Reform programme provide important context to our proposals. These developments support the conclusion that the development of an MA focused on objectives one and two is appropriate. We present our detailed proposal in chapter three.

#### Overall: Churn

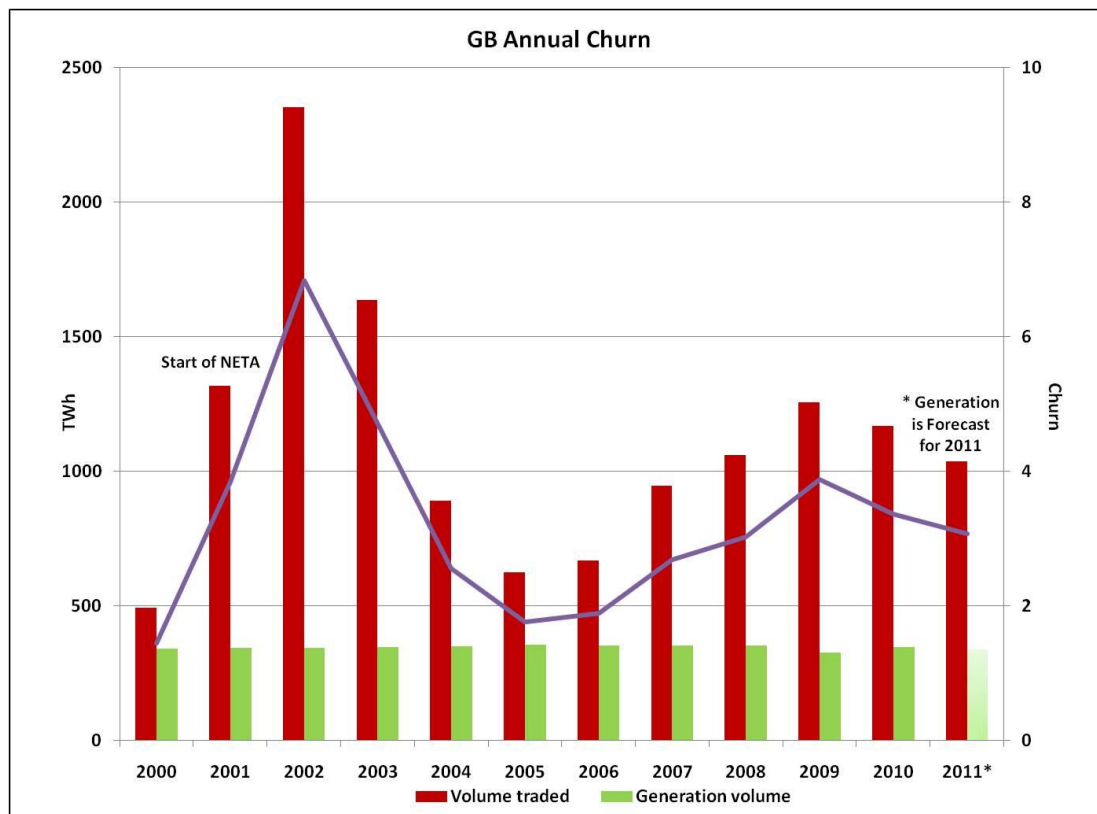
*Aggregate churn continued to deteriorate in 2011*

2.3. A key indicator of the overall level of liquidity in the market is the churn rate. Churn is defined as the number of times a unit of generation is traded before it is delivered to the final customer. Liquid markets are often characterised as having physical volumes traded many times over. Our previous wholesale market assessments have found that churn in GB is low compared to other European electricity markets and to the GB gas market.

2.4. Figure four updates our assessment of churn in the GB wholesale electricity market. Our provisional data suggests that churn continued to fall in 2011. It confirms the signs in

our previous wholesale assessment that the increasing trend in churn between 2005 and 2009 has reversed. By contrast, churn appears to have increased in other European markets (eg Germany) and in the GB gas market.<sup>9</sup> This suggests the decline in GB electricity market churn is not a result of wider economic factors.

**Figure 4 - GB Annual Churn**



Source: ICIS Heren, APX, N2EX, ICE, DUKES

2.5. While the decline in churn does not in itself have a direct bearing on our three objectives, it is a high-level indicator that overall the market is not independently becoming more liquid, potentially strengthening the case for regulatory intervention.

**Objective 1: Availability of a range of products to support hedging**

2.6. Of direct relevance to our liquidity objectives is the proportion of the OTC market that is traded months or years ahead of delivery. In order to compete, market participants require products that enable them to hedge against the risk of future movements in the wholesale price. These hedging products can be either physical (ie contracting for the delivery of power) or financial (ie a financial instrument based on a wholesale market reference price).

*Trading of longer-dated products has not significantly developed*

2.7. Our updated analysis (see figure five) shows that, for baseload, peak and off-peak products, the proportion of OTC trading beyond two months has not increased over the

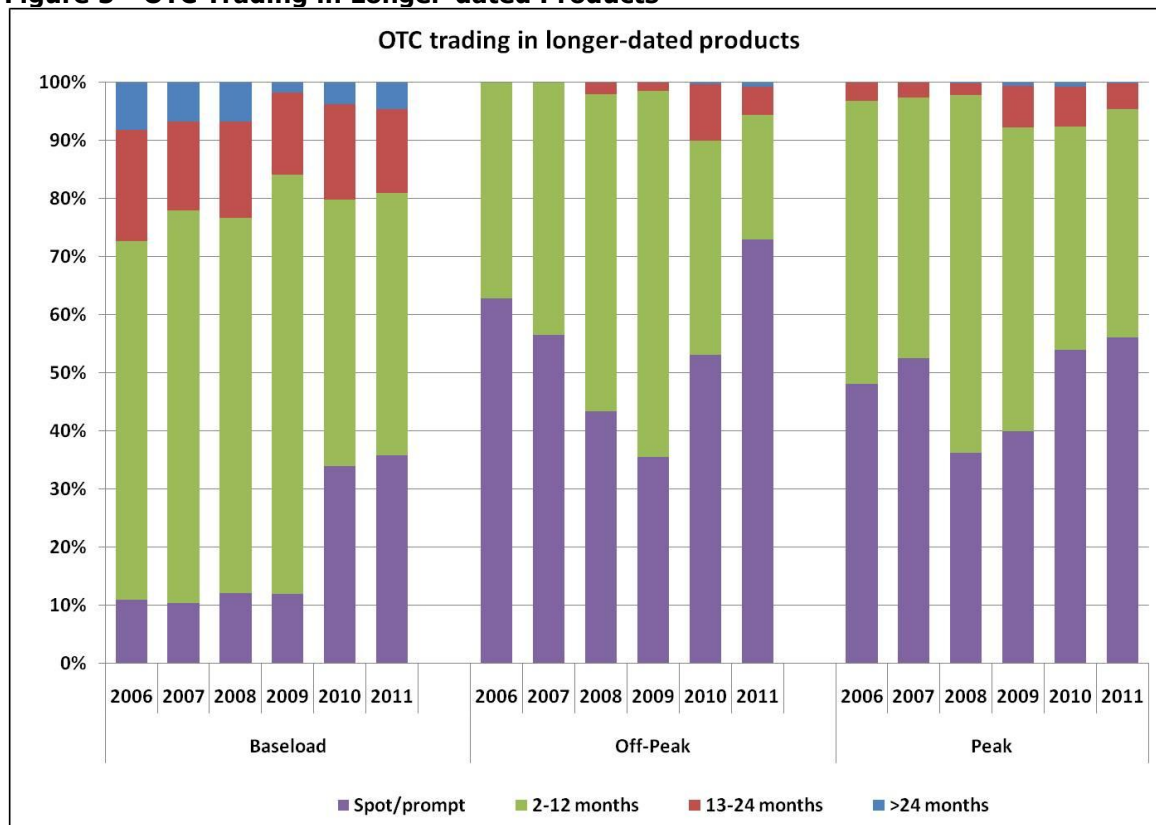
<sup>9</sup> Indicative calculations based on data from London Energy Brokers Association (LEBA), the International Energy Agency (IEA) and DUKES

course of 2011. Trading in the second half of 2011 has shown little deviation from the trends we noted in our Summer 2011 assessment. Notably:

- For baseload products, improvements in trading beyond 24 months have not accelerated and trading 13-24 months out decreased
- For peak and off-peak products, no significant trading over 24 months along the curve emerged, and trading beyond two months failed to grow
- Market participants remain concerned that access to products all along the curve remains insufficient.

2.8. We note initiatives by some Big 6 companies to facilitate access to bilateral trading for independent market participants. While we welcome these initiatives, we do not believe they are sufficient on their own to ensure access to the range of products that market participants need to compete effectively and to drive reference prices along the curve. However, we welcome views on the effectiveness of these initiatives.

**Figure 5 - OTC Trading in Longer-dated Products**



Source: ICIS Heren

*Some potential for improvement in availability of financial products*

2.9. Historically, GB wholesale market participants have generally sought to hedge through physically-settled transactions on the forward curve. This message was re-affirmed at our stakeholder event on 22 July 2011. This is in contrast to some other European markets, where market participants make use of a range of financial hedging products. We recognise that increased trading in financial products could offer a valuable hedging tool to market participants and may attract new players. However, we continue to note limited uptake.

2.10. Trading in financial products on N2EX remained sporadic throughout 2011, despite commitments from RWE and EDF to act as market makers for futures products and the growth in volumes on N2EX's other (physically settled) platforms. However, we have seen some signs that trading in financial products is beginning to develop:

- There was an increase in volumes traded in financial products on N2EX's UK Power futures platform in December 2011/January 2012
- There has been an increase in parties registered to trade on this platform
- Growth in volumes traded on the N2EX day-ahead auction could increase the robustness of the reference price on which the financial products are based and give market participants greater confidence.

2.11. On this basis, while trading in financial products is not meeting market participants' hedging requirements at present, we see the potential for further improvements in the coming months. We welcome stakeholders views on the extent to which improvements are occurring, and whether they will help to meet objective one.

## **Objective 2: Development of robust reference prices**

*Bid-offer spreads have narrowed slightly, but remain wide compared to gas*

2.12. A tight spread between the bid price (the price at which buyers are prepared to buy) and the offer price (the price at which sellers are willing to sell) is a good indication of a liquid market, as it indicates that arbitrage opportunities have been exhausted by the presence of numerous players in the market. A narrow spread also facilitates the development of reference prices, as views of the market price of a product converge.

2.13. Our Summer 2011 assessment showed a slight narrowing of bid-offer spreads for some products in the first few months of 2011. Our updated analysis confirms that this trend continued at the end of 2011, with evidence that spreads have fallen for products all along the curve. However, bid-offer spreads remain notably wider than those seen in the gas market all along the curve: in fact, gas market bid-offer spreads tightened by more than electricity market bid-offer spreads in 2011. The difference between gas and electricity market spreads is particularly wide for peak products: for example, electricity market spreads for Month+1 Peak products are more than five times the size of those seen in equivalent gas products.

*There has been significant growth in volumes traded on exchanges*

2.14. Power trading in GB has been dominated by OTC trading since the introduction of the New Electricity Trading Arrangements (NETA) in 2001. This is in contrast to other European countries in which there is often more exchange-based trading. Exchange-based trading has been cited as an important reason why other European markets, such as Nordpool, are more liquid than GB. It has been argued that exchanges offer transparency and a level playing field. In particular, there are possible benefits to market participants of being able to trade without multiple Grid Trade Master Agreements (GTMA) in place.<sup>10</sup>

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<sup>10</sup> A Grid Trade Master Agreement (GTMA) is a legal agreement between the two parties in a trade

2.15. In our summer 2011 wholesale market update we noted an encouraging upward trend in total exchange-based trading. As noted above, this trend has continued in the later months of 2011, largely due to the strong growth in trading on the N2EX day-ahead auction platform (see figure seven). However, it is important to note that exchange trading still makes up less than 10 percent of overall GB wholesale trading, compared to almost 40 percent in the Netherlands and approaching 100 per cent in Nordpool.

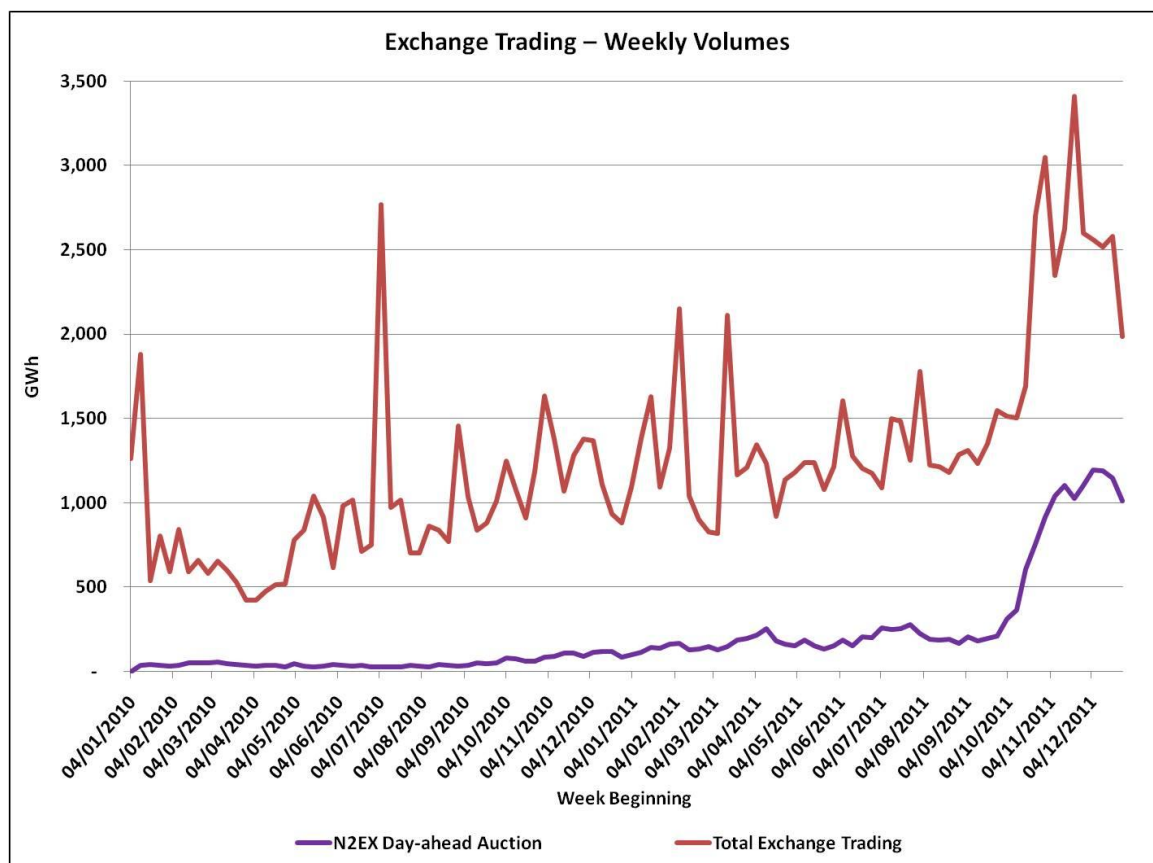
### **Objective 3: Effective near-term market**

2.16. Availability of near-term products – such as those traded at the day-ahead and intraday stage - is important to ensure that market participants are able to shape their supply to balance with their demand profile. Failure to do so exposes market participants to the risk of being out of balance and needing to make payments under the cash-out mechanism.

*There has been significant growth in volumes on the N2EX day-ahead auction*

2.17. The major development in the near-term market since our summer market update is the strong growth of volumes of the N2EX day-ahead auction platform (see figure six). In the last quarter of 2011, this trend accelerated substantially. While in September total trading on the auction was 820GWh, by December this had increased to over 5TWh.

**Figure 6 - Exchange trading**



Source: N2EX, APX, ICE

2.18. This growth in volumes traded on exchanges at the day-ahead stage provides market participants with more confidence that they will be able to balance their positions and avoid being subject to cash-out penalties. If this improvement is sustained, it marks significant progress towards achieving objective three.

#### *Intraday liquidity remains under review*

2.19. We note comments from some market participants that similar developments may not arise in intraday markets. This could become especially significant for intermittent generators, such as wind generators. Because of the inherent unpredictability of their generation, these generators may need to buy or sell power at the intraday stage, rather than being able to trade further ahead of delivery. As the level of intermittent generation in GB increases, this challenge may increase. We are keen to see intraday liquidity develop. However, we note that availability of intraday products is not currently a widely-held area of concern (see appendix three). Intraday liquidity could also be affected by our work on cash-out reform (see below).

2.20. On this basis, we believe that sufficient progress towards objective three has been made to lessen the rationale for intervening in support of it at this stage. However, we will continue to monitor market developments to ensure that these improvements are maintained. If improvements stall, we will consider intervention in support of this objective. Consequently we are keen to hear views from stakeholders on progress towards meeting this objective.



## Policy developments

2.21. As well as the market developments we have witnessed since our last wholesale market update, there are a number of key policy developments that have implications for market liquidity and which provide important context to our objectives.

### *The Government's Electricity Market Reform (EMR) programme*

2.22. As outlined in chapter one, a key aspect of EMR is the Feed in Tariff Contract for Difference (FiT-CfD) aimed at supporting investment in low-carbon generation. The FiT-CfDs use market reference prices to determine the level of payments that generators receive (or pay out). To ensure that these reference prices are robust and immune to manipulation, they will need to be based on liquid markets. We recognise the interactions between Ofgem's liquidity project and successful operation of the FiT-CfD. This policy development places additional focus on objective two.

2.23. We also acknowledge that certain aspects of the EMR remain uncertain and that this could be affecting longer-dated trading. For example, the impact of the proposed Carbon Price Floor<sup>11</sup> is unknown and will affect the price of longer-dated power.

### *Electricity cash out*

2.24. In November 2011, Ofgem published an electricity cash-out issues paper. This consultation sought views from stakeholders on whether Ofgem should launch a Significant Code Review on cash-out, as well as the potential scope of such a Review.<sup>12</sup> The consultation has now closed and we are considering the responses. The decision on whether to launch a Significant Code Review has not yet been made. However, any changes to cash-out could have implications for near-term liquidity and consequently could affect the rationale for intervening in support of objective three. This again supports our conclusion that we should not target this objective at present.

### *European Target Model*

2.25. European regulators have agreed a target model for cross-border trade in electricity, with the intention of implementing the model on a pan-European basis by 2014. The objective of the target model is to remove policy barriers to trading electricity between markets.

2.26. One aspect of the target model is the coupling of European markets at the day-ahead stage. In GB, this will be achieved through the creation of a GB 'hub', which will bring together trading in day-ahead products on the separate GB exchanges.<sup>13</sup> The

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<sup>11</sup> Relevant consultation documents are available here: [http://www.hm-treasury.gov.uk/consult\\_carbon\\_price\\_support.htm](http://www.hm-treasury.gov.uk/consult_carbon_price_support.htm)

<sup>12</sup> The prices parties pay or receive for their imbalances are known as cash-out. Ofgem published a consultation on whether to conduct a review of the way in which these prices are calculated in November 2011. The electricity cash-out issues paper is available at <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=148&refer=Markets/WhIMkts/CompandEff/CashoutRev>

<sup>13</sup> To implement coordinated price coupling, National Grid Interconnector Limited (NGIL) launched a procurement process in 2011 to select a market coupling service provider. The service provider will create a GB Hub with open access to all regional interconnectors (existing and future) and all regional power exchanges. The GB Hub will provide the interface to the single European coupling

creation of the GB hub, and the wider process of market coupling, could support further improvements in near-term liquidity. Progress is being made towards identifying the hub<sup>14</sup> and this potentially again reduces the rationale for specific liquidity intervention in the near-term market at this stage (objective three).

### *REMIT*

2.27. On 28 December 2011, the European Commission published Regulations on Energy Market Integrity and Transparency (REMIT). REMIT prohibits insider trading and market manipulation in the energy sector. Under REMIT, parties active in European electricity wholesale markets will face reporting requirements in relation to their wholesale market trading. We are aware of the ongoing need to make sure our proposals align with REMIT and expect that the requirements it puts in place also present a opportunity for our intervention to align with a more transparent market overall.

### *Markets in Financial Instruments Directive (MiFID) II*

2.28. In October 2011, the European Commission published its proposals to amend MiFID. These proposals - referred to as MiFID II – would widen the scope of MiFID and introduce a range of specific requirements in areas such as electronic trading and transaction reporting. We are conscious of the potential impact of changes to MiFID on participants in the GB wholesale market. We will continue to monitor the development of the proposals as they progress and will be keen to hear views from stakeholders on the implications of the changes for the GB market.

### **Summary**

2.29. Figure seven summarises the impact that these market and policy developments have had on our liquidity objectives. In short, while there have been positive developments in relation to our third objective, the objectives one and two are not being met at present. Therefore the rationale for a focussed intervention targeted on these objectives remains strong.










2.30. However, we are keen to hear stakeholders' views of the developments outlined in this chapter and to discuss the further developments that would be necessary to make sure that all of our objectives are met.

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algorithm.

<sup>14</sup> At the time of writing, National Grid NG was seeking a service provider to facilitate market coupling through the implicit allocation of GB cross border transmission capacity.

**Figure 7: Market developments and impact on our objectives**

	GB wholesale power market objective	Developments	Impact on objective	Present focus of the MA?
<b>1</b>	<b>Availability of products which support hedging</b>	<ul style="list-style-type: none"> <li>Slight fall in proportion of volumes traded more than 13 months along the curve</li> <li>Some signs of improved trading in financial products, although at present this is sporadic</li> </ul>	 	
<b>2</b>	<b>Robust reference prices generated along the curve</b>	<ul style="list-style-type: none"> <li>Bid-offer spreads have narrowed, although remain above those seen in the gas market, particularly for peak and off-peak products</li> <li>Volumes of exchange trading have increased.</li> </ul>	 	
<b>3</b>	<b>Effective near-term market</b>	<ul style="list-style-type: none"> <li>Increase in trading on the N2EX day-ahead platform</li> <li>Progress towards an integrated European day-ahead market</li> </ul>	 	

## 3. Our proposal: A Mandatory Auction

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### Chapter Summary

In this chapter we set out why a strengthened Mandatory Auction (MA) proposal is currently the most suitable mechanism for a regulatory intervention that meets our objectives and aligns with our design principles. We also set out the reasons that we do not propose to introduce Mandatory Market Making (MMM) at this time, but note that MMM could be further developed at a later date if it is necessary to meet our objectives.

**Question 6: Do stakeholders agree that the MA is the appropriate mechanism to meet our immediate objectives?**

**Question 7: Do you agree that, at the present time, the other mechanisms identified would not be appropriate for Ofgem to pursue?**

### Selecting a mechanism for a liquidity intervention

3.1. Prior to our March 2011 consultation, we considered four different mechanisms for supporting liquidity: a Mandatory Auction (MA); Mandatory Market Making (MMM); a Self-Supply Restriction (SSR); and a Direct Trading Obligation (DTO). In the March 2011 consultation we stated our view that the MA and MMM were our preferred options and committed to progressing the development of these mechanisms.

3.2. Responses to the March 2011 consultation confirmed that progressing the development of the MA and MMM was appropriate<sup>15</sup>. Some responses also suggested that we further develop the SSR, and others proposed an alternative, larger-scale model of MMM which would support forward products. We have therefore considered the potential benefits and risks of these alternative approaches alongside the further development of the MA and the MMM arrangements presented in March 2011.

3.3. This chapter considers which of these mechanisms can meet objectives one and two identified in the previous chapter. We conclude that a strengthened MA proposal or larger-scale MMM could improve the availability of key hedging products and deliver robust reference prices. However, we have also applied the design principles set out in our summer 2011 open letter and consider that the MA is currently the intervention best able to meet our objectives at least cost and risk. Initial impact assessments summarising our analysis on each mechanism are included at appendix two.

3.4. As noted in the previous chapter, we do not propose to intervene in support of objective three - effective near-term markets – at present, based on market developments and feedback from stakeholders. However, we will continue to monitor developments in this area. If we believe that progress towards our objective has stalled, intervention to support near-term markets – either through extending the focus of the MA to include

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<sup>15</sup> Ofgem's Retail Market Review – update and next steps (liquidity proposals), [http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity\\_Annex%20One\\_Open%20letter.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity_Annex%20One_Open%20letter.pdf)

near-term products or through the MMM arrangements we proposed in March 2011 – remains a possibility.

## Meeting our liquidity objectives

3.1. Figure eight summarises the extent to which we think each mechanism is able to meet our liquidity objectives.

**Figure 8: How different mechanisms meet our liquidity objectives**

	Liquidity objectives		
	Improves availability of forward products	Supports development of robust reference prices	Effective near-term market (met by market developments at present)
<b>MA</b>			
<b>MMM (March proposal)</b>			
<b>Large-scale MMM</b>			
<b>SSR</b>			
<b>DTO</b>			

### Mandatory Auction

*The Mandatory Auction would meet our priority objectives*

3.2. The Mandatory Auction (MA) would require each of the obligated parties to sell a proportion of their generated output in defined products in a regular auction. Other market participants would be free to participate in the auction on either the buy or sell side. Further detail on the design of the MA is set out in chapter four.

3.3. We consider that the MA mechanism is able to deliver the following key benefits which directly support objectives one and two:

- **Regular availability of a range of hedging products** – the MA makes sure that key products are traded on a monthly basis.
- **Potentially improved access to wholesale market** – through influence over platform selection process, Ofgem will seek to ensure that MA facilitates access to trading for all market participants
- **Generation of robust reference prices** - by its nature, the MA would deliver a sharp, transparent price in the range of products it sells.

3.4. As a result, the MA should enhance competition in the generation and supply markets. For suppliers, it provides a reliable market in key products. For generators, it provides an additional route to market, and serves to drive liquidity along the curve.

3.5. Further, the MA we present in chapter four is a strengthened version of our March 2011 proposal. Obligated parties are required to sell (rather than make available) a larger volume (25%) of their generated output in specific products. They will also face rules on their buy-side participation in the auction (see chapter 4) to ensure that the price discovered in the auction is a robust market price. If market developments were deemed insufficient to meet objective three, the MA is sufficiently flexible that we could potentially extend the focus of the MA to support near-term products.

### **Mandatory Market Making (March 2011 Proposal)**

*The March MMM proposal was designed to help market participants shape*

3.6. The MMM proposal put forward in March 2011 was aimed at enabling market participants, and in particular small suppliers, to meet their near-term requirements and to help them balance their positions. This would enable market participants to reduce the costs they face through cash-out. MMM required obligated parties to post bids and offers for a range of near-term (eg day-ahead and intraday) products on an ongoing basis. Other market participants would then be able to trade with the obligated party as long as they were prepared to meet the posted bid or offer. MMM arrangements as proposed was intended to be a small-scale intervention, with each obligated party required to make available 20-50MW at any time. MMM would also potentially include rules to limit the width of bids and offers posted by obligated parties (see below) and for suspending the obligation in certain conditions, for example during periods of high volatility.

3.7. This MMM model received some support from market participants, and we therefore decided to proceed with its development in July 2011<sup>16</sup>. However, it is important to note that a number of respondents to the consultation supported MMM for much larger volumes, and longer-dated products. We discuss this below.

3.8. We still consider that the MMM arrangements we proposed could help to deliver a near-term market which meets small suppliers' shaping needs. However, as discussed in chapter two, we recognise that market developments since July 2011 have lessened the rationale for intervention targeted at near-term improvements.

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<sup>16</sup> Ofgem's Retail Market Review – update and next steps (liquidity proposals), [http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity\\_Annex%20One\\_Open%20letter.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity_Annex%20One_Open%20letter.pdf)

3.9. We recognise the potential for these improvements to stall. We also recognise the potential barriers independent suppliers face when using exchanges, rather than shaped contracts, to meet their shaping requirements (including the practical challenge of trading round the clock) and will be keen to hear about the extent to which developments are meeting their needs. The option of further developing our MMM proposals remains open.

### **Larger-scale MMM in forward products**

*A large-scale MMM would provide continuous availability of forward products but may not generate robust reference prices*

3.10. Some respondents to our March 2011 consultation suggested that the MMM mechanism could be adapted to achieve some of the same goals as the proposed MA. It was suggested that, rather than being a small-scale intervention aimed at enabling companies to meet their near-term shaping requirements, an MMM could support a range of forward products. It was also suggested that the obligated volumes could be equivalent to those proposed for the MA. The key attraction of this large-scale MMM is that it provides continuous availability of key products, thereby potentially meeting objective one.

3.11. It is also anticipated that the continuous posting of bids and offers in forward products would support the development of reference prices along the curve. However, we are concerned that if Ofgem is required to play a role in regulating the bid-offer spreads, this could undermine the extent to which prices are reflective of market fundamentals.

### **Self-Supply Restriction**

*The Self-Supply Restriction would not deliver our objectives and would face practical challenges*

3.12. An SSR would limit – or altogether prevent – the internal transfer of power from the generation to the supply arm of the obligated parties. An SSR was previously in place in relation to the Public Electricity Suppliers (PESs).<sup>17</sup>

3.13. In theory, an SSR could require obligated parties to increase their levels of wholesale trading, potentially delivering significant improvements to bulk liquidity. It could also provide support to competition in both generation and supply markets: if prevented from self-supplying, obligated parties would be forced to both buy from and sell to other market participants. However without additional stipulations it does not ensure the availability of key products, and therefore does not necessarily generate robust reference prices. In effect, the MA we propose incorporates an element of an SSR, yet can be designed to have maximum impact for a more proportionate intervention.

3.14. It is also doubtful that an SSR would lead to substantial additional wholesale market trading in practice. Most of the vertically integrated companies trade multiples of

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<sup>17</sup> The SSR that was previously in place prevented those suppliers who were previously Public Electricity Suppliers (PES) from entering into new purchase agreements with their affiliated generation companies for the supply of electricity to “designated customers” (customers within the previous authorised area of the PES). Ofgem announced the removal of the SSR in 2003. The document assessing the removal of the SSR can be found here: [http://www.ofgem.gov.uk/Licensing/Work/Notices/ModNotice/Archive/4960-Self\\_supply\\_final\\_supply\\_22oct03.pdf](http://www.ofgem.gov.uk/Licensing/Work/Notices/ModNotice/Archive/4960-Self_supply_final_supply_22oct03.pdf)

their generation volumes. These companies would probably already comply with an SSR of 100 percent: it would therefore deliver little marginal improvement.

3.15. Finally, experience of the SSR applied to PESs suggests that it could be difficult to effectively enforce an SSR. For example, it can be difficult to identify power which is self-supplied. Companies also have incentives to avoid the restrictions through establishing complex corporate structures and trading arrangements.

3.16. For all of these reasons we do not believe that the SSR would be an effective way of meeting our liquidity objectives. On this basis, we do not intend to proceed with the development of the SSR at this stage.

### **Direct Trading Obligation (DTO)**

*The Direct Trading Obligation would not secure our objectives*

3.17. The proposal for a Direct Trading Obligation (DTO) was set out in our February 2010 document. It featured an obligation to take all reasonable endeavours to meet trading requests from independent suppliers without unduly onerous terms. It also proposed that obligated parties would have to trade with all market participants on the same terms internal trades between their own generation and supply arms.

3.18. It is possible that the DTO could remove barriers to trading with obligated parties, which could in turn improve the availability of key products. However, its focus is making sure that bilateral contract terms are reasonable and that there is a willingness to trade. The DTO does not more widely make sure that products are traded, and therefore does not generate robust reference prices. The mechanism also received limited support from stakeholders in response to our 2010 consultation, with most respondents suggesting that it would not deliver substantial improvements to liquidity and would be difficult to monitor and enforce.<sup>18</sup> We have therefore not proceeded with the development of the DTO.

### **Mechanisms that can meet our priority objectives**

3.19. Both the MA and the large-scale MMM in longer-dated products are potentially capable of meeting objectives one and two. Below we consider which mechanism is able to also meet our policy design principles, and would therefore be most likely to deliver our objectives at least cost and risk.

### **Measuring mechanisms against our key policy design principles**

3.20. As well as achieving our objectives for liquidity, any intervention must also take account of the key policy design principles we set out in our Summer 2011 open letter.<sup>19</sup> These principles are that any policy intervention by Ofgem should:

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<sup>18</sup> GB wholesale electricity market liquidity: summer 2010 assessment, <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf>














<sup>19</sup> Ofgem's Retail Market Review – update and next steps (liquidity proposals), [http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity\\_Annex%20One\\_Open%20letter.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Liquidity_Annex%20One_Open%20letter.pdf)



- i. align with what currently works well in the market
- ii. not incur significant cost in the event that it is not considered successful
- iii. allow GB to evolve towards becoming an integrated part of a wider European market
- iv. take account of the Government’s Electricity Market Reform (EMR) and developments in EU legislation

3.21. This section considers whether the two mechanisms that are capable of meeting our priority objectives – the MA and the large scale MMM – also reflect our policy design principles. The conclusions are summarised in figure nine:

**Figure 9: How the preferred interventions meet our design principles**

	Meets priority liquidity objectives	Design principles			
		Aligns with what currently works well in the market	Does not impose unreasonable costs	Allows GB to evolve towards becoming an integrated part of European market	Takes account of EMR and EU legislative developments
MA					
MMM (March proposal)		<i>Does not meet priority objectives</i>			
Large-scale MMM					
SSR		<i>Does not meet priority objectives</i>			
DTO		<i>Does not meet priority objectives</i>			

**The large-scale MMM and our key design principles**

*The large-scale MMM could require regulatory influence of the market price*

3.22. As outlined above, a key drawback of MMM is that Ofgem could be required to regulate bid-offer spreads. In the absence of regulation, it would be possible for obligated parties to post high bids and low offers (ie a wide spread). This would make trades through market making unattractive for all other market participants, and would prevent the intervention from meeting its objectives. To address this, Ofgem could set limits on the width of the spreads that could be posted under MMM.

3.23. However, in setting these limits, Ofgem would be impacting the price setting process and thereby potentially undermining the ability for this intervention to meet objective two. This is a more significant concern for a larger MMM obligation than the one put forward in March 2011. In requiring that MMM applies to larger volumes of longer-

dated products, we would be impacting the price setting process for products where trading is currently very thin. This would make setting a 'correct' spread very difficult and does not align with our design principle that the intervention should align with what works well in the market. This challenge is not faced if MMM arrangements are entirely voluntary and not a means of regulatory intervention.

3.24. Similarly, being required to market make for larger volumes exposes the party to significant risk if the allowed spread is too narrow, or is not sufficiently responsive to price movements. Again this means the arrangement could be a costly form of regulatory intervention, and less likely to meet our design principle of incurring costs which are proportionate to benefits.

3.25. Further, we consider that in not directly creating robust reference prices along the curve (especially if regulatory intervention is required), it is less likely that this MMM fully takes account of the EMR programme. As discussed above, it is important for the FiT-CfD mechanism that the contracts are based on robust market prices. Regulatory involvement in the spreads around these prices therefore carries additional risk to the EMR.

### **The MA and our key design principles**

*The MA is consistent with wider policy developments*

3.26. The MA is consistent with key policy developments and can reflect the needs of an evolving wholesale market:

- **European Target Model** - The MA is consistent with the GB market's evolution towards the integrated European market. For example, it will support the use of exchanges, which play an important role in the European target model. While we provisionally expect the MA to initially offer products based on the EFA calendar (see chapter four), to align with current practice in the GB market, in future it could support products based on the standard calendar – as is normal practice in other European markets.
- **EMR** – The MA could support improvements in liquidity in a range of forward-traded products, thereby potentially improving the functionality of the CfD with FiT under the EMR<sup>20</sup>.
- **REMIT** – The MA could further improve the transparency of the GB wholesale market, through the publication of the clearing price from each monthly auction. This reinforces the moves towards greater wholesale market transparency instigated by REMIT.

3.27. However, we also recognise the proposals to reform the Markets in Financial Instruments Directive (MiFID II) and the impacts that these changes could potentially have on market participants trading through the MA (or indeed the MMM). We will continue to monitor these developments as the MiFID II proposals develop to ensure that the potential impacts on Ofgem's intervention are fully taken into account.

*While the MA carries costs, these can be minimised through design*

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<sup>20</sup> Where the CfD is referenced to longer-dated markets.

3.28. We recognise that the MA does impose costs. Obligated parties will face the transaction costs of trading through the MA, such as exchange memberships, transaction fees and credit and collateral requirements. They may also face additional costs if the price they receive for the products sold in the auction is lower than they could achieve elsewhere in the market. However, risk and cost considerations have been prioritised in the design set out in chapter four – we have identified a proportionate volume level for the auction, and propose permitting reasonable buy and sell side participation by obligated parties.

3.29. Other market participants trading through the MA will also face costs, including credit and collateral requirements. We recognise that credit and collateral costs are an issue for some small market participants when accessing the wholesale market. Again, the MA design is key – by requiring the sale of products on a defined platform or platforms (see chapter five), it provides opportunities for market participants to maximise the efficiency of their credit and collateral, by enabling them to do a large proportion of their wholesale trading in one place. Through Ofgem’s influence over the platform selection process, we would seek to ensure that the MA is as accessible as possible for independent market participants.

*We are aware of the risks of unintended consequences*

3.30. Some stakeholders have expressed concerns that the exchange-based MA could affect liquidity in the OTC market, with potential implications for market participants’ ability to trade continuously in that market. However, we believe that the MA is unlikely to have significant negative effects on the OTC market. An obligation of the size we envisage (ie 25% of the obligated parties’ generated output) would be equivalent to five percent of the OTC market. While this is sufficient to achieve our liquidity objectives, it is unlikely to have any serious negative impacts on liquidity in the OTC market.

3.31. In fact, we believe the MA has the potential to have positive impacts on the OTC market. Participants may need to trade outside of the auctions, and new participants could be attracted to the market. In addition, obligated parties may need to enter OTC markets in order to secure the products they are obligated to sell through the MA. Finally, we would expect a clearing price to be published after each monthly auction, thereby also providing a potential useful reference for the pricing of OTC contracts, giving market participants greater confidence.

*The potential benefits of the MA outweigh the costs and risks*

3.32. While we recognise the costs and risks associated with the MA, we believe these are reasonable, proportionate and can be mitigated through the detailed design of the intervention. We say more about this detailed design in chapter four. We also believe that the costs and risks are outweighed by the benefits to consumers of achieving our priority liquidity objectives – availability of products that support hedging and robust reference prices – and that the MA is an effective way of achieving these objectives. The current MA proposal is not focussed on achieving our third objective – effective near-term markets – but we believe there is a lessened rationale for intervention in support of this objective at present. Should such intervention become necessary in future, the MA could be modified, or we could develop our MMM proposals further.

3.33. Ultimately, the MA could help to lower barriers to entry in the generation and supply market, increasing competitive pressures in these markets. This could result in downward pressure on prices, as well as improved choice and quality of service for consumers.

## 4. Proposed detailed design features

### Chapter Summary

In this chapter we set out how our strengthened Mandatory Auction (MA) model has been developed. We set out several key proposed design aspects, and our rationale for each. The model we put forward reflects feedback from stakeholders. In setting out these detailed proposals we aim to road test our proposal with stakeholders.

The design presented here is focussed on meeting our current priority objectives, but it could be adapted to respond to positive or negative market developments.

**Question 8: Do you agree with the key features of the MA we have set out?**  
**Question 9: Do you consider it appropriate to have buy-side rules in place and do you have any comments on the detail of such rules?**

### Detailed design of the Mandatory Auction

4.1. As set out in chapter three, we consider that the MA can be designed to deliver our key objectives in accordance with the design principles we set out in our June 2011 open letter. We have therefore developed the detailed design of the MA mechanism based on these design principles, as well as feedback from stakeholders. We have been mindful of the following messages:

- It is important that products can be bought and sold by parties other than those who are obligated to take part in the MA
- Bids and offers need to reflect market prices, including the cost of generation
- Any MA needs to provide reliable access to products – eg products should be available in each round
- The MA should attract a range of participants, and thereby facilitate the development of innovative ways to access to the wholesale market for those market participants that find it difficult to do so at present.

4.2. With these messages in mind, we have developed the proposed MA summarised in figure 11. In this chapter we set out how each of the design aspects has been developed and present our rationale. The purpose of this chapter is to facilitate the road testing of our proposals with stakeholders.

4.3. However we recognise that the market is evolving, and that the focus of our objectives may change. Therefore while key aspects of the design presented here are focussed on meeting objectives one and two, we also indicate how the intervention could adapt to allow us to reflect either positive or negative market change.

4.4. The ways in which the MA obligation is formulated and implemented via licence conditions may vary to reflect how the platform or platforms are identified. We discuss the different options for platform selection in chapter five, and provide illustrative licence conditions in appendix 4.

### **Nature of the obligation**

#### *Updated position*

4.5. In March 2011, we did not specify whether an obligation to take part in the MA would require obligated parties to make products available for sale or to actually sell them. Our current MA proposal places an obligation on parties to sell a defined proportion of their generation in accordance with the guidelines of the auction. This obligation would mean that certain products must be sold in minimum volumes each month, on a certain platform or platforms<sup>21</sup> and in accordance with detailed rules. In total over the course of a year, the minimum volume sold in these products would amount to 25% of the obligated parties' generated output (equivalent to 50 TWh: more than 40 per cent of household electricity demand).

#### *Rationale*

4.6. Requiring that obligated parties actually sell key products should help the MA to support both sides of the market. It should make sure that products are regularly available to market participants and that the auction will reliably clear and generate reference prices. Requiring that the obligated parties potentially support both sides of the market should also help the MA to be a useful trading tool for both independent sellers and generators, thereby fulfilling some of the functionality of MMM arrangements, and further reducing the need to take both interventions forward at this time.

4.7. However we recognise that there are risks associated with obligated parties being potentially active on both the buy and sell-side, notably that this could inhibit access to the products for other market participants. Below we describe possible buy-side rules to address this issue and ensure robust auction outcomes.

## **Participation**

#### *Updated position*

4.8. In March 2011 we suggested that the obligation should apply to the six large, vertically integrated energy companies in the GB market (the 'Big 6'). Following analysis of the consultation responses, we still think this is consistent with our objectives.

#### *Rationale*

4.9. The purpose of the MA is to facilitate more effective competition in generation and supply markets. We think it is most consistent with our objectives for the obligation to

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<sup>21</sup> Determined in accordance with the chosen delivery model – see chapter five.

be placed on the large, vertically integrated companies with a significant position in both the generation and the supply (particularly domestic supply) market<sup>22</sup>.

4.10. These six organisations collectively account for the vast majority of power generation and domestic supply in GB. In the case of domestic supply (which accounts for around 36 percent of the total supply market), they hold around 99 percent of market share<sup>23</sup>. They also control around 70 percent of the generation market. Given their substantial market position, we expect that imposing the obligation on the Big 6 should bring about an improvement in the competitiveness of these markets while avoiding the imposition of unnecessary or disproportionate costs across the industry more widely.

4.11. By virtue of being vertically integrated to a significant degree, the Big 6 already have commercial reasons to both buy and sell wholesale products. We expect that being obligated to do so does not require that they take on the risk of an activity they would not normally engage in. This is in contrast to a party which was only, for example, on the generation side of the market (or was balanced to a lesser degree). Such a party could find that in being obliged to sell a product, they also have to be active on the buy-side. In such an event they could find that they have purchased power which they need to trade again (rather than supply to customers as a vertically integrated company would be able to). Therefore we consider that applying the obligation only to the Big 6 is consistent with our design principle of making sure that intervention does not impose disproportionate cost. Our present view is that the arrangement presented here does not leave obligated parties exposed to significant risk.<sup>24</sup> In contrast, we consider that extending the obligation to non (or less) vertically integrated generators could impose disproportionate risks and costs. There is also a risk that it could constrain their trading options and impose barriers to entry in the supply market (for example if the obligation was triggered by any level of vertical integration) and thus undermine the goal of intervention of improving competition in the generation and supply markets.

## Products

### *Updated position*

4.12. In March 2011 we proposed that the auction should offer a range of near-term to longer-dated products. We also suggested that a number of shaped products could be supported. This proposal met with some support. In particular, independent suppliers were keen to see a range of products available. However, a theme from our 21 July stakeholder event was that liquidity in longer-dated products was a priority. In particular, liquidity beyond the front-month could be improved – and there could be benefit in stretching the curve.

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<sup>22</sup> This is supported by our findings, in the RMR, that low liquidity was continuing to contribute to stagnant market structure with limited entry and exit in the GB domestic supply market: The Retail Market Review: findings and initial proposals, <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Markets/RetMkts/rmr>

<sup>23</sup> <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Markets/RetMkts/rmr>

<sup>24</sup> For example, obligated parties will be able to participate on both sides of the auction.

4.13. Our developed proposal is that, each month, the MA intervention ensures that a range of key hedging products are sold. Reflecting feedback from stakeholders, the products would be physical rather than financial, and available in small clip sizes.

4.14. Figure ten sets out an indicative list of products and volumes that could be supported by the MA. However, we are keen that the products supported by the MA reflect the needs of market participants. Consequently this is one area we are particularly keen to road test with stakeholders. Additionally, our Governance principles (see below) would make sure that there was sufficient flexibility over time for the products offered to adapt to meet market needs.

**Figure 10: Indicative product list**

<b>Indicative list of products and volumes</b>		
<b>Products</b>	<b>Annual Volume</b>	
	<b>Baseload</b>	<b>Peak</b>
<b>Balance of Front Month</b>	<b>1.3 TWh</b>	<b>1.3 TWh</b>
<b>Month+1</b>	<b>1.3 TWh</b>	<b>1.3 TWh</b>
<b>Month+2</b>	<b>1.3 TWh</b>	<b>1.3 TWh</b>
<b>Quarter+1</b>	<b>2.6 TWh</b>	<b>1.9 TWh</b>
<b>Season+1</b>	<b>5.3 TWh</b>	<b>2.6 TWh</b>
<b>Season+2</b>	<b>5.3 TWh</b>	<b>2.6 TWh</b>
<b>Season+3</b>	<b>5.3 TWh</b>	<b>2.6 TWh</b>
<b>Season+4</b>	<b>5.3 TWh</b>	<b>2.6 TWh</b>
<b>Season+5</b>	<b>5.3 TWh</b>	<b>-</b>
<b>Annual Total</b>	<b>49.2 TWh</b>	

*Rationale*

4.15. To produce the list in figure ten, we have conducted analysis to better understand independents' trading needs and to identify gaps in the current wholesale market. The key findings from this work are summarised in appendix three and we hope to build on it through further discussions.

4.16. We want the MA arrangement to provide market participants with access to an improved range of products and signals. In particular, we think it can deliver the objectives which we do not think are currently met:

- improved availability of forward products; thereby helping market participants to better manage risk

- improved development of robust reference prices along the curve; thereby providing improved longer-term market signals.

4.17. If market progress stalled and objective three ceased to be met, the MA could be adapted to focus on near-term products. Similarly, if the market developed towards meeting our objectives, the focus of the MA could be narrowed further.

4.18. In light of present market developments, we think that having a range of products available is important. We recognise independents' (and in particular small suppliers') concerns that any intervention should help them to access the products they need in a cost-effective way. Our indicative product range constitutes a 'one stop shop' which can provide a range of risk management tools in one place – and therefore helps with the efficient use of resources, including credit and collateral. We recognise that the extent to which this develops is partially contingent on how the MA is run on any platform or platforms (see chapter five).

4.19. The volumes we have allocated to the products in figure ten are also indicative, but reflect our goals of making sure that the intervention delivers a useful range of hedging tools and a meaningful price. We suggest this would be achieved by requiring the sale of greater volumes of products which have a larger contract size.

4.20. In recognition of both developments in the near-term market (see chapter two) and feedback received at our July stakeholder event, we are not currently proposing that the auction offers shaped products. We note the following, and welcome views:

- the market is increasingly providing near-time tools to meet shaping needs
- it is more aligned with the market (ie in accordance with our design principles) that any intervention enhances trading in standard products
- standard products could attract interest from a range of intermediaries who could facilitate access to shaped products for independent market participants<sup>25</sup>

4.21. Finally, we note industry discussions on moving from Electricity Forward Agreement (EFA) products to products based on a standard calendar, as is common in other European markets. We recognise the potential benefits for liquidity that such a move could deliver. It could also help to facilitate the European integration of the GB market, as discussed in chapter two. We therefore welcome views on whether, how and when any such move should be reflected in the MA.

## Volume

### *Updated position*

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<sup>25</sup> Including diverse participants such as financial players and industrial and commercial (I and C) consumers.



4.22. In March 2011 we proposed that the obligated parties would be required to put 10-20% of their generation output through the auction. We considered that, at the lower end, this was reflective of cases where similar arrangements had been put in place globally to address market power concerns. For example:

- in France, the Virtual Power Plant (VPP) auctions introduced for EDF in 2001 are applied at 10% of generation
- in Texas, the VPP auctions introduced in 2001 for the three largest incumbent suppliers were set at a minimum of 15% of capacity.

4.23. However stakeholders were keen to see a more detailed justification for the volume level. Having undertaken further analysis to determine a level which meets our objectives, we consider, in view of the objectives we are aiming to achieve, that the MA auction volume for any given year should be the sum total of 25% of each of the Big 6's generated annual output. This would be sold in defined products each month. If the market were to develop to meet our objectives, we would be able to revise the obligated volume level downward accordingly.

#### *Rationale*

4.24. The MA needs to be able to provide a valuable trading tool for independent market participants and to be able, if necessary, to offer a range of key longer-dated products. It is also important that when these products are traded, a reliable reference price is generated.

4.25. At the same time, we are mindful of our design principles. We do not consider it appropriate for the MA to impose a disproportionate level of cost. In other words, identifying an appropriate volume level requires that potential benefits and costs are balanced. Box 1 summarises the drivers of cost and benefit, and describes how we think a 25% obligation may achieve the correct balance.

4.26. A further design principle is that the MA should align with what works well in the market. The intention is to build on, rather than to replace, existing trading facilities. To this end, we note that a 25% MA represents around five percent of the overall traded power market in GB. We would hope that other forms of trading, including Over the Counter (OTC) trading, would continue to develop alongside the MA arrangement; and that this trading may benefit from increased participant diversity and sharper prices.

#### *Calculation*

4.27. We suggest that an obligated party's annual obligation is calculated ex ante in GWh using data which captures the volume of energy they and their affiliates produced in the previous year. We propose that:

- production energy account data<sup>26</sup> is used, aggregated over the course of the previous year for each party and its affiliates

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<sup>26</sup> As collected by Elexon.

- this would include output from generation plant which is not owned by the obligated party, but which has been reallocated to the production account of the party or their affiliates due to a tolling agreement
- an annual information request is completed in which obligated parties notify us of the product energy accounts which are to be included in the calculation of its obligation.

### Box 1: Identifying an appropriate volume level – balancing benefits and costs

#### Benefits

25% of the Big 6's current generation equates to approximately 50TWh in 2011. By way of context, this is over 40 percent of the volume of electricity supplied in the GB domestic market. This suggests that, over time, an auction of 25% could feasibly support current independents and new entrants.

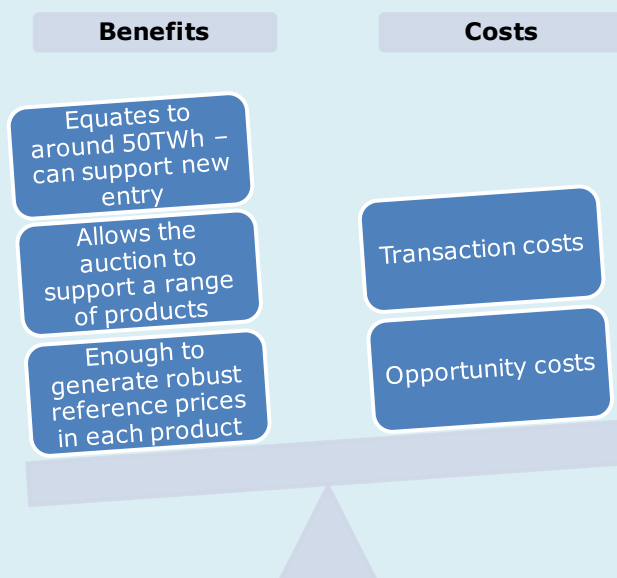
In this chapter we also describe and explain the indicative product list in more detail. Clearly the question of the appropriate volume level is linked to the breadth of the desired product list. Having developed the indicative product list in accordance with stakeholder feedback, we think that a volume requirement of 25% could support enough trading in each product in each auction round. Further, it requires that each obligated party trades a non-trivial amount in each product in each auction. This is essential if the auction is to reveal meaningful prices.

#### Costs

Some costs are one-off, or do not increase markedly with a bigger volume requirement. These include set-up and monitoring costs. However other costs are more closely linked to volume. These include:

- transaction costs
- opportunity costs (if prices vary between the MA and other platforms)
- possible additional costs related to the potential inefficiency of being required to make trading decisions which aren't purely commercial.

Our initial analysis suggests that if the volume level is set at 25 percent, the costs of the MA would not be disproportionate to the benefits.



## Frequency

### *Updated position*

4.28. In March 2011, we proposed that the MA should require that products are auctioned on a monthly basis. There was some support for this – though we note that some stakeholders were in favour of more frequent auctions.

4.29. Overall, our view is currently unchanged. Developments in the near-term market have arguably reduced the rationale for more frequent auctions and our provisional view is that a monthly frequency is appropriate for the auctioning of longer-dated products. This intervention is currently not intended to affect the means by which market participants continue to meet their near-term needs.

## Governance and safeguards

### *Updated position*

4.30. In March 2011 we proposed that an independent trustee could be appointed to ensure that the auction was run in accordance with our objectives. There was support from stakeholders that some degree of involvement from Ofgem could be required. However there was also concern that too much involvement – specifically in relation to reserve price setting – could undermine the MA's ability to generate trusted market signals. This was further echoed in our roundtable on 21 July 2011.

4.31. We have aimed to clarify the principles of our approach to governance and present these in box 2. Our current view is that Ofgem should not need to play a role in regulating reserve prices if obligated parties are required to actually sell specific products in each auction round. However we would require compliance with buy-side rules, designed to make sure that (i) obligated parties are unable to foreclose the auction and, as a result (ii) the auction delivers prices which reflect market supply and demand. Indicative rules are also presented in box 2.

### *Rationale*

4.32. We have aimed to derive governance principles which are consistent with our design objectives. We intend for any MA arrangement to align with what works well in the market, and to that end it is preferred that the mechanism is robust with limited need for direct regulatory involvement (eg in setting reserve prices).

4.33. However, it is essential that the MA arrangement is trusted and generates reliable signals. An obligation to sell potentially introduces an incentive for vertically integrated obligated parties to sell at a very low price and buy at a very high price. If all obligated parties were to pursue a similar strategy, this could result in the following outcomes:

- the auction clears at an artificial price – potentially very high
- obligated parties buy all the generation that they sell – so they remain in balance and there is no surplus market for independent players

4.34. The proposed buy-side rules outlined in box two restrict this behaviour by making sure that obligated parties:

- cannot buy exactly the amount that they sell – thereby making sure that there is always a market for the surplus
- offer to buy and sell at prices that are reflective of market prices.

4.35. These rules make sure that auction participants who offer a competitive price are able to trade. Obligated parties would always be 'long' or 'short' in the auction. Any attempt to present an unreflective bid or offer (which does not reflect market value) would result in actually having to buy or sell at this price – which implies selling below cost, or buying at an inflated rate.

4.36. As with other design aspects of the MA, we remain open to alternative suggestions or alterations to our design. We also recognise that competitive pressures could prevent this behaviour from occurring – but presently remain of the view that a safeguard is warranted.

## **Box 2: Proposals to make sure the MA arrangement is fit for purpose**

### *Governance principles*

We propose that Ofgem does have a role to play in the governance of an MA arrangement. Different approaches to identifying the platform (see chapter five) mean that the structure of the arrangements for setting up and governing the MA could take different forms. However the same principles would be common to both. These would be that:

- Ofgem oversight of the MA arrangement is essential. However, we do not intend to regulate prices
- industry engagement in the set-up and ongoing implementation of an MA arrangement is key
- the MA arrangement must be adaptable to reflect ongoing market developments.

### *Buy-side rules*

In accordance with our concern that Ofgem should not regulate reserve prices, we favour a mechanism which results in obligated parties revealing market prices for the products they sell. We consider that rules developed along these lines could prove effective. However we would envisage refining them with stakeholders and auction design experts.

#### **Obligated parties: Illustrative MA buy-side rules**

Obligated parties must sell minimum volumes in defined products in each auction round. They are not prevented from buying products in the auction and reserve prices are allowed. However, if they do participate on the buy-side they must:

1. Offer to buy more or less than the volume they are selling (eg at a minimum 20% more or less); thereby making sure there is an amount in the auction which they are not matching with their own buy or sell volume
2. Offer to buy or sell this unmatched amount at the same price as that bid/offered for the obligated product

**Figure 11: Key proposed design features for an MA which meets our priority objectives**

Design Aspect	Key Features	Rationale
<b>Participation</b>	<ul style="list-style-type: none"> <li>• Big 6 obligated to sell defined products in each auction</li> <li>• Non-obligated parties can take part on the buy or the sell side</li> </ul>	<ul style="list-style-type: none"> <li>• It is appropriate that those companies with a significant position in both the generation and supply markets are responsible for discharging the obligation to improve those markets</li> <li>• Vertically integrated companies have a reason for buying and selling power, meaning they can manage the risks of holding the obligation through participation on the buy side of the auction</li> </ul>
<b>Products</b>	<ul style="list-style-type: none"> <li>• Our indicative list includes products from front month to season+5</li> <li>• Volumes each month would be sufficient to provide a 'one stop shop' for products needed for hedging</li> </ul>	<ul style="list-style-type: none"> <li>• Our indicative product list aims to provide a one-stop shop with a range of hedging products needed by market participants</li> <li>• It is informed by submissions received from a range of independent generators and suppliers (see appendix four). However, we will be keen to hear views from stakeholders on the appropriate products to be supported by the auction</li> <li>• Requiring the sale of products in this list will also generate robust reference prices along the curve</li> </ul>
<b>Volume</b>	<ul style="list-style-type: none"> <li>• Volume sold is equivalent to 25% of Big 6's generated output (around 50TWh based on 2011 data)</li> </ul>	<ul style="list-style-type: none"> <li>• 25% is sufficient to improve availability of products that support hedging</li> <li>• 25% is also enough volume to make sure that sufficient trading in each product takes place in each auction to provide a robust reference price</li> <li>• Greater volumes could impose disproportionate costs on market participants, which could be passed on to consumers</li> </ul>
<b>Governance</b>	<ul style="list-style-type: none"> <li>• Ofgem-led governance arrangement based on clear principles</li> <li>• No regulation of reserve prices</li> <li>• Two alternative approaches for platform selection (see chapter five)</li> </ul>	<ul style="list-style-type: none"> <li>• The MA must be robust, trusted by market participants and capable of achieving our liquidity objectives. Consequently there must be clear principles governing its operation</li> <li>• However, it must also align with what works best in the market and be flexible enough to respond to market developments. Ofgem will therefore not be involved in the day-to-day running of the auction (eg through the setting of a reserve price)</li> </ul>
<b>Safeguards</b>	<ul style="list-style-type: none"> <li>• Big 6 subject to rules governing buy-side participation in the auction</li> </ul>	<ul style="list-style-type: none"> <li>• Buy-side rules are necessary to ensure that all parties are able to benefit from trading in the auction</li> <li>• The rules will also ensure that the price discovered by the auction is reflective of market fundamentals</li> </ul>

## 5. Identifying a Platform

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### Chapter Summary

In this chapter we set out two broad approaches to identifying the service provider or providers underpinning the Mandatory Auction (MA) arrangement. We would envisage the same product range and high level governance principles operating under each approach.<sup>27</sup> Under approach one, Ofgem would run a tender for a platform services provider and determine and oversee, with stakeholders, the key features of the arrangement. Under approach two, Ofgem still determines and oversees, with stakeholders, the features any service provider would have – but the obligated parties themselves identify the platform or platforms.

**Question 10: Do you consider that there are benefits and risks to the approaches that we have not identified?**

**Question 11: Which approach do you consider is best placed to deliver our objectives at least in terms of cost and risk?**

**Question 12: Do you consider that both approaches are able to meet our objectives?**

### Role of the auction services provider

5.1. The MA requires that certain products are auctioned each month. This requires a platform on which the products are sold. We expect that any platform provider offering the MA service would be able to offer:

- an external interface with buyers and sellers
- a robust auction mechanism which brings together bids and offers
- the function to collate and report important data, such as prices and volumes
- clearing facilities.

5.2. In recognition of stakeholders' concerns that Ofgem's intervention should not further fragment the market, this infrastructure could be provided by an existing platform or platforms.

5.3. We expect that a number of current or potential service providers may be interested in supporting our MA proposal. However, we will be carrying out further market sounding to help us establish exactly what infrastructure is required. This may include conducting further market testing to help us understand more about the requirements of interested parties and potential timescales.

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<sup>27</sup> Although the detailed governance framework may vary slightly under each approach – see appendix four.

## Meeting our objectives and design principles

### One platform vs multiple platforms

5.4. The MA design set out in chapter four requires that key products are sold in defined quantities each month. Reliable product availability is key to meeting objective one, and could occur on one or multiple platforms. To meet objective two, it is important that the MA generates robust reference prices. This appears most likely to be met by pooling the sales volumes in one place. However, we note that if price data could be brought together across platforms (for example by means of a 'virtual hub' arrangement), then the platforms on which the products are actually sold becomes less important to meeting this objective.

5.5. We also note that selecting only one platform for the MA may not reflect our design principle of aligning with what works well in the market. In making this choice, we would potentially exert significant impact on the exchange market which could ultimately reduce the trading options available to both the obligated parties and other traders.

5.6. Overall, in our view the MA could operate successfully on either one or multiple platforms.

### Identified by Ofgem vs identified by the obligated parties

5.7. One option is for Ofgem to run a tender to identify a service provider. This would allow us to control the delivery timeline (and to take on the costs of running the process ourselves). We would also be able to select a platform we think best meets the needs of the market – for example driving towards improved accessibility and reasonable terms for smaller, independent participants. Finally, having an Ofgem-run tender process could also attract a variety of bidders and could help us secure the best deal for stakeholders.

5.8. However, we are mindful of the fact that in making this decision, Ofgem would be identifying a service provider it would not itself be contracting with. We would be shaping a commercial agreement between third parties. Therefore it may be more appropriate for those obligated parties who use the platform or platforms to select them.

5.9. We recognise that one alternative could be for the obligated parties (ie the Big 6) to collectively identify a single service provider. However we are concerned that the co-ordination challenges of this approach could incur significant potential delays and complexity.

5.10. Therefore our two lead approaches are:

- Approach one: Ofgem to identify a single service provider;
- Approach two: Obligated parties to individually identify service providers.



## How the approaches work

5.11. In box three we set out two diagrams which illustrate how the auction would be set up and governed under the two approaches. We discuss these in more detail and provide illustrative licence conditions for the two approaches at appendix four.

### Approach one

5.12. Under approach one, all obligated parties are required to participate in an MA on a platform identified by Ofgem by means of a competitive tender. The details of the auction (including for example what products are sold, and any specific features the platform needs) are set out in an Industry Liquidity Document (ILD). This would be developed by Ofgem in conjunction with a Working Group<sup>28</sup> with industry input and would be maintained by means of a Committee<sup>29</sup>. This allows the auction to adapt to changing needs over time.

### Approach two

5.13. Under approach two, each obligated party is individually responsible for selecting a platform or platforms and making arrangements with their chosen platform provider(s). There are several ways in which this could work, and we set this out in more detail at appendix four. In short, Ofgem would develop a Principles Document (the Principles) in consultation with industry<sup>30</sup>. This document could set out similar requirements (eg products to be sold, any specific platform features) to the ILD – but would not be collectively binding. Instead, individual obligated parties would be required to produce an Annual Methodology Statement to demonstrate how they comply with its requirements. The Annual Methodology Statement would be subject to our approval.

## Risks and mitigations

5.14. In figure 12 below we summarise the key risks of identifying a platform for the MA, and our view of whether they apply to both approaches. In light of the benefits and risks we have highlighted, we welcome stakeholders' views on which approach should be pursued further.

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<sup>28</sup> We expect the working group would comprise of Ofgem, the obligated parties, plus other trading parties (including, but not limited to, independent suppliers and generators) as designated by us.

<sup>29</sup> We expect the Committee would comprise of similar members to the Working Group, as designated by us.

<sup>30</sup> We would expect to consult with a range of stakeholders including the obligated parties, plus other trading parties (including but not limited to, independent suppliers and generators) as designated by us.

Figure 12: Risks and mitigations for the two approaches

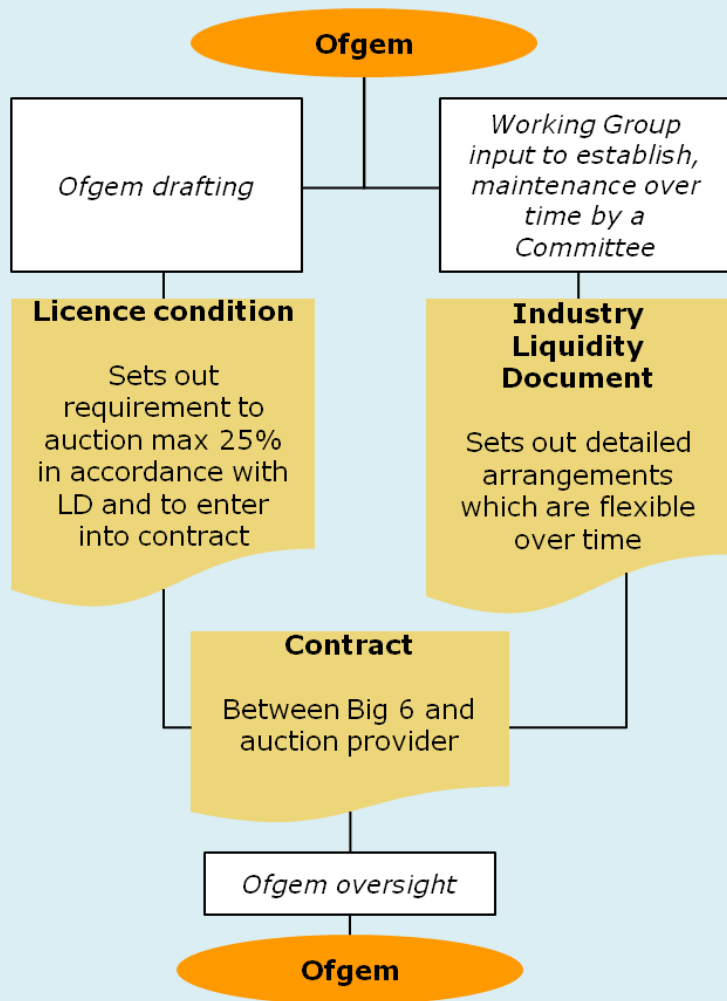
	Risk	Proposed mitigation
Approach one	<b>Ofgem has direct influence over development of exchange market<sup>31</sup></b>	Further market sounding / work with industry (via the Working Group) to get the tender right
	<b>A single provider may create a monopoly<sup>32</sup></b>	Appoint service provider for a limited time period
	<b>A delay to the tender process would cause delay to implementation of the MA and to meeting our objectives</b>	Ensure delivery of the tender process builds on our experience of delivering other complex procurement across Ofgem
	<b>Ofgem would have no direct commercial relationship with service provider once identified</b>	Maintain oversight via monitoring obligated parties' compliance with the Licence Condition, and by extension, the requirements set out in the Industry Liquidity Document
	<b>Obligated parties need to negotiate further with the tender provider to establish contract terms (and this undermines the tender process)</b>	Ensure tender process and high level terms for service providers address need for future flexibility
Approach two	<b>Ofgem has less control over the process</b>	Set out principles which affect the outcome in the Principles Document and approve platform selections
	<b>Requires additional resource from the obligated parties</b>	Set out clear expectations and reasonable timeframes
	<b>The Principles Document fails to create the conditions necessary to meet our overarching policy objectives</b>	Draft the Principles Document in consultation with industry Maintain the right to amend the Principles following consultation if required
	<b>Changes to the Principles document may impact on the contract arrangements between the obligated parties and their service providers</b>	Ensure terms for service providers allow for sufficient flexibility

<sup>31</sup> Note we also have an indirect impact under approach two

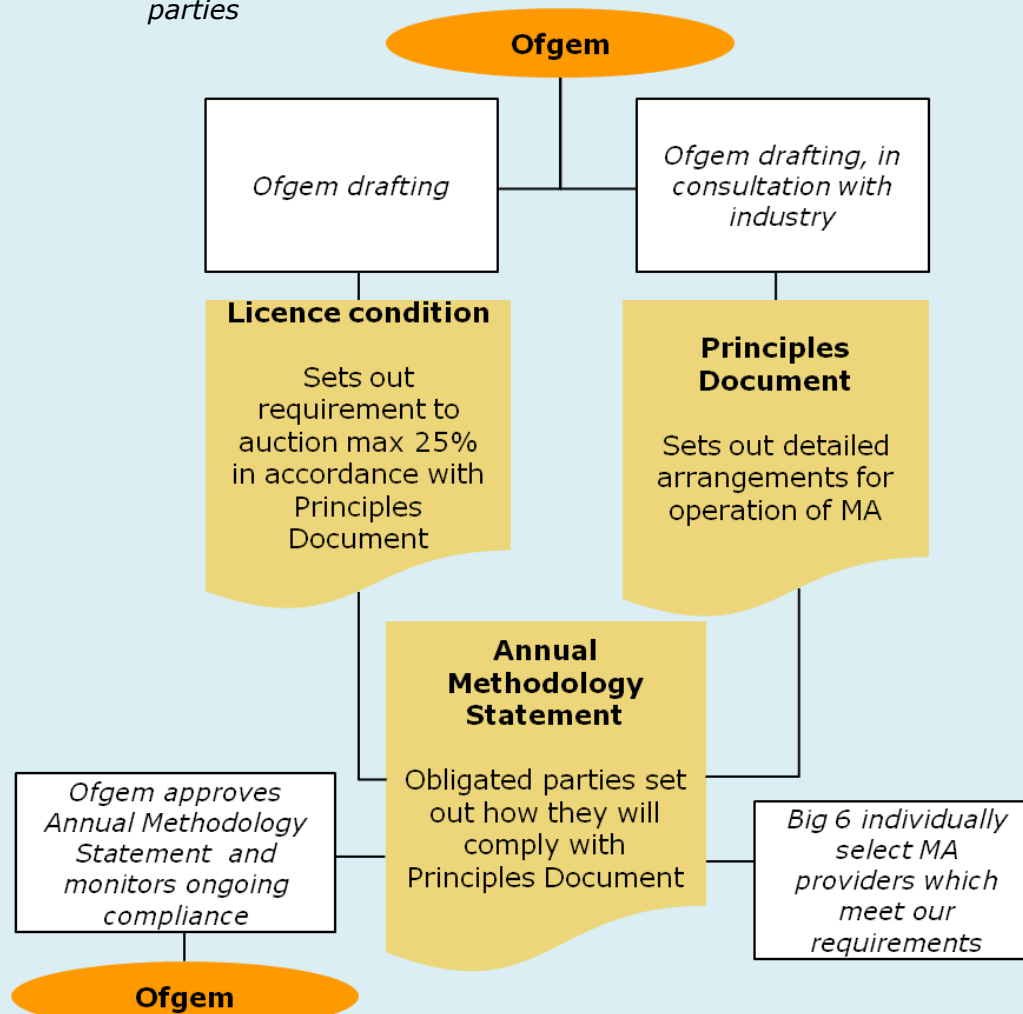
<sup>32</sup> Note that this could also occur if the obligated parties separately identified the same provider

**Box three: How the MA is established under approach one and approach two**

*Approach one: Ofgem-identified platform*



*Approach two: Platform or platforms identified by the obligated parties*



## 6. Next steps: Liquidity roadmap

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### **Dialogue on our objectives and how we can make sure they are met**

6.1. In this document we have set out three objectives for the wholesale market. We think that one of these (objective three - the development of an effective near-term market) is currently being met. However the market is yet to develop a full range of products to support hedging, and does not currently deliver robust reference prices along the curve (and therefore it does not meet objectives one and two). We have therefore presented a developed proposal for a Mandatory Auction (MA) in which obligated parties are required to sell specific products each month. This is stronger than the MA we put forward in March 2011, and reflects our commitment to seeing that our objectives for the wholesale market are realised.

6.2. However, with this focused and adaptable proposal, our intention is to drive, and not to preclude, further industry-led action. In setting out our objectives and how the MA would meet these we invite discussion on how to make sure the market overall delivers what participants need to see. We want participants to be specific about their requirements. We would like to explore how current or future industry-led change could impact how we ultimately design the MA and progress towards a more liquid market. For example, developments could mean it is appropriate for the MA to be implemented at a lower volume level – or with a focus on fewer products. Similarly, its focus could be widened<sup>33</sup> if we were concerned that improvements (for example those in the near-term market) had stalled or reversed. The flexibility of the MA we propose reflects our view that we need to be ready to take action to address any liquidity objective if current or future developments are insufficient. It is therefore essential that we are aware of market developments and have built a robust mechanism.

### **Road-testing the MA**

6.3. It is with a view to building a robust mechanism that this document sets out a detailed MA proposal. This marks the start of a road test for the MA. To capture your views on the appropriateness of both the mechanism and its specific features, we expect to hold workshops with industry participants and to invite stakeholders to meet with us. We will also undergo further internal work. In particular we expect to work with auction design experts, and to undertake market testing to inform our position on delivery. Throughout this time we will also be closely monitoring the market.

### **Key milestones**

6.4. We anticipate publishing a minded-to position and if appropriate, our final proposals, in Summer 2012. Following this further consultation, we would expect to modify the licence in late 2012. Operative parts of the licence condition would be switched on at a later date. For further explanation regarding timing see appendix four.

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<sup>33</sup> Or we could re-consider the introduction of Mandatory Market Making (MMM) obligations.

## Appendices

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### Index

<b>Appendix</b>	<b>Name of Appendix</b>	<b>Page Number</b>
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## Appendix 1 - Consultation Response and Questions

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1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document. In particular, we would like to hear from generation and supply companies, other parties which trade in GB, consumer groups and trading platform providers.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by Tuesday 8 May 2012 and should be sent to:

Camilla Egginton  
GB Markets  
Ofgem  
9 Millbank  
London  
SW1P 3GE  
0207 901 7000  
gb.markets@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to reach a minded-to position in Summer 2012. Any questions on this document should, in the first instance, be directed to Camilla Egginton or Phil Slarks, at the contact details above.

### **CHAPTER: One**

**Question 1:** Do you agree with the objectives we have identified?

**Question 2:** Do you think there are other objectives we should be considering?

### **CHAPTER: Two**

**Question 3:** Do you agree with our views on market developments since summer 2011?

**Question 4:** What specific further developments would be necessary to meet our objectives?

**Question 5:** Do you agree that objectives one and two are current priorities given market developments?

### **CHAPTER: Three**

**Question 6:** Do you agree that the MA is the appropriate mechanism to meet our immediate objectives?

**Question 7:** Do you agree that, at the present time, the other mechanisms identified would not be appropriate for Ofgem to pursue?

### **CHAPTER: Four**

**Question 8:** Do you agree with the key features of the MA we set out?

**Question 9:** Do you consider it appropriate to have buy-side rules in place and do you have any comments on the detail of such rules?

### **CHAPTER: Five**

**Question 10:** Do you consider that there are benefits and risks to the approaches that we have not identified?

**Question 11:** Which approach do you consider is best placed to deliver our objectives at least in terms of cost and risk?

**Question 12:** Do you consider that both approaches are able to meet our objectives?

## Appendix 2 – Outline Impact Assessments

<b>Outline Impact Assessment: Liquidity Intervention Mechanisms</b>		<b>Name of Option:</b>
		<b>Mandatory Auction (MA)</b>
<b>Description of option:</b> Obligated parties must sell a minimum volume in specific products in a monthly auction. Over the course of the year, the total volume sold must be equal to 25% of their generated output. In consultation with industry, Ofgem will specify the range of products that must be sold.		
<b>Does this option meet our liquidity objectives and design principles?</b>		
<b>Liquidity Objectives</b>	<b>Design Principles</b>	
<p><b>Availability of products that support hedging</b> – supports defined range of forward physical products</p> <p><b>Robust reference prices</b> – a single clearing price would be published for each product after each auction</p> <p><b>Effective near-term markets</b> – does not presently meet this objective. However, market developments mean that rationale for intervention in this area is currently lessened</p>	<p><b>Aligns with what works well in the market</b> – exchange-based auctions are a growing part of the GB market</p> <p><b>Does not impose unreasonable costs</b> – For the MA we have designed, costs to obligated parties are proportionate, e.g. the risk of being forced to sell is mitigated by being allowed to participate on the buy-side</p> <p><b>Allows GB to evolve towards an integrated European market</b> – promotes exchange trading, a key aspect of European target model. Products are adaptable - could over time switch to European contract terms (eg non-EFA calendar)</p> <p><b>Takes account of changes resulting from EMR/EU legislation</b> – liquidity in key products supports FIT-CfDs</p>	
<b>Impact on competition and consumers</b>		
The MA can provide access to a range of products that support hedging. This will enable generation and supply market participants to compete more effectively and in particular, removes a barrier to entry in the supply market. This has the potential to exert downward pressure on bills and improve quality and choice for consumers.		
<b>Key costs/risks/unintended consequences</b>		
<p><b>Credit and collateral costs</b> – market participants will face credit and collateral costs from trading through an exchange. These could be prohibitive to small parties. This is mitigated through ensuring that credit and collateral requirements are as competitive as possible (ie through competitive platform selection). Further, offering a range of products in one place, with a single counterparty, enables efficient use of credit.</p> <p><b>Costs to obligated parties</b> – parties may face transaction and opportunity costs from trading in the MA. However, these costs can be mitigated by participation on the buy-side.</p> <p><b>Reduced liquidity in OTC market</b> – the MA could become a substitute for some OTC market liquidity. However, the obligation is equal to only 5 percent of the overall traded market. The MA may in fact lead to more OTC trading, as market participants trade out of positions they have taken in the auction.</p>		
<b>Conclusion</b>		
<b>Preferred option - consult with stakeholders on design detail</b>		



<b>Outline Impact Assessment: Liquidity Intervention Mechanisms</b>	<b>Name of Option:</b>
	<b>Mandatory Market Making (MMM) (March Proposal)</b>
<b>Description of option:</b> Obligated parties must post bids and offers for a range of near-term products (eg day-ahead and intraday), with 5-10 MWh of power collectively available at any time. This will enable market participants to meet their shaping requirements. MMM could include rules to limit bid-offer spreads and to suspend MMM in times of price volatility.	
<b>Does this option meet our liquidity objectives and design principles?</b>	
<b>Liquidity Objectives</b>	<b>Design Principles</b>
<p><b>Availability of products that support hedging</b> – supports only near-term products; no direct support for hedging products</p> <p><b>Robust reference prices</b> – regulation of bid-offer spreads could have significant impacts on prices, meaning prices are not trusted. Does not directly generate sharp prices</p> <p><b>Effective near-term markets</b> – provides a range of near-term products to meet shaping requirements; but this is not a priority objective</p>	<p><b>Aligns with what works well in the market</b> – regulation of bid-offer spreads could result in regulatory impact on market price, thereby not meeting this principle</p> <p><b>Does not impose unreasonable costs</b> – potential to impose significant costs on obligated parties close to gate closure and at times of price volatility</p> <p><b>Allows GB to evolve towards an integrated European market</b> – does not inhibit development towards an integrated European market</p> <p><b>Takes account of changes resulting from EMR/EU legislation</b> – improved near-term liquidity could support FiT-CfDs</p>
<b>Impact on competition and consumers</b>	
MMM could enable market participants to manage their balancing risk. This would enable them to compete more effectively and could contribute to reduced barriers to entry in the supply market. However, it does not provide significant volumes of products, or a wide range – so its impact may be limited.	
<b>Key costs/risks/unintended consequences</b>	
<p><b>Regulation of bid-offer spreads</b> – regulatory limits on bid-offer spreads could impact the market price. This could reduce confidence that the price is based on market fundamentals, with potentially damaging long-term impacts.</p> <p><b>Could expose parties to increased risk</b> – requiring parties to continuously offer intraday products at times of volatility exposes them to greater risk of imbalance, and could potentially increase system costs overall.</p>	
<b>Conclusion</b>	
<b>Keep under review</b>	

<b>Outline Impact Assessment: Liquidity Intervention Mechanisms</b>		<b>Name of Option:</b>
		<b>Longer-dated MMM</b>
<b>Description of option:</b> Obligated parties must post bids and offers for a range of longer-dated products and for a larger volume of product than that intended by the March 2011 proposal. The platform is unspecified. Rules to limit bid-offer spreads could be required.		
<b>Does this option meet our liquidity objectives and design principles?</b>		
<b>Liquidity Objectives</b>	<b>Design Principles</b>	
<p><b>Availability of products that support hedging</b> – makes sure a range of products are traded but does not support access to these products</p> <p><b>Robust reference prices</b> – regulation of bid-offer spreads could have significant impacts on prices. Does not directly generate sharp prices</p> <p><b>Effective near-term markets</b> – does not directly meet this objective, though could be adapted to do so. However, market developments have lessened rationale for intervention in this area</p>	<p><b>Aligns with what works well in the market</b> – regulation of bid-offer spreads could result in significant regulatory impact on market price. Though the existing diversity of trading routes is unaffected</p> <p><b>Does not impose unreasonable costs</b> – potential to impose significant costs on obligated parties at times of price volatility (if the obligation is not removed and if spreads are regulated)</p> <p><b>Allows GB to evolve towards an integrated European market</b> – no direct impact (positive or negative)</p> <p><b>Takes account of changes resulting from EMR/EU legislation</b> – improved liquidity could support FiT-CfDs; though sharp prices are not directly generated.</p>	
<b>Impact on competition and consumers</b>		
Longer-dated MMM could enable market participants to meet their hedging requirements. This would enable them to compete more effectively and lower barriers to entry in the generation and supply markets. However there is no impact on trading routes – so parties would still require multiple GTMAs to trade. Further, regulatory involvement in the market price could deter market entry, thereby limiting improvements in competition.		
<b>Key costs/risks/unintended consequences</b>		
<b>Regulation of bid-offer spreads</b> – regulatory limits on bid-offer spreads could impact the market price. This would reduce confidence that the price is based on market fundamentals. For larger longer-dated products, obligated parties could be exposed to increase risk if bid-offer spreads were regulated.		
<b>Conclusion</b>		
<b>Do not proceed with development at this stage</b>		

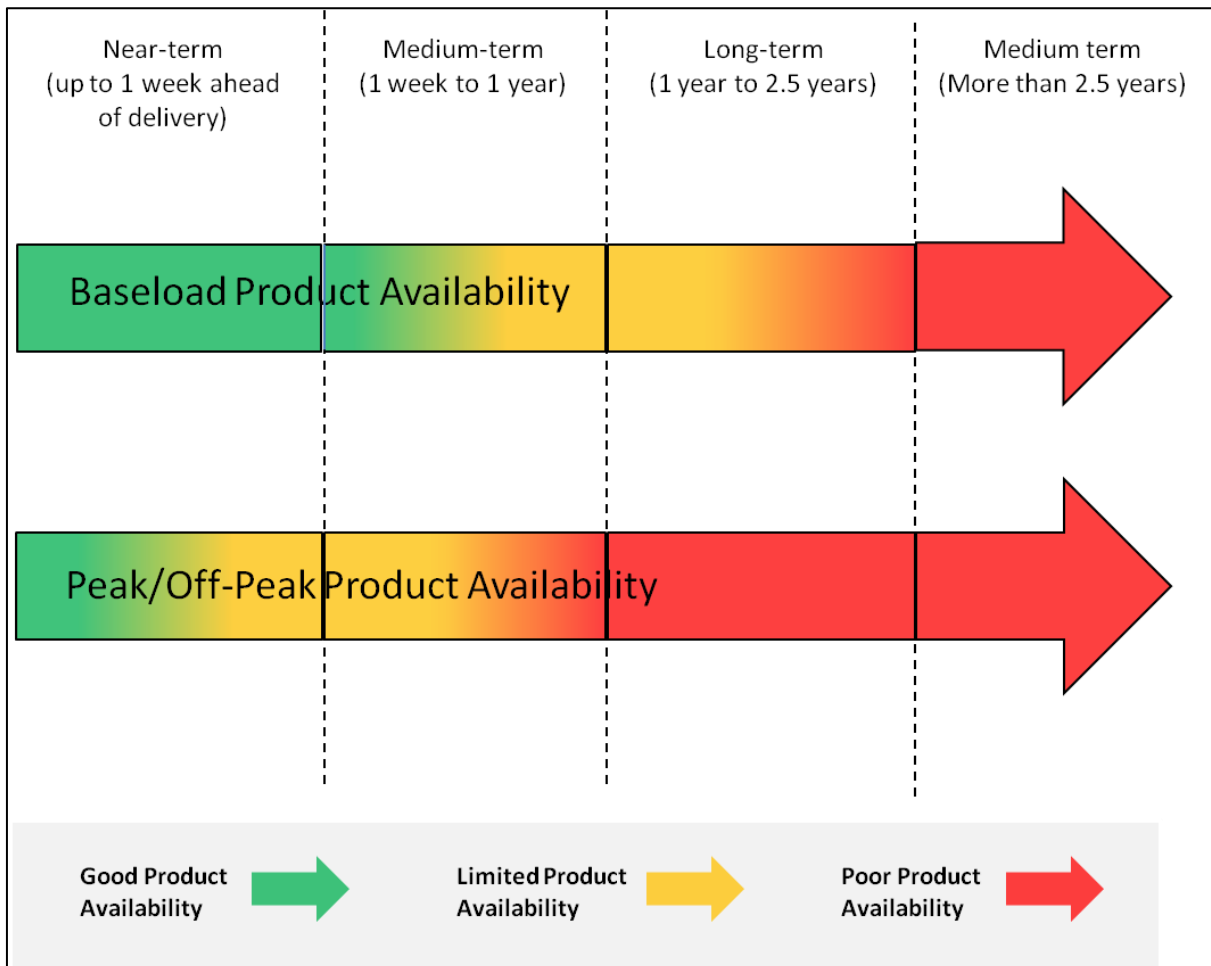
<b>Outline Impact Assessment: Liquidity Intervention Mechanisms</b>		<b>Name of Option:</b>
		<b>Self-Supply Restriction (SSR)</b>
<b>Description of option:</b> Vertically integrated obligated parties would be prevented (either completely, or in part) from selling their own generation to their supply arm.		
<b>Does this option meet our liquidity objectives and design principles?</b>		
<b>Liquidity Objectives</b>	<b>Design Principles</b>	
<p><b>Availability of products that support hedging</b> – would not directly provide key products</p> <p><b>Robust reference prices</b> – in theory, increased overall trading could improve reference prices – although there is no guarantee that reference prices would develop along the curve</p> <p><b>Effective near-term markets</b> – would not guarantee improvements in near-term markets</p>	<p><b>Aligns with what works well in the market</b> – vertically integrated obligated parties already trade substantial volumes in the wholesale market. Therefore an SSR is aligned with the market, but may have limited impact</p> <p><b>Does not impose unreasonable costs</b> – a complete SSR could impose significant costs on obligated parties, and could also incur significant monitoring cost</p> <p><b>Allows GB to evolve towards an integrated European market</b> – no impact</p> <p><b>Takes account of changes resulting from EMR/EU legislation</b> – no certainty that an SSR will boost trading in key products</p>	
<b>Impact on competition and consumers</b>		
The SSR will not ensure that our priority objectives for liquidity are met. This will mean that liquidity continues to pose a barrier to entry and competition in the generation and supply markets, limiting downward pressure on bills and improvements in choice and quality of service for consumers.		
<b>Key costs/risks/unintended consequences</b>		
<p><b>Does not ensure availability of products that support hedging</b> – an SSR does not ensure regular access to the products that market participants need to compete effectively.</p> <p><b>Impact may be limited</b> – Most obligated parties already trade multiples of their generation in the wholesale market. Monitoring and enforcement would be key challenges.</p>		
<b>Conclusion</b>		
<b>Do not proceed with development at this stage</b>		

<b>Outline Impact Assessment: Liquidity Intervention Mechanisms</b>	<b>Name of Option:</b>
	<b>Direct Trading Obligation (DTO)</b>
<b>Description of option:</b> An obligation to take all reasonable endeavours to meet trading requests from independent suppliers without applying unduly onerous terms. Obligated parties could be required to trade with all market participants on the same terms they would apply to carry out an internal trade.	
<b>Does this option meet our liquidity objectives and design principles?</b>	
<b>Liquidity Objectives</b>	<b>Design Principles</b>
<p><b>Availability of products that support hedging</b> – would not ensure availability of particular products needed by market participants</p> <p><b>Robust reference prices</b> – does not ensure robust reference prices</p> <p><b>Effective near-term markets</b> – would not ensure effective near-term markets</p>	<p><b>Aligns with what works well in the market</b> – no impact</p> <p><b>Does not impose unreasonable costs</b> – unlikely to place significant costs on any party</p> <p><b>Allows GB to evolve towards integrated European market</b> – no impact</p> <p><b>Takes account of changes resulting from EMR/EU legislation</b> – no impact</p>
<b>Impact on competition and consumers</b>	
<p>The DTO would only have limited impact on our priority objectives and by extension, on delivering improved outcomes for consumers. It is a small-scale intervention that does not directly require that key products are traded. Therefore the impact on lowering barriers to entry, or providing signals for investment, could be limited.</p>	
<b>Key costs/risks/unintended consequences</b>	
<p><b>Difficulties of monitoring and enforcement</b> – a DTO requires that parties, and Ofgem, are able to take a view of when terms for trading are or are not appropriate. This provides scope for disagreement and could undermine the effectiveness of the obligation.</p>	
<b>Conclusion</b>	
<p><b>Do not proceed with development at this stage</b></p>	

## Appendix 3 – Devising the indicative product list

3.1 Following our March 2011 consultation, we undertook analysis to better understand the particular products that market participants find difficult to access in the market. In addition to comments received in response to our March consultation, we sought views from a range of independent suppliers and generators on the products that are not well supplied by the wholesale market at present. These views are summarised in Figure 13 below:

**Figure 13: Stakeholder responses on product availability**



3.2 While we received a range of responses, a number of key themes emerged:

- Liquidity is generally sufficient in near-term markets (although some concerns were raised about the availability of intraday products).<sup>34</sup>
- However, beyond the front two to three months or the front one to two seasons, liquidity declines sharply. Beyond two years along the curve, liquidity is very poor. This shortage of longer-dated products makes it difficult for market participants to meet their hedging requirements.
- The decline in liquidity along the curve is sharper for peak and off-peak products than for baseload products.

3.3 On this basis, the indicative product list set out in chapter four focuses on providing the longer-dated products that market participants need in order to meet their hedging requirements.

3.4 The indicative list proposes that a proportion of the obligated volumes (less than 20 percent) is allocated to products in the front three months, where liquidity may already be sufficient. Our initial view is that providing limited support to these products is worthwhile, as it will offer users of the MA a 'one stop shop', through which they can meet a significant portion of their wholesale trading requirements. This will reduce trading costs and allow for efficient deployment of credit and collateral.

3.5 However, our product list is only indicative: it is important that the product range supported by the MA reflects the needs of market participants. On that basis, we welcome views from market participants on the product range that should be supported by the MA.

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<sup>34</sup> It is worth noting that this view was expressed prior to recent further improvements in near-term liquidity resulting from increased trading on day-ahead exchange platforms.

## Appendix 4 – Delivery approaches explained, with illustrative draft licence conditions

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4.1 This appendix expands on chapter five, presenting how our two lead delivery approaches could be applied in practice. We set out the key elements of the Mandatory Auction (MA) arrangement under each approach, and present two illustrative draft generation licence conditions (one for each approach) to stimulate further discussion. Please note that including these licence conditions does not represent a formal consultation on these changes.

### Indicative arrangements under approach one

#### Set up and governance

4.2 Under approach one, Ofgem would lead two parallel processes in the lead-up to the modification of obligated parties' licences to include the MA licence condition coming into force:

- the procurement exercise to select and designate the single platform provider
- the development of the Industry Liquidity Document (ILD) which will provide for the ongoing governance of the MA.

4.3 An Industry Working Group would assist Ofgem with these exercises, including providing input on matters such as the procurement procedure, platform specification, tender evaluation criteria, and content of the initial ILD.<sup>35</sup> Ofgem would maintain oversight of the tender process.

4.4 The MA licence condition would require obligated parties to be members of the designated MA platform, and to adopt, keep in force and comply with the ILD. Once the platform was selected by Ofgem's tender process, obligated parties would also be required to sign an agreement with the selected platform provider. This would be the contract under which the platform provider is committed to develop and make available the platform within a specified timetable.

4.5 The ILD would serve two main purposes. Firstly, it would provide further detail regarding the MA obligation under the new licence condition, including:

- how the volume commitment (25% of annual generation) for each obligated party is calculated in detail

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<sup>35</sup> We expect this working group would comprise of the obligated parties, plus other trading parties (including but not limited to, independent suppliers and generators) as designated by us.

- the proportions in which obligated volumes must be sold by way of such products
- any circumstances in which obligated parties might be relieved from the MA obligation
- requirements/restrictions on obligated parties participating on the buy-side in the MA (as discussed in chapter four)
- reporting requirements for obligated parties.

4.6 Secondly, the ILD would set out core aspects of the specification for the platform and the products to be sold through the auction. The ILD would reflect the MA platform specification used in the tender exercise. We anticipate that the Working Group would begin this process sufficiently early to inform the procurement exercise for the platform provider(s). The MA platform specification could cover such areas as:

- specification of the products which must be sold in the MA
- auction design
- potential additional points related to the technical specification of the platform
- membership requirements, to ensure accessibility to participants
- charging requirements, to ensure that the level and methodology of the platform's fees remain in line with its tender, and it cannot exploit the position it will hold as a result of the designation of the platform
- potentially, requirements as to credit, clearing and collateral.

4.7 The chosen platform provider would be required to adopt this second part of the ILD in its rulebook, and would not be entitled to unilaterally modify its rules such that they would be inconsistent with the above. Similarly the platform provider would also be required to modify its rules to reflect certain changes in the ILD (such as to product specification).

4.8 The ILD would also set out how it is to be governed and changed. It is proposed that this should be similar to a very simple code modification process, with an ongoing role for the original Industry Working Group in the form of a more permanent Committee.

### *Timing*

4.9 The operative parts of the MA licence condition would be switched on at the same time that the selected platform provider is designated, the ILD is adopted and the agreement between the platform provider and the obligated party is finalised. There would then be a period required for building and testing the platform, after which the MA would begin operation.



## Indicative arrangements under approach two

### Set up and governance

4.10 Under approach two, Ofgem would establish and consult on Mandatory Auction Principles (at the same time as developing the MA licence condition).

4.11 The MA licence condition would require each obligated party to establish and comply with an Annual Methodology Statement, which must be approved by Ofgem and conform with the Mandatory Auction Principles (the Principles).

4.12 Each obligated party's Annual Methodology Statement would include:

- the platform(s) nominated by that party for use in that year
- the arrangements made with the platform provider to enable the MA to take place on the platform
- how the volume commitment (25% of annual generation) is calculated in detail
- how the party will report to Ofgem to demonstrate compliance with the licence condition and the Mandatory Auction Principles.

4.13 The Mandatory Auction Principles established by Ofgem sets out what each obligated party must provide for in its Annual Methodology Statement, and would include:

- the specification of the auction products
- criteria to be satisfied by any nominated platform
- buy-side requirements or restrictions
- requirements as to the other matters to be included by obligated parties in their Auction Methodologies.

### *Timing*

4.14 The MA licence condition would be switched on at the same time as the Mandatory Auction Principles are issued by Ofgem. There would then follow a period in which obligated parties would develop their Annual Methodology Statements to be approved by Ofgem, and identify and make arrangements with their chosen platform providers. The platform providers might then need to develop or adapt arrangements to provide for the MA.

### Approach two: different approaches to implementation

4.15 Within approach two, there are three main options for how Ofgem could authorise the obligated parties' choice of platform.

- **Open Source, self-certified** – obligated parties would be required to procure their own platforms from any service provider so long as the nominated platform met the requirements of the Principles document. Ofgem would maintain oversight through the Annual Methodology Statement process. This could reduce the timeframe needed to get the platform in place. We would be able to review the appointed platform at the point of the first Annual Methodology Statement to ensure it met the criteria stipulated in the Principles document.

However, depending on the complexity of the auction system involved, this could introduce uncertainty into the contracting process between the obligated party and the service provider. If the nominated platform did not fulfil the requirements of the Principles document, we could reject the Annual Methodology Statement (or approve it with conditions if adopting an iterative approach). This could potentially impact on the contract between the obligated party and the provider.

- **Open Source, Ofgem approved** – obligated parties procure their own platform from a service provider which they identified, but Ofgem would approve the platform prior to the obligated party signing a contract with the service provider. This would formalise the control mechanism for Ofgem approval and give greater certainty at an earlier stage. It lengthens the initial platform appointment process but reduces the risk of complications arising at the Annual Methodology Statement stage.

We anticipate that we would continue to need to approve the obligated party's Annual Methodology Statement. However, our up-front approval of the service provider could represent a more generic approval so that other obligated parties would be able to contract the same service provider with individual terms set out in their own Annual Methodology Statement.

- **Approved short-list** – under this option we would approve a list of platform suppliers and the obligated parties would have to select from that list. This could reduce uncertainty in the contracting process between the obligated parties and their service providers because no further approval step would be necessary. There would be ongoing monitoring through the Annual Methodology Statement process.

However, the effectiveness of this option may depend on the nature of the bidder market. It may only be beneficial to introduce a short list if we anticipate a significant number of bidders wishing to provide the platforms. We will test the implications of this option as part of our market sounding.

4.16 If approach two is preferred, we would aim to provide more detail on how it would work in our minded-to document.

## Illustrative Draft Generation Licence Conditions

### APPROACH ONE

#### Electricity Generation Licence Condition XXX : Mandatory Auction Requirement

- X.1 Paragraphs X.3 to X.18 of this Condition shall be suspended and shall have no effect in this licence until such time as the Authority issues to the licensee a direction in writing ending the suspension and providing for those paragraphs to have effect in this licence with effect from the date specified in the direction.
- X.2 Paragraphs X.3 to X.18 shall cease to have effect in this licence on such date as the Authority may specify in a direction given to the licensee.
- X.3 The licensee shall ensure that, in each Auction Month, a volume of electricity not less than the Monthly Auction Volume is sold by the Licensee and its Affiliates on the Designated Auction Platform in accordance with the requirements of the Industry Liquidity Document.
- X.4 For the purposes of this condition a particular volume of electricity is sold in an Auction Month if that volume is sold under transactions entered into in that Auction Month, irrespective of when such electricity is to be delivered pursuant to those transaction(s).
- X.5 The licensee shall be relieved of the obligation in paragraph X.3 in such circumstances and to such extent and for such period as are provided for in the Industry Liquidity Document.
- X.6 The licensee shall, at all times at which this Condition applies to it, be (and if necessary for its compliance with paragraph X.3, ensure that any of its Affiliates shall be) a member of the Designated Auction Platform, and shall enter into such agreements and do such other things as are required for that purpose.
- X.7 Where the licensee is a Relevant Licensee on the Effective Date, the licensee shall:
- (a) be a party to the Platform Implementation Agreement, and
  - (b) together with all other Relevant Licensees, manage and enforce such agreement in accordance with the requirements in the Industry Liquidity Document.
- X.8 The licensee shall, together with all other Relevant Licensees, prepare and have in force a document (the "**Industry Liquidity Document**") setting out:
- (a) arrangements for giving effect to paragraph X.3, including:
    - (i) the basis for designation of the Designated Auction Platform;

- (ii) the basis for determining the first Auction Month;
  - (iii) provisions for the determination of Annual Generation Volume;
  - (iv) the proportions in which volumes of electricity may or must be sold by way of particular Auction Products in each Auction Month;
  - (v) circumstances where the licensee is relieved (either in whole or in part) from complying with the obligation in paragraph X.3;
  - (vi) any requirement or restriction in relation to the participation of Relevant Licensees or any of their Affiliates as buyer of Auction Products on the Designated Auction Platform;
  - (vii) requirements for Relevant Licensees to report to the Authority in respect of their compliance with this Condition in each Compliance Period;
- (b) provisions for the management and enforcement by the licensee, together with all other Relevant Licensees, of the Platform Implementation Agreement;
  - (c) the modification procedures established by the Relevant Licensees pursuant to sub-paragraph X.10(a);
  - (d) the implementation arrangements established by the Relevant Licensees pursuant to sub-paragraph X.10(b);
  - (e) a specification for the Designated Auction Platform, including the definition of the Auction Products.

X.9 The licensee shall comply with the Industry Liquidity Document.

X.10 The licensee shall, together with the other Relevant Licensees, establish and operate:

- (a) procedures for the governance and modification of the Industry Liquidity Document which conform to the requirements in paragraph X.11; and
- (b) any further arrangements required for the implementation of the Industry Liquidity Document or for the provision by Relevant Licensees of resources required for such implementation.

X.11 The procedures established under sub-paragraph X.10(a) shall:

- (a) establish a committee (the "**ILD Committee**"), whose members are nominated by relevant persons, which is to supervise the governance and operation of the Industry Liquidity Document; and
- (b) provide for the following arrangements for modification of the Industry Liquidity Document:

- (i) modification proposals may be made by any relevant person;
- (ii) modification proposals are brought to the attention of relevant persons;
- (iii) representations made in respect of a modification proposal are considered by the ILD Committee;
- (iv) the ILD Committee decides whether to recommend to the Authority that the proposed modification should or should not be made;
- (v) a modification report is prepared and submitted to the Authority, which shall include:
  - (aa) the specific modification of the Industry Liquidity Document required to give effect to the proposed modification;
  - (bb) a proposed implementation date for the proposed modification;
  - (cc) the recommendation of the ILD Committee in respect of the proposed modification; and
  - (dd) a summary of and copies of all representations made in respect of the modification proposal.

X.12 Where the Authority determines that a modification of the Industry Liquidity Document, proposed pursuant to the procedures established under sub-paragraph X.10(a), would better facilitate the relevant objectives, and gives a direction to the Relevant Licensees to make such modification, the licensee shall, together with the other Relevant Licensees, comply with such direction.

X.13 The "**relevant objective**" is facilitating competition in the generation and supply of electricity, by promoting the development of liquidity in the wholesale electricity market.

X.14 Except with the consent of the Authority, the licensee shall not make or permit any modification of the Industry Liquidity Document other than pursuant to paragraph X.12.

X.15 The licensee shall comply with paragraph X.8, as at the Effective Date, by adopting (together with other Relevant Licensees) as the Industry Liquidity Document the document designated by the Authority by notice to all Relevant Licensees.

X.16 Where the Industry Liquidity Document provides that any matter should be referred to the Authority for decision, the licensee (together with other Relevant Licensees) shall refer such matter to the Authority.

X.17 The licensee shall report to the Authority in respect of its compliance with this Condition in accordance with the Industry Liquidity Document.

X.18 For the purposes of this condition:

"Annual Generation Volume"	means, in relation to an Annual Volume Period, the following amount determined in relation to the period of 12 months ending 30 September in the preceding year: [ <i>definition to be included of Licensee's and its Affiliates' generation volumes – see consultation document</i> ].
"Annual Volume Period"	means a calendar year in which any one or more Auction Months fall.
"Auction Month"	means a calendar month commencing on or after the date determined under the Industry Liquidity Document.
"Auction Products"	means the traded electricity products which may be sold and purchased on the Designated Auction Platform.
"Designated Auction Platform"	means the auction platform for the time being designated by the Authority pursuant to the Industry Liquidity Document.
"Effective Date"	means the first date with effect from which (pursuant to a direction of the Authority) paragraphs X.3 to X.18 of this Condition are to apply in any generation licence.
"Industry Liquidity Document"	has the meaning given in paragraph X.11.
"modification proposal"	means a proposal to modify the Industry Liquidity Document.
"Monthly Auction Volume"	in relation to each month in an Annual Volume Period, means that percentage (not exceeding 25%), specified in the Industry Liquidity Document, of one twelfth of the Annual Generation Volume for that Annual Volume Period.
"Platform Implementation Agreement"	means an agreement, in a form designated by the Authority, to be entered into by Relevant Licensees and the operator of the Designated Auction Platform, providing for the design, build, testing, trialling and commencement of operation of the Designated Auction Platform.
"Relevant Licensee"	means the holder of a generation licence in which paragraphs X.3 to X.18 of this Condition have effect pursuant to a direction under paragraph X.1.
"relevant person"	means each Relevant Licensee, each other person holding a generation licence or a supply licence, the operator of the Designated Auction Platform, the Authority and such other persons or bodies as may be designated by the Authority.

## APPROACH TWO

### **Electricity Generation Licence Condition XXX : Mandatory Auction requirement**

- X.1 Paragraphs X.3 to X.13 of this condition shall be suspended and shall have no effect in this licence until such time as the Authority issues to the licensee a direction in writing ending the suspension and providing for those paragraphs to have effect in this licence with effect from the date specified in the direction.
- X.2 Paragraphs X.3 to X.13 shall cease to have effect in this licence on such date as the Authority may specify in a direction given to the licensee.
- X.3 The licensee shall ensure that, in each Auction Month, a volume of electricity not less than the Monthly Auction Volume is sold by the licensee and its Affiliates by way of Specified Auction Products pursuant to a Monthly Auction on a Nominated Auction Platform in accordance with the licensee's Auction Methodology.
- X.4 For the purposes of this condition a particular volume of electricity is sold in an Auction Month if that volume is sold under contract(s) entered into pursuant to a Monthly Auction held in that Auction Month, irrespective of when such electricity is to be delivered pursuant to those contract(s).
- X.5 The licensee shall be relieved of the obligation in paragraph X.3 in such circumstances and to such extent and for such period as the Authority may (upon the application of the licensee or otherwise) from time to time specify in a direction to the licensee or to Relevant Licensees collectively.
- X.6 The licensee shall ensure that any Buy-side Participation Requirement is complied with by the licensee and its Affiliates in respect of each Monthly Auction.
- X.7 The licensee shall have in force a methodology, which the Authority has approved as being consistent with the Mandatory Auction Principles and otherwise as consistent with achieving the relevant objective, which shall set out:
- a) the identity of each Nominated Auction Platform;
  - b) an explanation of the basis on which the criteria in the Mandatory Auction Principles are satisfied in relation to each Nominated Auction Platform, including any arrangements made by the licensee with the operator of such platform for the purposes of satisfying such criteria;
  - c) how the Annual Generation Volume for an Annual Volume Period will be determined;
  - d) the basis on which the licensee will report (or ensure reporting) to the Authority each month in respect of its compliance with this condition;
  - e) such other matters as may be required by the Mandatory Auction Principles.

X.8 The licensee shall:

- (a) no later than three months after the Authority's direction under paragraph X.1, prepare and submit to the Authority for approval its initial methodology under paragraph X.7;
- (b) thereafter, upon any modification of the Mandatory Auction Principles, and in any event at least once every year, review the Auction Methodology and submit to the Authority a report on such review;
- (c) propose in such report such modifications (if any) of the Auction Methodology as are necessary to ensure that it remains consistent with the Mandatory Auction Principles, and otherwise consistent with achieving the relevant objective;
- (d) make such modifications of the Auction Methodology as are approved by the Authority;
- (e) not modify the Auction Methodology other than as approved by the Authority;
- (f) publish (in such manner as the Authority shall require) the Auction Methodology and each modification thereof.

X.9 For the purposes of this condition "**Mandatory Auction Principles**" means the document so entitled and issued by the Authority on or before the date on which this licence was modified to include this condition, as from time to time modified by the Authority in accordance with paragraph X.10, setting out all or such of the following as the Authority shall decide:

- (a) a specification of the traded electricity products to be sold by Relevant Licensees pursuant to this condition;
- (b) criteria to be satisfied by any trading platform nominated as a Nominated Auction Platform, including criteria as to:
  - (i) independence of the platform from Relevant Licensees;
  - (ii) qualification for membership of the platform;
  - (iii) eligibility to participate (as buyer or seller) in each auction conducted on the platform;
  - (iv) clearing arrangements for the platform;
  - (v) credit requirements for participation in the platform;
  - (vi) the rules and procedures for each auction held on the platform;
  - (vii) reporting of the outcome of each auction;



- (c) principles for determining Annual Generation Volume;
- (d) the proportions in which volumes of electricity may or must be sold by way of particular Specified Auction Products in each Auction Month;
- (e) any requirement or restriction in relation to the participation of the licensee or any of its Affiliates as buyer in any Monthly Auction;
- (f) principles, requirements or guidelines as to any other matter which is to be included in an Auction Methodology;
- (g) such other matters as the Authority determines may be appropriate in order to facilitate achieving the relevant objective.

X.10 If the Authority, after consultation with Relevant Licensees and such other persons as the Authority shall decide, considers that a modification of the Mandatory Auction Principles would better facilitate achieving the relevant objective, and gives a direction to Relevant Licensees specifying the modification and the date with effect from which it shall take effect, the Mandatory Auction Principles shall be modified in accordance with such direction.

X.11 The "relevant objective" is facilitating competition in the generation and supply of electricity, by promoting the development of liquidity in the wholesale electricity market.

X.12 The licensee shall, in accordance with its Auction Methodology:

- (a) determine and notify to the Authority the Annual Generation Volume in respect of each Annual Volume Period;
- (b) report to the Authority in respect of the licensee's compliance with this condition.

X.13 For the purposes of this condition:

"Annual Generation Volume" means, in relation to an Annual Volume Period, the following amount determined in relation to the period of 12 months ending 30 September in the preceding year: [*definition to be included of Licensee's and its Affiliates' generation volumes – see consultation document*].

"Annual Volume Period" means a calendar year in which any one or more Auction Months fall.

"Auction Methodology" means the methodology prepared and from time to time modified by the licensee pursuant to paragraph X.8 of this condition, as approved by the Authority pursuant to paragraph X.7 of this condition.

"Auction Month"	means a calendar month commencing on or after the Commencement Date.
"Auction Platform"	means a trading platform on which a Specified Auction Product may be sold by way of a monthly auction.
"Buy-side Participation Requirement"	means any restriction or requirement set out in the Mandatory Auction Principles in relation to the participation of the licensee or any of its Affiliates as buyer in any Monthly Auction.
"Commencement Date"	means the date specified by the Authority in a direction to the licensee as the date with effect from which the obligation in paragraph X.3 shall apply in relation to the licensee.
"Mandatory Auction Principles"	has the meaning given in paragraph X.9.
"Monthly Auction"	means a single auction in an Auction Month of a Specified Auction Product on a Nominated Auction Platform.
"Monthly Auction Volume"	in relation to each month in an Annual Volume Period, means that percentage (not exceeding 25%), specified in the Principles Document, of one twelfth of the Annual Generation Volume for that Annual Volume Period.
"Nominated Auction Platform"	means an Auction Platform for the time being nominated by the licensee for the purposes of complying with this condition.
"Relevant Licensee"	means the holder of a generation licence in which paragraphs X.3 to X.13 of this condition have effect pursuant to a direction under paragraph X.1.
"relevant objective"	has the meaning given in paragraph X.13.
"Specified Auction Products"	means the traded electricity products (being products for delivery in Great Britain) specified in the Mandatory Auction Principles.

## Appendix 5 - Glossary

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### A

#### APX

APX Group is a holding company owning and operating energy exchange markets in the Netherlands, UK and Belgium. APX-ENDEX, a subsidiary of APX Group, provides exchange trading, central clearing & settlement and data distribution services.

### B

#### Barrier to Entry

A factor that may restrict a firm's entry into a market.

#### Baseload product

A product which provides for the delivery of a flat rate of electricity in each hourly period over the period of the contract.

#### Bid-offer spread

Bid-offer spread shows the difference between the price quoted for an immediate sale (bid) and an immediate purchase (offer) of the same product; it is often used as a measure of liquidity.

#### Broker

A broker handles and intermediates between orders to buy and sell. For this service, a commission is charged which, depending upon the broker and the size of the transaction, may or may not be negotiated.

#### Big 6

The name collectively given to the six companies that supply most of the energy to domestic households in the GB market. They are Centrica, E.ON, Scottish and Southern Energy, RWE Npower, EDF and Scottish Power.

### C

#### Churn rate

Churn is typically measured as the volume traded as a multiple of the underlying consumption or production level of a commodity.

#### Clearing

The process by which a central organisation acts as an intermediary and assumes the role of a buyer and seller for transactions in order to reconcile orders between transacting parties.

### Clip size

The size (usually in MW) of the contract to be traded.

### Collateral

A borrower will pledge collateral (securities, cash etc) in order to demonstrate their ability to meet their obligations to repay monies loaned. The collateral serves as protection for a lender against a borrower's risk of default.

### Contract for Difference (CfDs)

A contract designed to make a profit or avoid a loss by reference to movements in the price of an underlying item. The underlying item is not bought or sold itself.

### Curve

A time-series of prices for near to longer-term products.

## D

### Day-ahead market

A form of spot market where products are traded for delivery in the following day.

## E

### Electricity Market Reform (EMR)

The EMR is the Government's approach to reforming the electricity system to ensure the UK's future electricity supply is secure, low-carbon and affordable.

### Exchange

A type of platform on which power products are sold. Typically an exchange would allow qualifying members to trade anonymously with other parties and the risks between parties would be managed by a clearing service.

## F

### Financial contracts

Whenever a contract's value at maturity is settled with a monetary transaction.

### Forward trading

The trading of commodities to be delivered at a future date. Forward products may be physically settled - by delivery - or financially settled.

## **G**

### [Grid Trade Master Agreement](#)

A Grid Trade Master Agreement (GTMA) is a legal agreement between the two parties in a trade that sets out terms in relation to financially settling the contract and physically delivering the power.

## **H**

### [Hedging](#)

Transactions which fix the future price of a good or service, and thereby remove exposure to the daily (or spot) price of a good or service. This enables those purchasing a good or service to reduce the risk of short term price movements.

### [Heren ICIS](#)

A publisher of gas, power and carbon market information.

## **I**

### [ICE](#)

Intercontinental Exchange, an American financial company that operates Internet-based marketplaces which trade futures and over-the-counter (OTC) energy and commodity contracts as well as derivative financial products.

### [I&C Sector](#)

Industrial and Commercial sector. The non-domestic sector in general rather than any specific group of customers.

## **M**

### [Market Coupling](#)

Market coupling is a method for integrating electricity markets in different areas, applied across a number of European countries.

## **N**

### [N2EX](#)

The N2 Exchange, a recently established GB electricity market platform, which is operated by Nasdaq OMX and Nord Pool Spot AS.

### [Nord Pool](#)

Nord Pool, the Nordic Power Exchange, a single power market for Norway, Denmark, Sweden and Finland.

## O

### Off-peak product

A product which provides for the delivery of a flat rate of electricity for the period of the day when demand is typically lowest for the duration of the contract.

### Over the Counter (OTC)

Trading of financial instruments, including commodities, that takes place directly between counterparties. This is in contrast to exchange-based trading where the exchange acts as a counterparty to all trades.

## P

### Peak product

A product which provides for the delivery of a flat rate of electricity for the period of the day when demand is typically highest for the duration of the contract.

### Physical settlement

Whenever a contract at maturity results in an exchange of the contracted good for its contracted value.

### Product

The type of contract available. Examples include day-ahead, weekly, weekend, block seasonal, year, etc. Standard products are those that are widely traded on well-established terms, so exchanges generally deal in standard products. By contrast, structured products are those where the terms are precisely tailored to match the contract buyer's requirements, and they usually involve variable contract volumes and/or non-standard volumes and durations.

## R

### Reference price

A price for a product which has been revealed through enough trading for it to be considered reflective of the product's real market value.

## S

### Shaped product

A shaped product is a contract which specifies different amounts of electricity to be delivered at different times. A bespoke shaped product with half-hour granularity could specify a different volume for every half-hour period of the contract's duration.

## Appendix 6 - Feedback Questionnaire

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6.1 Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

6.2 Please send your comments to:

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