

Nord Pool proposals for potential post-Brexit trading arrangements outside the IEM

**NORD
POOL**

SEPTEMBER 2020

One of the key benefits of GB's participation in the EU's internal energy market was, at least as far as the day-ahead timeframe was concerned, the sharing of order books by the GB power exchanges to create a single GB price.

While we at Nord Pool remain keen to investigate all possibilities around the potential continuation, post-Brexit, of a single GB price, we are also very aware of the need to at least explore other possible solutions should this not be possible.

In the following paper we outline some of the key issues which in our view should be addressed to enable power exchanges to continue to deliver a level of products and services to their customers, both cross-border and within-GB, which resemble as closely as possible those which they are able to access via the IEM.

Our position on possible future GB arrangements as set out below has been adapted from a paper submitted to BEIS in June 2020.

Overview

Geographical scope

Our proposals have two geographical areas of focus:

- (i) arrangements relevant for the GB market only; and
- (ii) arrangements we envisage as being possible to put in place to optimise cross-border electricity trading between GB and interconnected countries.

Allocation of cross-border interconnector capacity

Currently, interconnector capacity may be allocated either explicitly or implicitly. It is critical to recognise the key differences.

Explicit markets offer capacity rights only over an interconnector. Participants in such markets tend to be the larger, longer-term market participants (e.g. large generators, financial traders and other significant market participants with positions to hedge).

Explicit auctions tend to be established and operated by TSOs/ICOs or a service provider selected by them.

Under implicit auctions, capacity is made available to a power exchange(s) by the TSOs/ICOs of each participating interconnector cable and is implicitly allocated to such of the power exchange's trading members as may be matched, by such power exchange's matching system, with another market member in a location on the other side of the interconnector border. In reality, this means that the capacity over the interconnector in question is allocated to the net flow over the cable in one direction or another, as determined by the relevant auction results. There is no actual allocation of capacity directly to any one or more of the power exchanges' market members.

Another key difference between implicit and explicit markets is that power exchanges attract their customer base from across the full range of market participants that have a requirement to buy/sell in the local bidding area. Although some of the participants in an explicit market will also trade implicitly, many more different types and sizes of customers will actively engage in the markets operated by power exchanges.

When directly comparing the two markets, it can be observed that:

- (i) the operators (and operations) of the markets are different;
- (ii) the commodity being traded is different; and
- (iii) the market participants are different (though with some overlap).

However, there is clearly a level of interaction between the explicit and implicit (day-ahead and intraday) auctions which exist today, not least in the fact that long-term capacity holders via explicit auctions will be entitled to receive congestion income arising from day-ahead and intraday implicit auctions.

Market Functions and Responsibilities

Any future post-Brexit framework for GB must in our view properly recognise and demarcate the respective functions and responsibilities of each type of market participant. Power exchanges operate commercial markets for the trading of electricity during the period up to system gate-closure. TSOs are responsible for performing tasks with respect to the trading of physical electricity only in connection with network balancing and system security from the moment when gate-closure takes place.

Timeframes

In Nord Pool's view both day-ahead and intraday timeframes need to be considered as part of the same physically traded market. There cannot be genuine competition (a 'level playing field') between participating power exchanges in the GB market without an equal opportunity (via shared order books) to access available market liquidity across both timeframes. In GB there is currently a shared order book in the day-ahead market, but no equivalent arrangement for intraday.

Seeking a potential solution

Within-GB Framework

- Nord Pool supports, as an interim GB solution, the voluntary continuation of the current sharing of order books between GB1 and GB2 from 1st January 2021, provided that a suitable agreement can be reached to this effect between the GB exchanges. We also anticipate that the current SEM-GB intraday auctions will continue to operate post-Brexit as currently planned (i.e. with shared order books between the GB power exchanges).
- Apart from the current coupled auction and the SEM-GB intraday auctions, GB power exchanges would continue to operate any other market offerings and services without shared order books.
- The above interim measures should remain in place until an appropriate enduring market structure for within-GB is in place. Any enduring solution should comprise, as a key feature, the full sharing of day-ahead, intraday auction and continuous intraday order books between GB power exchanges to ensure that no GB exchange is placed at a competitive disadvantage (a level playing field within GB) while customers can truly benefit from fair competition between exchanges.
- The roadmap for design and implementation of an enduring within-GB solution should be agreed as soon as possible by all interested parties, including GB power exchanges, TSOs and ICOs.
- In Nord Pool's view, elements of the existing GB market contract structure (or even that relating to the SEM-GB intraday auctions), could be used as the basis of a framework for the enduring solutions, including:
 - Design and implementation of enduring day-ahead and intraday auction solutions (both based on Euphemia) and a continuous intraday solution
 - Mandating day-ahead, intraday auction and continuous intraday shared order books
 - Managing change requests
 - Organising cost reimbursement
 - Providing a proper framework for the provision of security with respect to congestion income payments (if needed)
 - Operation of enduring solutions

Both the interim and enduring arrangements should in Nord Pool's view be open to accession by power exchanges entering the GB market.

Cross-Border Arrangements

- Where the GB cross-border market is concerned, in the immediate post-Brexit period, it is in our view unlikely that any implicit allocation will take place from GB to any other EU/EEA country otherwise than pursuant to the existing SEM-GB intraday auctions referred to above.
- It would of course be beneficial to the GB market as a whole to work towards an enduring solution where only one GB day-ahead, plus one or more coordinated intraday auctions, was held per day, having at their disposal all available day-ahead and intraday interconnector capacity between GB and the EU/EEA. Coordinating single day-ahead and intraday implicit auctions on all GB-EU/EEA borders would concentrate the power exchanges' liquidity, thereby increasing potential social welfare and congestion incomes for participating ICOs.
- Nord Pool/EMCO understands that such solutions might be able to exist outside CACM's remit. In our view GB power exchanges should be entitled to participate in trading arrangements between IEM and non-IEM countries, though such arrangements would at least require a bi-lateral agreement (between relevant governments and/or NRAs) to enable implicit allocation to take place in addition to the existing SDAC processes.
- The GB framework (as referred to in the within-GB section above) would have a role to play in enabling the timing and operation of the day-ahead and intraday auctions to be coordinated between multiple ICOs.
- Until an enduring solution can be attained, however, it is possible that the GB market could, as an initial step, see the development of one or more interconnector-specific

arrangements for day-ahead and intraday implicit auctions. In such cases there will at least need to be a bi-lateral agreement (between relevant governments and/or NRAs) to enable implicit allocation to take place.

- The timing of any interconnector-specific GB-EU/EEA implicit auctions should be the subject of agreement between the relevant power exchange appointed to operate it and the ICO (as well as a matter for consultation with market members more generally). Given that traditionally in the GB market the majority of trading takes place early in the morning, it would be optimal for any such GB-EU/EEA day-ahead implicit auctions to take place before the SDAC auction at midday. In any event we consider it is unlikely that it would be optimal for such an auction to take place at the same time as the SDAC auction - both to increase the chances that such arrangements would be acceptable to the SDAC market and to enable market participants positioned in both markets (GB and EU/EEA) to place orders in both and optimise their positions.
- In technical terms, such auctions could be supported via a separate iteration of the current PCR platform, in which Nord Pool EMCO is a co-owner, and ideally could also be applicable to intraday auctions.

The diagrams on the following pages illustrate the scenarios described in this paper¹:

¹ Interconnector map available on <https://www.thecrownestate.co.uk/en-gb/media-and-insights/stories/2018-electricity-interconnectors/>

Nord Pool welcomes the opportunity to explore potential future GB market arrangements, post-Brexit, with any interested parties. If you have questions, comments or feedback contact Frank Thompson, our UK Market Manager, email: frank.thompson@nordpoolgroup.com

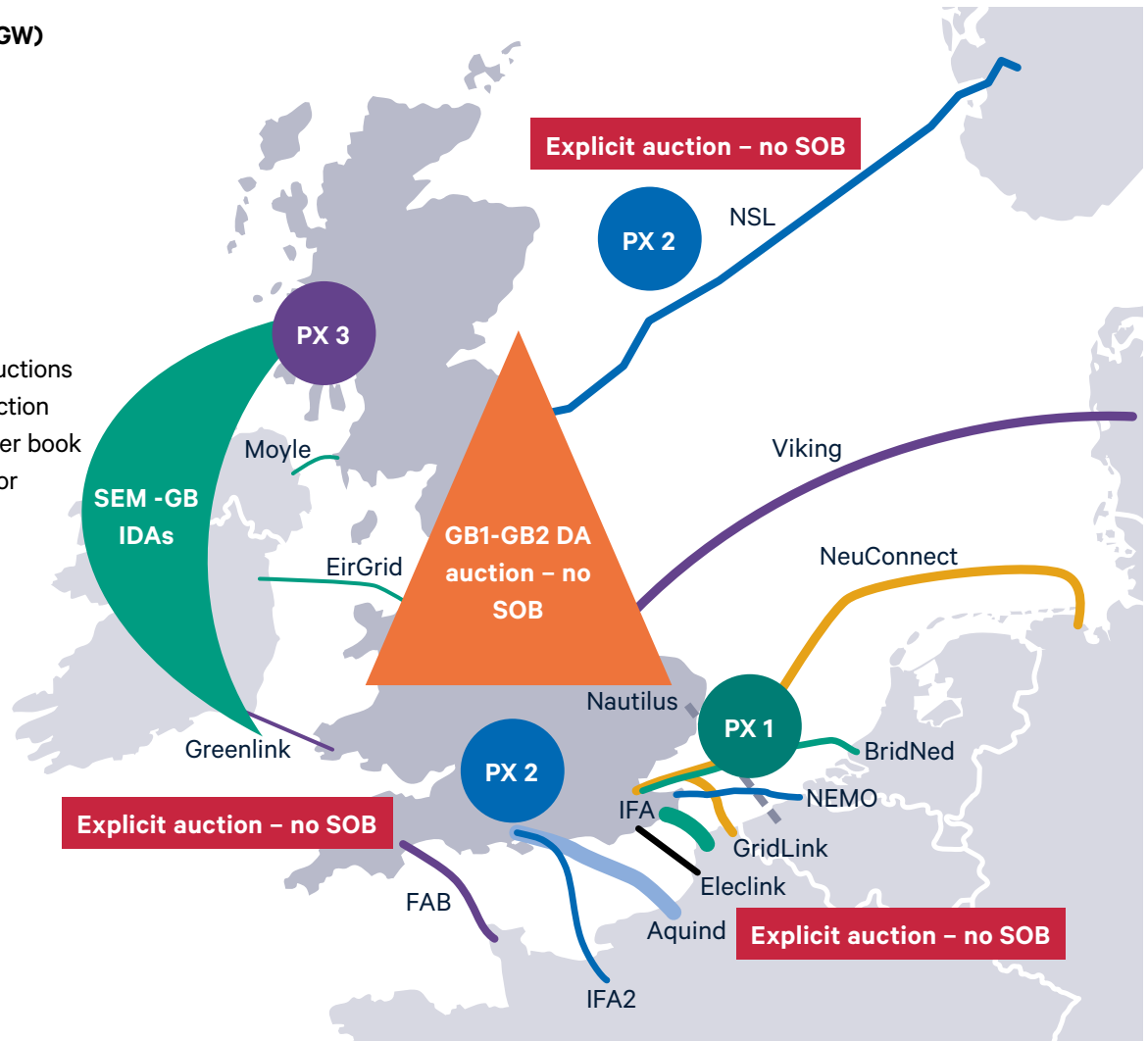
Base case scenario – no action

Cable Capacity (GW)



Acronyms

DA = day-ahead
 ID = intraday
 IDAs = intraday auctions
 IDA = intraday auction
 SOB = shared order book
 IC = interconnector



Partly created from data sourced from Kingfisher

- Explicit auctions only on each IC
- Nord Pool and EPEX DA auctions; no SOB*
- SEM-GB IDAs as planned; SOB between PXs
- No single DA price; no SOB or competition in ID

*SOB = shared order books

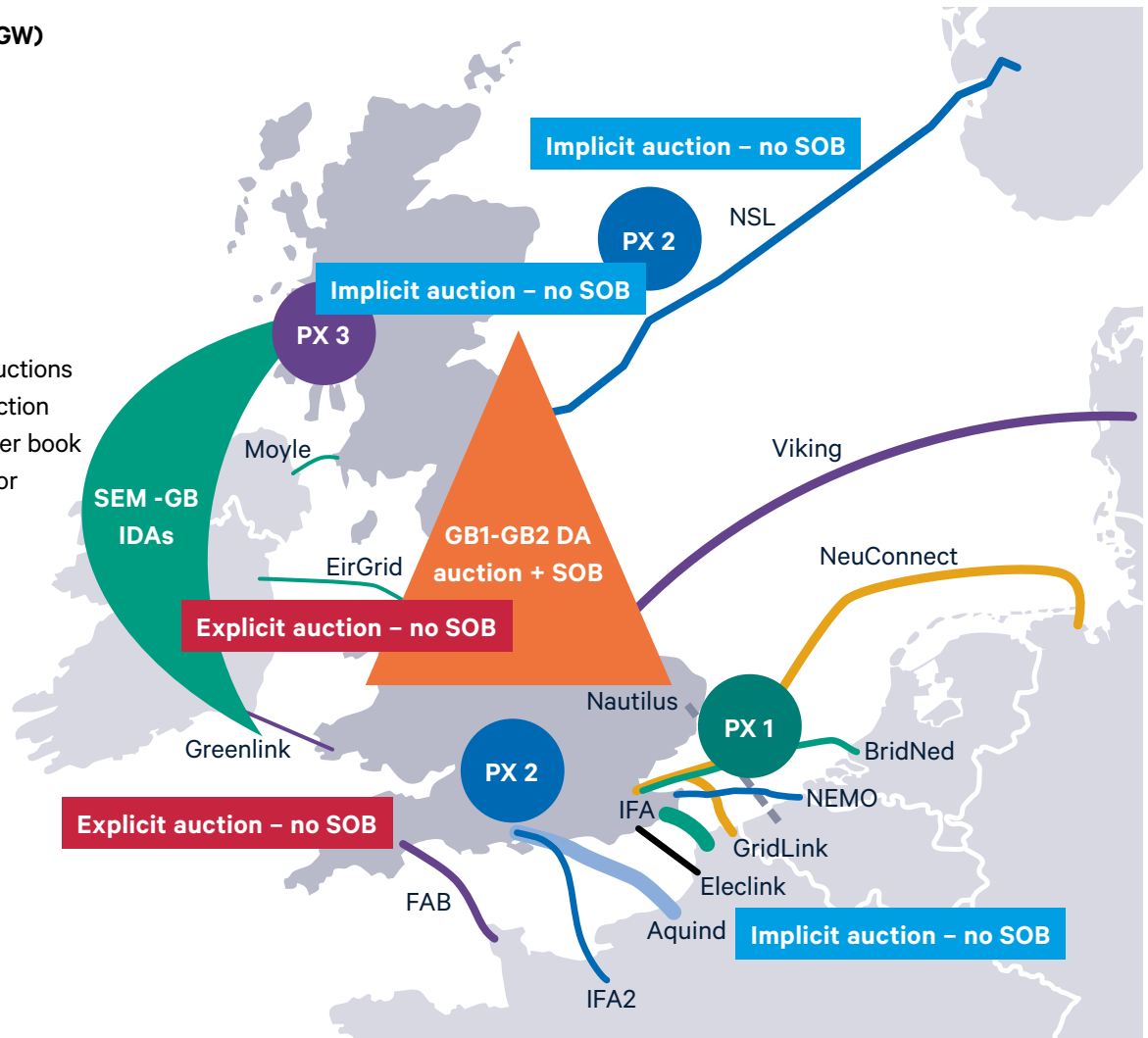
Interim Phase

Cable Capacity (GW)



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Partly created from data sourced from Kingfisher

- 1 or more interconnector-specific arrangements for implicit DA auction and one or more IDAs; some explicit allocation; no SOB
- SOB between GB1 and GB2 for the current day-ahead auction
- SEM GB IDAs continue with SOB;
- No alignment between current day-ahead auction and other interconnector-specific DA auctions.
- No SOB on continuous ID within GB

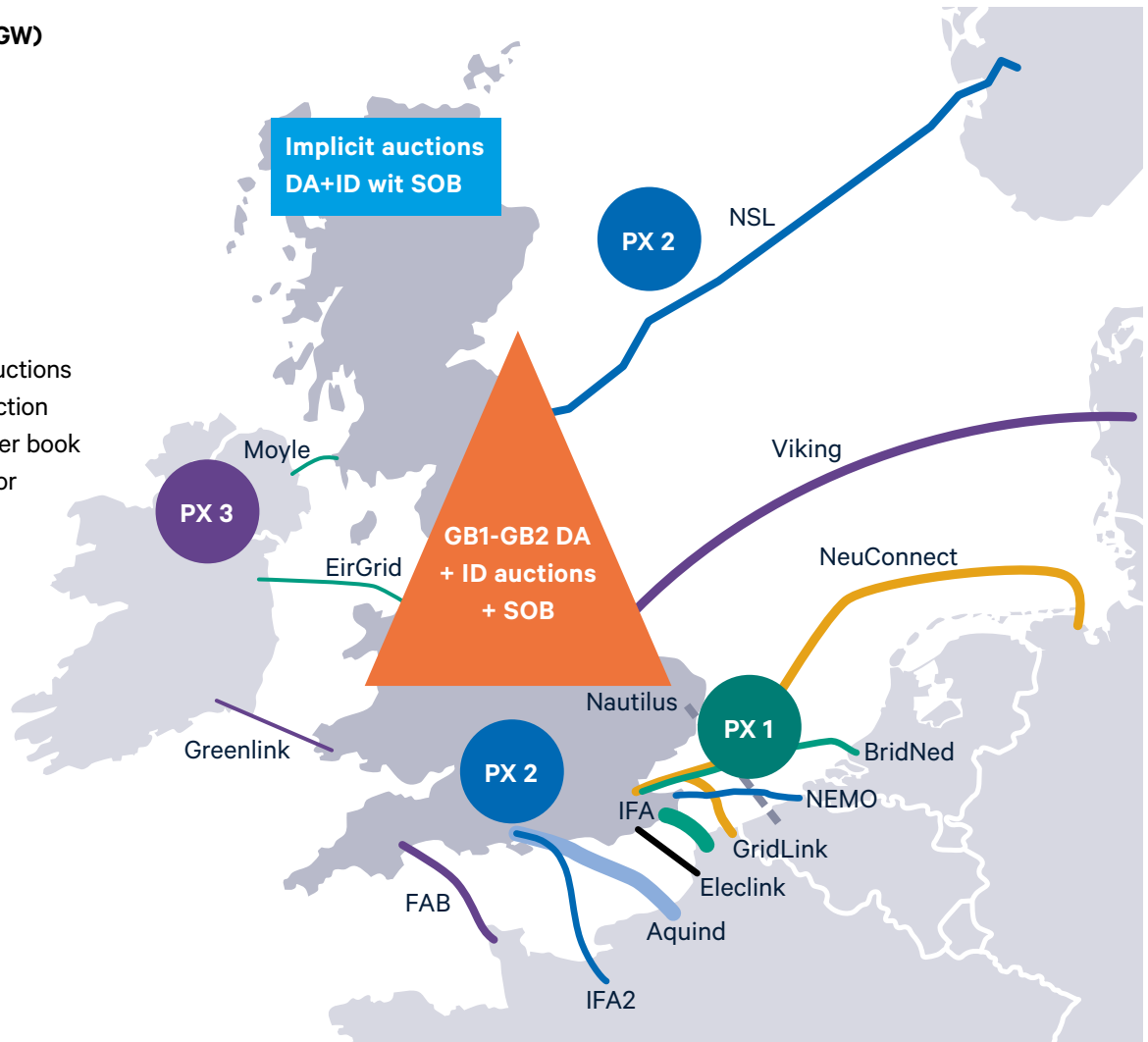
Enduring Phase

Cable Capacity (GW)



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 IDA = intraday auction
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 IC = interconnector



Partly created from data sourced from Kingfisher

- Single DA auction across all participating ICs; Single DA GB Price
- Alignment between current day-ahead auction and other interconnector-specific DA auctions.
- One or more IDAs across all participating ICs;
- SOBs across all DA and IDA products
- SOB on continuous ID within GB
- Enduring GB framework arrangements in place and operational