

Introduction

The North Sea Link (NSL) is a 1400 MW HVDC interconnector that directly connects the electricity systems of Great Britain and Norway. NSL is owned by National Grid North Sea Link (NGNSL) and Statnett and went into operation October 2021.

Due to Brexit, the trading arrangement on NSL could not be a part of the common trading arrangements within the Internal Electricity Market (IEM). We therefore had to establish a stand-alone trading arrangement for NSL. After a thorough assessment, we decided to set up a stand-alone implicit day-ahead auction on NSL, that would operate before the common European day-ahead auction. After a competitive tender process, Nord Pool EMCO was selected to be our Service Provider for the implicit auction on NSL. The contract with Nord Pool EMCO cannot be prolonged after autumn 2026. We are therefore in the process of designing and procuring a new trading arrangement for NSL.

Before finalising the design of the new trading arrangement on NSL, we would like to consult with stakeholders on key questions.

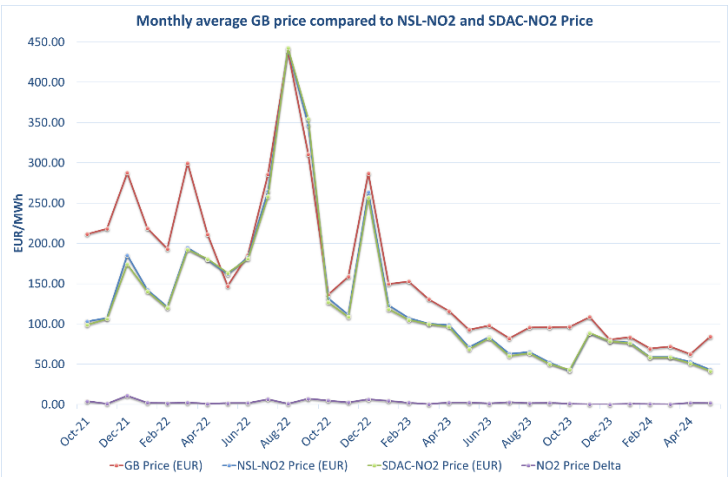
High level design

The new trading arrangement will have many similarities to the existing solution, but with a few key changes.

It will still be an implicit day-ahead auction

In our view, the separate implicit day-ahead auction on NSL is working very well overall. With only a few exceptions, it ensures a flow from the low price area to the high price area, minimizing overall production costs and maximizing social welfare. By coordinating the trade of energy with the allocation of capacity in one step, it also minimizes any loss in market efficiency.

Another indicator of how the implicit auction is performing is to look at the price spread between the NSL auction in the Norwegian bidding zone NO2 and the NO2 price generated through the common European auction (Single Day-ahead Coupling – SDAC). Despite the market undergoing a period of extreme volatility in recent years, the two NO2 prices have consistently traded at very similar levels, suggesting that an efficient price formation is able to occur in the earlier auction – this is evident in the chart below showing how NO2 prices have outturned on average since NSL went live in comparison to the GB market.



It is also easier for smaller and mid-size companies to participate in an implicit auction compared to an explicit auction, as they only need to be active in their local market (being GB or Norway) and not in the other market.

We will therefore continue with having an implicit day-ahead auction. The auction will still take place ahead of SDAC. The current auction has a Gate Closure time at 10:50 CET and the results are published before 11:00 CET. The exact timing of the new auction is not clear, as it is likely to depend on the choice of Service Provider, but we will require that the results shall not be ready later than 11:00 CET, giving the market participants in Norway one hour to update their bids for the SDAC auction.

In the current trading arrangement only the Power Exchange (PX), being a part of the Service Agreement, has access to the NSL capacity. In the new trading arrangement, also other PX's will be given access to the NSL capacity in Norway. This is in line with requirements from the Norwegian regulator, RME. In GB, there is no legal obligation to share orderbooks between the PX's. The new trading arrangement will therefore as a minimum only require access for one PX in GB.

Intraday trading

The current trading arrangement does not have a solution for intraday trading. In our view that is a significant drawback, as the flows from day-ahead cannot be changed based on new market conditions and it is not possible to release any capacity that was not allocated in the day-ahead auction. We are therefore planning to facilitate intraday trading for market participants in the new trading arrangement, via implicit Intraday auctions. Intraday auctions will ensure an efficient use of the capacity and will enable us to reuse the auction platform that we are procuring for the day-ahead market.

We have not yet concluded on the number of intraday auctions or the timing of them and are seeking views on these questions. A possible solution can be to start with one or two auctions and then increase the numbers if there is an interest in the market for it.

The choices to be made for Market Time Unit (MTU)

The current Day ahead auction for NSL is running with 60-minute MTU, as this is currently the MTU in the Day Ahead market in both GB and Norway. In 2025 the MTU in Norway will change to 15-minute, and this opens up possibilities for changing the MTU on NSL.

The European standard for MTU on bidding zone borders is to operate with the highest MTU of the two connected bidding zones. In the foreseeable future we expect there will continue to be a 60-minute MTU in GB for Day Ahead trading, so the initial choice is to continue with a 60-minute MTU in the Day Ahead auction.

In the intraday markets in GB the MTU is today 30 minutes, and our intention is to operate the interconnector on 30-minute MTU. There is the possibility to couple 15-minute bids in Norway with 30-minute bids in GB, and this is what we foresee. This means that bids in Norway are made in 15-minute resolution but are matched with bids in 30-minute resolution in GB. We see it as a benefit of this setup that market participants on both ends can use their standard MTU as they are used to in their other intraday markets. Another benefit is that a 30-minute resolution on the interconnector will mean we can allow cable ramping every 30-minute and consequently enable the flows to alter twice as fast, compared to the current 60-minute MTU.

Questions for the consultation

- 1) Do you agree that it is a good idea to establish intraday auctions on NSL for market participants?
- 2) Assuming that intraday auctions will be established, how many auctions would you suggest? Would you support a stepwise approach? Please explain your views
- 3) Would you have a preference of
 - a. each ID auction covering a specific part of the day or
 - b. each auction covers all remaining hours of the day
- 4) Taking into account the timing of other auctions within the IEM and in GB, at what time do you think we should run the intraday auction(s)?
 - a. Morning
 - b. Afternoon
 - c. evening
- 5) Do you support the setup of intraday trading in 30-minute MTU in GB and 15-minute MTU in Norway?
- 6) Do you have any other comments to the design of the new trading solution?