Financial Transmission Rights on Moyle
A Plain English Overview for Interested Parties

Introduction
The interconnectors between SEM and GB markets currently sell a form of physical transmission rights. These rights enable a participant to buy interconnector capacity in an auction then, via the Single Electricity Market Operator\(^1\) for the island of Ireland, nominate a flow of electricity across the interconnector within the participant’s capacity holding.

In the I-SEM\(^2\) arrangements the forwards electricity market will be strictly financial and the interconnectors will sell Financial Transmission Rights.

What are Financial Transmission Rights?
Financial Transmission Rights (FTRs) are a form of contract for difference based on prices in two markets.

FTRs offered by Moyle will be FTR options\(^3\). FTR options are a form of one way contract for difference, entitling the holder to receive the positive day ahead market spread in the direction of the FTR option. If the markets are de-coupled at day ahead, the fall back arrangement is that the results of the first cross-border intraday auction will be used i.e. FTR holders would receive the intraday market spread\(^4\).

FTRs offer a valuable hedging tool to market participants, particularly when combined with access to the neighbouring forwards market.

Examples:
If a generator located in bidding zone A wishes to sell electricity from bidding zone A to bidding zone B they could purchase at auction an FTR option in the direction A to B. At day ahead, if the clearing price in zone B is higher than zone A the FTR option will pay out the spread between the markets. Receiving the market spread allows a participant to sell its energy at the lower price in zone A but ultimately receive the higher zone B price i.e. it receives the Zone A price plus the FTR pay-out. If the day ahead clearing price in zone B is less than zone A then there will be no pay out and no reverse obligation so the generator ultimately receives the higher of the two bidding zone prices.

On the other hand: If a supplier located in bidding zone B wishes in a period to buy electricity from bidding zone A as a hedge against the bidding zone B price, they could purchase at auction an FTR option in the direction A to B. At day-ahead, if the clearing price in zone B is higher than zone A the

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\(^1\) [http://www.sem-o.com/Pages/default.aspx](http://www.sem-o.com/Pages/default.aspx)

\(^2\) I-SEM is the name given to the project to reform the SEM in line with European legislation and deliver market coupling with GB. The new market arrangements are expected to go-live from 23rd May 2018.

\(^3\) The form of FTRs to be offered in I-SEM was consulted on by the SEM Committee in [SEM-15-061](http://www.sem-o.com/Pages/default.aspx), with a decision on [SEM-15-100](http://www.sem-o.com/Pages/default.aspx).

\(^4\) The day ahead market spread between the coupled markets will be determined with hourly granularity. (Intraday auctions will have half-hourly granularity.)
FTR option will pay out the spread between the markets. Receiving the market spread allows the supplier to sell its energy in bidding zone B but ultimately pay the lower zone A price i.e. it pays the Zone B price and receives the FTR pay-out. If the day ahead clearing price in zone B is less than zone A then there will be no pay out and no reverse obligation so the supplier ultimately pays the lower of the two bidding zone prices.

Both these examples could be combined with contracts in the forwards market of the neighbouring bidding zone to lock in a hedged position, as an alternative to forward hedging opportunities in the local market.

**Will FTR pay-outs be adjusted for transmission losses?**

In accordance with the SEM Committee decision5 FTR pay-outs will be adjusted for interconnector transmission losses, which are different for each interconnector. The loss adjustment factors to apply for I-SEM go-live are expected to be published in Q4 2017.

The loss adjusted market spread can be calculated as follows:

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\text{Loss adjusted market spread} = \text{Max} \left[ \left( \text{Market B price} - \frac{\text{Market A price}}{1 - \text{interconnector loss factor}} \right), 0 \right]
\]

**What is the risk of an interconnector trip to FTR holders?**

FTRs are a financial instrument which are not directly linked to a flow of electricity. Therefore, FTR holders have no exposure to imbalance due to failure of the interconnector.

FTRs may be curtailed prior to the day ahead firmness deadline6 in the event of asset unavailability and will be compensated at the day ahead loss-adjusted market spread (other than for *force majeure*), as described above. The total amount of compensation payable in such circumstances is capped at the total auction revenues for that month.

A trip due to *force majeure* prior to the day ahead firmness deadline will cause curtailed FTRs to be compensated at the price paid for the FTRs.

**How do I buy FTRs on Moyle for the (I-)SEM-GB border?**

FTRs on the (I-)SEM-GB border will be sold on a ‘per-interconnector’ rather than a ‘per-border’ basis i.e. each interconnector owner will sell FTRs on their respective interconnectors.

Both interconnector owners will sell FTRs through the Joint Allocation Office (JAO) and its eCAT auction platform. JAO is a joint service company of European Transmission System Operators (TSOs) performing explicit auctions of transmission rights on borders throughout Europe. The JAO platform will manage the FTR auctions including settlement of auction sales and pay-outs. Auctions will be governed by Harmonised Allocation Rules for long-term transmission rights and the associated SEM-GB border specific annex. These documents are due to be approved by regulators in October 2017 and consultation versions can be found on the ENTSOE consultation hub7.

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5 [SEM-15-100](#).
6 Currently 1 hour ahead of day ahead market gate closure time
7 [https://consultations.entsoe.eu/markets/fca-har/](https://consultations.entsoe.eu/markets/fca-har/)
How do I register to buy Financial Transmission Rights?

Registration for Moyle FTR auctions is directly with JAO.

Contact the JAO Helpdesk:

  E-mail: helpdesk@jao.eu
  Tel:   +352 27 62 38 01
  Web:   www.jao.eu/support/resourcecenter/overview, includes the FAQs.

In summary, participants must provide participation and financial agreements, as well as appropriate collateral. Collateral is pooled so the same collateral may be used support participation in both Moyle and EWIC auctions (or auctions on other borders hosted by JAO).

JAO reports that registration should take 5 days once satisfactory registration materials have been provided.

There is no need for registration directly with the interconnector owners.