Response to questionnaire to market participants on long-term hedging possibilities between the Nordic Region and continental Europe

General remarks

EFET believes that a common design model for the wholesale power market must be introduced on a European basis. This means that FTRs or PTRs should be issued by TSOs between all bidding zones. EFET is not aware of a successful example of "appropriate cross-border financial hedging" being offered "in liquid financial markets on both side of an interconnector" in any part of Europe in any other way than through the issuance of PTRs (which may become effectively FTRs when subject to UIOSI procedures day-ahead) by TSOs.

EFET does not believe there is any reason to consider a non-harmonised model for the issuance of transmission risk hedging products in any part of Europe, based solely on the liquidity (or not) of financial trading in electricity contracts.

Therefore EFET requests the affected regulators to comply with the CACM Guidelines and to assign TSOs of the Northern Europe region to introduce long-term physical and/or financial transmission rights at all interconnections between the Nordic region and continental Europe as well as within the Nordic region.

The introduction of FTRs or PTRs would ease cross-border competition, rationalise price signals, provide additional transparency and therefore increase liquidity on the market and facilitate market entry.
Questions

1. Opening questions

1.1 Who do you represent?

EFET is an industry association representing the interests of wholesale suppliers of energy (principally electricity, gas and emission allowances) in Europe.

1.2 Where is your main office and/or your main activities located?


1.3 Could you please indicate the size of the company/organization you are responding on behalf of either in production volumes per year, consumption volumes per year, traded volumes per year or members?

EFET promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles.

EFET currently represents more than 90 energy trading companies, active in over 27 European countries. For more information: www.efet.org

2. The need for hedging opportunities and changes in the future

2.1 How would you describe your companies need for hedging opportunities between the Nordic market and continental Europe today?

EFET represents the interests of energy trading companies throughout Europe, including companies trading on a regular basis within the Nordic market and between the Nordic market and continental Europe. Hedging activities are at the centre of their business. The issuance of transmission rights between the Nordic market and continental Europe as well as within the Nordic market would very much help increasing the risk management opportunities of our member companies. The ability to cover these transmission risks (including the specific risk of availability of capacity between Denmark and Germany) is just as important to our member companies as it is anywhere else in Europe, where TSOs may constrain access to the network for cross border deals.

2.2 Do you anticipate that your need will change in the future? If so, in what way would it change?

We anticipate that cross-border trading will continue to grow as the EU internal market for electricity consolidates. As this includes cross-border
power contracts spanning the Nordic region and continental Europe over various timeframes, we can confirm that the availability of transmission rights sold forward by TSOs will remain essential as far as our member companies are concerned.

3. Existing possibilities of cross border financial hedging and liquidity of financial markets

3.1 How do you view the existing possibilities of cross border financial hedging?

EFET believes that a common design model for the wholesale power market must be introduced on a European basis. This means that FTRs or PTRs should be issued by TSOs between all bidding zones. EFET is not aware of a successful example of "appropriate cross-border financial hedging" being offered “in liquid financial markets on both side of an interconnector“ in any part of Europe in any other way than through the issuance of PTRs (which may become effectively FTRs when subject to UIOSI procedures day-ahead) by TSOs.

Cross border financial hedging in the Nordic electricity market is currently based on trading a virtual system price. A market for Contracts for Difference (CfDs) then makes it possible to hedge the price between one specific bidding zone and the system price at a particular point in time. Market participants wishing to hedge between two zones therefore need to sign three contracts. One contract is needed for the purchase/sale of energy at the system price. Two CfDs are then needed: one from the sell area to the virtual point, and one from the virtual point to the customer. This complication makes cross border transactions more difficult and is a clear constraint on the development of competition in the Nordic market. In particular all of these markets need to be liquid in the sense of having sufficient buyers and seller and reasonable bid-offer spreads.

However this is a different concept from forward cross-border transmission risk hedging, whereby market participants can purchase correctly “rationed rights” issued by neighbouring TSOs in auctions either in the form of Physical Transmission Rights (PTRs) or Financial Transmission Rights (FTRs). This allows market participants to protect themselves against unexpected events leading to a volume risk such as cold weather, plant outages etc. Under the CfD it is less easy to do this and cross border market participants may find themselves unable to hedge such risks and are therefore potentially exposed to volatile day-ahead prices for the uncovered volumes. They may cover this by systematically over-hedging in the market they are trying to enter. However this means they are, in effect, required to make additional payments to the companies they are trying to compete with, rather than using their own plant.

In addition, where system operators sell specific zone-zone cross border capacity rights, this means that only two contracts are needed to perform a cross border forward transaction. In addition, provided that both zones have liquid wholesale markets, there is no need to also develop liquidity in the CfD market since this is assured by the participation of the transmission system
operator. Also CfDs bring in an additional set of counterparty risks which are not present when a regulated TSO is selling the transmission rights. In order to determine the issuance, neighbouring TSOs first need to coordinate in order to calculate the maximum available interconnection transmission capacity, for which they are able to guarantee firmness in different timeframes, then split the volumes into different products, depending on the delivery period (typically annual and monthly products, but also potentially others if requested by the market).

A PTR is an optional right sold by TSOs to program an exchange of power (1 MW) on a specific border and in a specific direction, during a period indicated in the product definition. The total volume of PTR issued by the TSOs is directly linked to the amount of available capacity that these TSO can guarantee as firm during the period indicated in the product definition (hence allowing these TSOs to be fully hedged when issuing those rights).

An FTR is an optional right sold by TSOs to receive the price spread for 1 MW on a specific border and in a specific direction, during a period indicated in the product definition. The total volume of FTR issued by the TSOs is directly linked to the amount of available capacity that these TSO can guarantee as firm during the period indicated in the product definition (hence allowing these TSOs to be fully hedged when issuing those rights).

3.2 In your opinion what constitutes a liquid financial market?

As stated above, we do not believe there is any reason to consider a non-harmonised model for the issuance of transmission risk hedging products in any part of Europe, based solely on the liquidity (or not) of financial trading in electricity contracts.

A liquid financial market for electricity is one where companies are able to buy and sell the volume of required products without any concern that their particular purchase moves the market price. The existence of a large range of creditworthy counterparties and reasonable bid-offer spreads is also indicative of liquidity which allows for frequent modification of positions as new information becomes available.

The same criteria apply with respect to the buying and selling of financial transmission rights. Our current assessment is that the CFD market is not, and can never be, sufficiently liquid. This is because buyers and sellers of such rights will always have difficulty in assessing the true market for such rights since the actions of the TSO will have a frequent and unpredictable impact on the availability and value of such rights. This problem will become more extreme once the CACM guidelines are adopted since they will put more emphasis on the intraday markets and allow for more frequent recalculation of available transmission capacity.
3.3 Has your company performed transactions with counterparties in other than your home market? If so, between which countries / through which interconnectors and how often?

EFET member companies are active throughout Europe, and on a regular basis book forward, daily and intraday transmission rights at all the existing cross-border interconnectors over Europe (FUI, CWE, SWE, CSE, CEE, and SEE region). With regard to the interconnectors mentioned in the questionnaire our member companies regularly purchase yearly, monthly and intraday transmission rights at the Denmark West/Germany.

3.4 Have you used the financial market in order to hedge your open positions for these transactions? If so, how often and to what extent?

EFET member companies are active throughout Europe, and almost everywhere make use of futures, forwards, options and other commodity derivatives to hedge their open positions. This does not mean however that they feel they can dispense with access to products more specifically tailored to deal with transmission risk.

3.5 In your opinion, are the respective (national/regional) financial markets sufficiently liquid in order to perform hedging between continental Europe and the Nordic Market?

EFET does not consider that the cross-border arrangements are sufficiently liquid in financial markets to perform hedging, either within the Nordic market or between the Nordic market and the continent.

The problems created by the existing arrangements are illustrated by the following example:

<table>
<thead>
<tr>
<th>Product</th>
<th>Price (€/MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nord Pool system price ENOVR-12</td>
<td>52.20</td>
</tr>
<tr>
<td>CfD Western Denmark SYARHYR-12</td>
<td>5.10</td>
</tr>
<tr>
<td>CfD Eastern Denmark SYCPHYR-12</td>
<td>6.00</td>
</tr>
<tr>
<td>Area price Western Denmark</td>
<td>57.30 (52.20 + 5.10)</td>
</tr>
<tr>
<td>Area price Eastern Denmark</td>
<td>58.20 (52.20 + 6.00)</td>
</tr>
<tr>
<td>EEX Germany/Austria Cal 12</td>
<td>59.30</td>
</tr>
<tr>
<td>ENDEX NL Cal 12</td>
<td>59.04</td>
</tr>
</tbody>
</table>
The example illustrates that a combination of the system price and a CfD contract is the same as directly trading the local price, which is the market design in continental Europe. A CfD is not a cross-border hedging instrument, it is just a component needed in a market where a virtual system price is used. You could argue that buying one CfD and selling another CfD would be a way to hedge the cross-border risk, but buying and selling two local prices would be the same. If a producer in Western Denmark would like to sell its generation to a customer in Eastern Denmark at fix price without taking an area price risk it has to sell the power in Western Denmark and buy the power in Eastern Denmark. This can be done in the OTC market or by selling a CfD for Western Denmark and buying a CfD for Eastern Denmark. If a producer in the Netherlands would like to sell its generation to a customer in Germany at fix price without taking an area price risk it has two possibilities. It can sell the power in the Netherlands and buy the power in Germany in the OTC or exchange market or buy from the TSOs a transmission right from the Netherlands to Germany.

The example shows that there is a missing component in the Nordic electricity market, which makes cross-border competition in the forward market more difficult. The introduction of FTRs or PTRs would ease cross-border competition, rationalise price signals, provide additional transparency and therefore increase liquidity on the market and facilitate market entry.

4. Product design to achieve an efficient market design

4.1 What sort of hedging instruments should be used in order to promote an efficient market design?

EFET believes that the target model for the organisation of the wholesale power market must be introduced on a European basis. This means that FTRs or PTRs between adjacent bidding zones should be mandatorily issued by all TSOs. We do not recognise the claim that, in the absence of PTRs or FTRs offered by TSOs, “(...) appropriate cross-border financial hedging is offered in liquid financial markets on both side of an interconnector” in any part of Europe. The Nordic electricity market is based on a virtual system price, which combined with a Contract for Difference (CfD), makes it normally possible to hedge the price between the virtual system price and one specific bidding zone. However TSOs (who are “long of interconnection capacity”) are not the issuer of CfDs and their issuance by commercial market makers has nothing to do with hedging the price difference between two interconnected zones due to cross-border congestions. It strikes us that in the existing market design TSOs are not fully optimising their assets since the natural hedging which could be provided by auctioning access to the network infrastructure is not offered to the market and not used by TSOs as a means of gauging the cost-effectiveness of their own risk management.

4.2 How should these products be designed in order to promote an efficient market design?

FTRs or PTRs should be issued by TSOs between all bidding zones.
EFET believes that, applied across Europe, adherence by TSOs to the following principles would promote an efficient market design and facilitate cross-border energy trading:

- **TSOs shall auction physical transmission rights or financial rights with equivalent effect.** It is essential for market participants to be able to buy transmission capacity rights that allow them to deliver power across borders for a fixed price. Capacity rights do not absolutely need to be physical. With this proviso, they can instead be structured as financial instruments, as long as issuing TSOs and/or power exchanges on their behalf provide a payout to the holder of the right representing any effective price difference across a border at the day-ahead stage.

- **TSOs shall auction the maximum of available capacity over appropriate timeframes.** Borrowing the model of the forward electricity commodity markets, TSOs could organise term transmission auctions regularly, on each occasion for a variety of maturities. They should allocate to market participants the maximum amount of capacity expected to be available in a given hour of a given day, well in advance of the D-1 timeframe. Auctioning at least one year ahead two thirds of the available capacity (and most of the remainder monthly or quarterly) would be in line with common term-sales arrangements, and would thus help develop liquidity in a traded secondary capacity market.

- **Transmission rights must be firm.** TSOs, as natural sellers of firm transmission capacity rights, have the ability to manage the risks involved, enjoy a variety of operational and physical means to adjust those risks, and indeed are the only players in the electricity sector that can do both. The transfer of the “firmness risk” from market participants to TSOs (in exchange for payment) will result in an overall efficiency and welfare gain.

- **TSOs must not discriminate against holders of transmission rights purchased in advance of day-ahead and intra-day timeframes.** We advocate the introduction of a UIOGPFI (use-it-or-get paid for it) option for holders of transmission rights issued with maturities longer than one day ahead. For borders implicitly allocated in the day-ahead market the principle of UIOGPFI should be introduced without delay. The way in which the capacity allocation should function at D-1 is shown in graphic form. Graphic variations deal with regional markets, where currently only explicit (e.g. CEE) or only implicit (e.g. Nordic) capacity auctions are organised.

- **Transmission rights need to be fungible in a secondary, traded market.** Liquid secondary markets for capacity would enable TSOs to buy back in the market any proportion of rights they turn out to have oversold in advance, for example in order to manage unexpected operational circumstances. Secondary markets would also allow market participants to manage their transmission capacity portfolios, giving especially the possibility to “slice and dice” i.e. turn an annual or monthly right into hourly pieces, just as traders already do in the case of their wholesale electricity transactions.
4.3 To what extent would your company make use of long-term transmission rights if these were offered on interconnectors between the Nordic and Europe?

The introduction of FTRs and/or PTRs would facilitate cross-border competition, rationalise price signals, and therefore increase liquidity and new entry to the Nordic market. EFET anticipates that energy trading between the Nordic markets and continental Europe as well as within the Nordic market would grow significantly with the introduction of FTRs and/or PTRs. FTRs and/or PTRs would also provide important and reliable price signals, useful to all market players as well as TSOs.

5. Firmness

Most interconnections between the Nordic market and continental Europe are subsea DC cables. There are some general differences between AC interconnections and subsea DC links. While terrestrial links are generally easier to repair, this might not always be the case with subsea cables. Repairs and maintenance can take several weeks or months when it comes to subsea cables. Furthermore when it comes to single interconnectors which are not TSOs, these interconnectors may be subject to restrictions in capacity which are out of control of the owners of these interconnectors.

Energy Regulators believe that these differences have to be taken into account when defining firmness rules. Otherwise financial firmness could lead to a dramatic increase in cost and easily exceed congestion revenues.

5.1 How do you see different firmness rules for AC interconnections and DC subsea links?

We believe that this question is real but probably overplayed.

Firm transmission rights give certainty for traders on delivery and on the price for the transmission access. Once the market participant has booked the capacity, it will then be sure, that it will be able to nominate power between its chosen exporting and importing areas (or to receive the price difference) without being subject to any additional costs. If force majeure (as discussed below) is not applicable, then firm cross-border transmission access must be provided by the TSO, even in case of a cable failure. Otherwise the TSO must compensate market participants at market spread, which represents the market value of lost capacity.

The only justified reasons for curtailing transmission according to EU Regulation 1228/2003 are the existence of an emergency situation or an event or circumstance constituting force majeure.

As such, firmness should apply to DC subsea cables in the same manner as it applies to AC interconnectors.
In order to hedge their own risk of having to pay compensation, merchant DC cable operators could set up appropriate contracts with TSOs or market participants or explore insurance.

5.2 Would firmness rules which limit firmness to for instance a few days before the operational day make a LT transmission right less attractive as a hedging product?

Firmness rules limiting firmness to a few days before the operational day, could not be called firmness in the sense intended by the EU Regulation, and would certainly make transmission rights significantly less attractive as hedging products. This would result in a lower value of the products and in a less efficient market functioning.

Regarding force majeure, EFET recognizes that, until the main contractual terms are harmonised across the EU (a potential role for ACER), the definition of force majeure will differ among various sets of auction rules. Anyway the claimed incidence of force majeure can always be challenged on a case by case basis. In our view, there are certain key elements that every force majeure clause must include.

Force majeure would be restricted to an actual event or circumstance which:

1. Has occurred (not one that is anticipated to happen or prevail in the future); and
2. Is objectively verifiable.

A force majeure event or circumstance must additionally:

1. Not be reasonably foreseeable by the claiming party;
2. Be beyond the reasonable control of the claiming party;
3. Be not reasonably avoidable by the claiming party; and
4. Impede the claiming party from performing its obligations.

A system emergency or “security event” declared by the TSO is not in and of itself force majeure, unless the specific event leading to the declaration of a system emergency is independently a force majeure event. TSOs retain discretion to declare a system emergency if needed, in order to maintain system reliability, even if a force majeure event has not occurred. For instance, the combination of planned maintenance outages and unseasonably hot weather in the summer could impact reliability, but would not constitute force majeure. This would hence not prevent the TSO to compensate the curtailed rights at market spread but would allow the TSO not to flow the corresponding power, thus only retaining the financial obligation of the TSO towards the PTR or FTR holder. This would in practise induce no change for PTRs holder whereas PTRs holder would need to rebalance their physical positions on both sides of the cable. This could be considered as a comparative advantage for FTRs but in fact PTRs holders could also use the UIOGPFI functionality, thus cashing out the market spread as with FTRs, whereas PTR holders could also nominate those rights, and therefore would have the choice between physical flow or financial cash out.
Curtailment owing to system availability difficulties or for other system “reliability reasons”, as perceived by the TSO, should not justify a claim of force majeure.

If firm capacity is curtailed as a result of force majeure, the TSO will be obliged to reimburse the affected party (or parties) at the initial product price and If firm capacity is curtailed for any other reason, including for a system emergency or security event, the TSO must reimburse the affected party (or parties) the market spread for the entire duration of curtailment.

5.3 How would different firmness rules affect the attractiveness of LT hedging products? Please elaborate.

Ensuring firm transmission rights provides significant benefits for customers, TSOs, regulators and traders:

- For customers, firm transmission rights facilitate access to cost effective power supplies; enhance service reliability through a real forward hedge; facilitate optimal use of the transmission grid. It also provides a transparent and reliable forward market price signals (not subject to operational uncertainty) and ensures grid enhancements are performed at the lowest possible cost, with a natural incentive on the TSO to provide the maximum reliability.

- For TSOs, firm transmission rights provide increased revenues as grid users will pay more for firm capacity; encourage system optimisation; provide clear rules for provision of the service; ensure management of transmission risks by the most appropriate party; and facilitate the secondary market, giving TSOs more opportunities to manage dynamically capacity rights if needed by buying back some previously sold rights in case of substantial changes of the availability forecast.

- For regulators, firm transmission rights offer clear marked benefits for customers and for a good functioning and coupling of markets; provide transmission system optimisation at the right cost from a society perspective; and place the risk of ensuring firmness on the party that can take the necessary measures, with the adequate incentive for a good management of the asset.

- Finally, for traders, firm transmission rights provide the ability to transact cross border at the correct price (no undue risk factor) and to accurately hedge forward power positions; facilitate the development of secondary capacity market; and provide clear rules for provision of service.

Alternative rules suggested in the consultation paper, which would not guarantee full firmness and would compromise those benefits.
6. Common criteria to evaluate the possible options on each cable

6.1 What common criteria should be used to evaluate the possible options on each cable?

We believe that the Rules should be harmonised for all cables in order to avoid a patchwork of situations and Rules, which would necessarily diminish the efficiency of markets and delay the objective of market integration.

Why should these criteria be used?

See above.