

Physical and Financial Capacity Rights for Cross-Border Trade: **Key Findings and Recommendations**

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Key objectives of the study

- Identify advantages and disadvantages of tradability of long-term TRs
- Should rights be **financial transmission rights** (FTRs) or **physical transmission rights** (PTRs), (or variants/hybrids);
- Propose **practical recommendations**, including the preconditions necessary, for a facilitating a market in the rights which will meet the needs of participants, and deliver efficient and reliable long-term price signals

Key Conclusions (Headline)

- ***Transmission rights?***: Long-term energy contracts including TRs are desirable
- ***PTR or FTR?***: Anything PTRs can do, FTRs can do better
- ***Options or Obligations?***: Offering *Obligations* is obligatory, offering *Options* is optional
- ***Firmness?***: FTR should be firm
- ***Volume & Duration?***: Simultaneous Feasibility Test to be introduced; FTRs to match energy trades.
- ***Warning***: Target Model design could limit the amount of long term cross-border capacity to be made available to market participants

Supporting Cross Border Trade with PTRs and FTRs

*Three key
features of FTRs*

- (i) **Financial**
(backed by
physical capacity)
- (ii) **Zone to Zone**
(rather than
contract path)
- (iii) **Obligations**
(and options)



Key Conclusions (Headline)

- Long-term contracts including TRs are desirable
 - reduce risk, and help to underwrite investment plans
- Anything PTRs can do FTRs can do better
 - main advantage: two-sided FTR is a firm obligation and can be netted to release a potentially far larger market on either side of any IC, increasing opportunities for trade, promoting competition, reducing market power, financial contracts have lower transaction costs than physical contracts
- FTR cross-border market can increase competition and efficiency
 - BUT the Target Model is an impediment to full market integration, because the NTC calculation is market condition dependent and may lead to inefficient use of capacity

Key Conclusions (Options/Obligations)

- FTR Obligations must be issued
 - Essential for netting, facilitates Simultaneous Feasibility Test calculation
 - Options only would be little different to PTRs
- FTR Options are desirable as an addition to Obligations
 - to the extent that customers desire them, and it is feasible, it is desirable that options be additionally issued
 - algorithms are now readily available for simultaneous auction of obligations and options
 - it is possible that financial intermediaries may be able to supply the demand for options if they are not provided by TSOs

Long term TR: From PTR options, at present, to FTR, in future: obligations (& options) issued by TSOs and CfDs, issued by traders

Key Conclusions (Firmness)

- Short version: FTRs should be 100% financially firm
 - Except for merchant links and under-sea links
- Long version: TSOs should not discriminate between internal and interconnection customers in the level of firmness they offer, since that is an impediment to trade
 - to the extent that TSOs offer firmness to internal customers, so they should offer it to interconnection customers; any residual *force majeure* terms should be the same for internal and interconnection customers.
 - to the extent that national regulators share TSO's potential losses from the firmness of national links across customers, or allow congestion surplus funds to accumulate to pay for it, so they should do the same for interconnection customers

Key Conclusions (Volume)

- The full NTC should be issued as early as possible
 - because uncertainty reduces as real time approaches, ATC will usually increase as despatch date approaches, so there is no need to hold margin at early dates; and if ATC does reduce some FTRs can be bought back
- The methodology for calculating NTC, by a Simultaneous Feasibility Test (SFT) should be externally specified to the TSOs and their application of it supervised
- The Simultaneous Feasibility Test (SFT) is:
 - Important, because it tests that the FTRs required and issued are within network capacity when allocated; Achieved by representing all FTRs simultaneously in network model, with all loop flows from the external network
 - Revenue neutrality cannot be guaranteed within the zone based Target Model (Reference flow calculation involves assumptions on market conditions)

Key Conclusions (Duration)

- FTR duration to match power contract duration
 - Either encourage continuous trading or hold periodic auctions for re-trading
 - Advantages in issuing amounts of varying durations
- Determining NTC requires TSOs to make assumptions years ahead about conditions expected to prevail in real time

Difficult, **ATC is market condition dependent**; forward FTRs likely to be inter-zonal so forward amounts based on inter-zonal NTCs

- NTC years ahead may be a conservative estimate of day-ahead, so sell higher fraction of this ATC, leaving more released day-ahead

Key Conclusions (Secondary / OTC)

- FTR holders should be free to trade them bilaterally or through exchanges offering this service
 - There is no need to mandate that they must be sold through specific exchanges
- Financial Intermediaries should be free to issue OTC products related to FTRs
- TSOs should hold periodic reconfiguration auctions

Key Conclusions (Merchant / Undersea)

- Under-sea links need specific terms related to their much higher outage risk
 - They should be permitted to offer interruptible service; to the extent firm service is offered it is likely to be at a large premium
- Regulators may need to consider whether to impose contractual changes on merchant link operators
 - Since they will need to be compensated if required to trade on more disadvantageous terms; otherwise merchant link operators would continue under the contracts they already have

Key Conclusions (Credit / MIFID)

- There is no economic necessity to apply MIFID regulation to TSO-issued FTRs
 - Since the regulation of TSOs by national regulators is entirely adequate and better suited to purpose than general financial regulation
 - Although specified in financial terms, FTRs are the method of obtaining access to the physical service
- Credit control and counter-party tracing is necessary for two-sided FTR Obligations
 - But TSOs could delegate this to another party which has suitable financial authorisation
 - Counterparties wishing to avoid this can trade in one-sided options which present no credit risk, but the fair price of a one-sided option is likely to be much more than for an obligation

Key Conclusions (Role of Regulators)

- Key role in delivering integrated market
 - Need to specify obligations on TSO
 - non-discrimination of internal and external trade
 - maximise ATC, FTR's for 3 years ahead
 - Reassure TSOs about compensation for *force majeure*, or revenue inadequacy driven by the Target Model design
 - Monitor delivery of trading and market coupling
 - Market dependent reference flows; Impact of renewable generation, Regular impact assessments

Issues for further consideration

- Market design for bilateral cross border trades vs mandatory PX pool
- Interconnection of markets of different designs
- Zone definition & size
- TSO incentives and governance
- NTC under cost-benefit based security standards

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