



Merchant transmission lines

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AGENDA

1. ABOUT ELECLINK
2. REGULATORY FRAMEWORK FOR ELECTRICITY INTERCONNECTORS
3. EXEMPTIONS
4. THE ELECLINK EXEMPTION CASE
5. TYPE OF PRODUCTS OFFERED BY ELECLINK
6. INTEGRATION WITH MARKET MECHANISMS
7. TSO INTERFACES

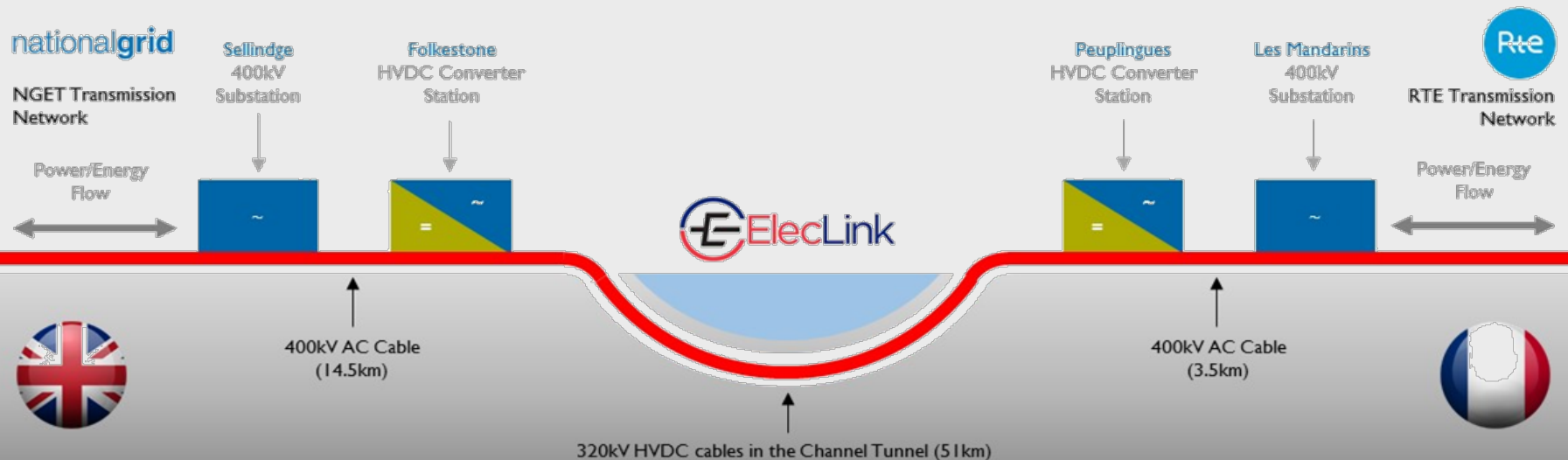


A new build high voltage interconnector through the Channel Tunnel

- 100% subsidiary of Groupe Eurotunnel
- ElecLink is building a new 1000MW HVDC interconnector through the Channel Tunnel between the UK and France
- ElecLink will respond to the need for greater electricity interconnection to:
 - ✓ **Improve security of supply** in both the UK and France;
 - ✓ **Enable higher levels of renewables** and meet the challenge of intermittency;
 - ✓ **Contribute to decarbonization** a reduction of circa 6.1m tonnes CO₂;
 - ✓ **Strengthen European energy market integration**; and
 - ✓ Enhance competition and **enable more competitive energy pricing**.

KEY FACTS

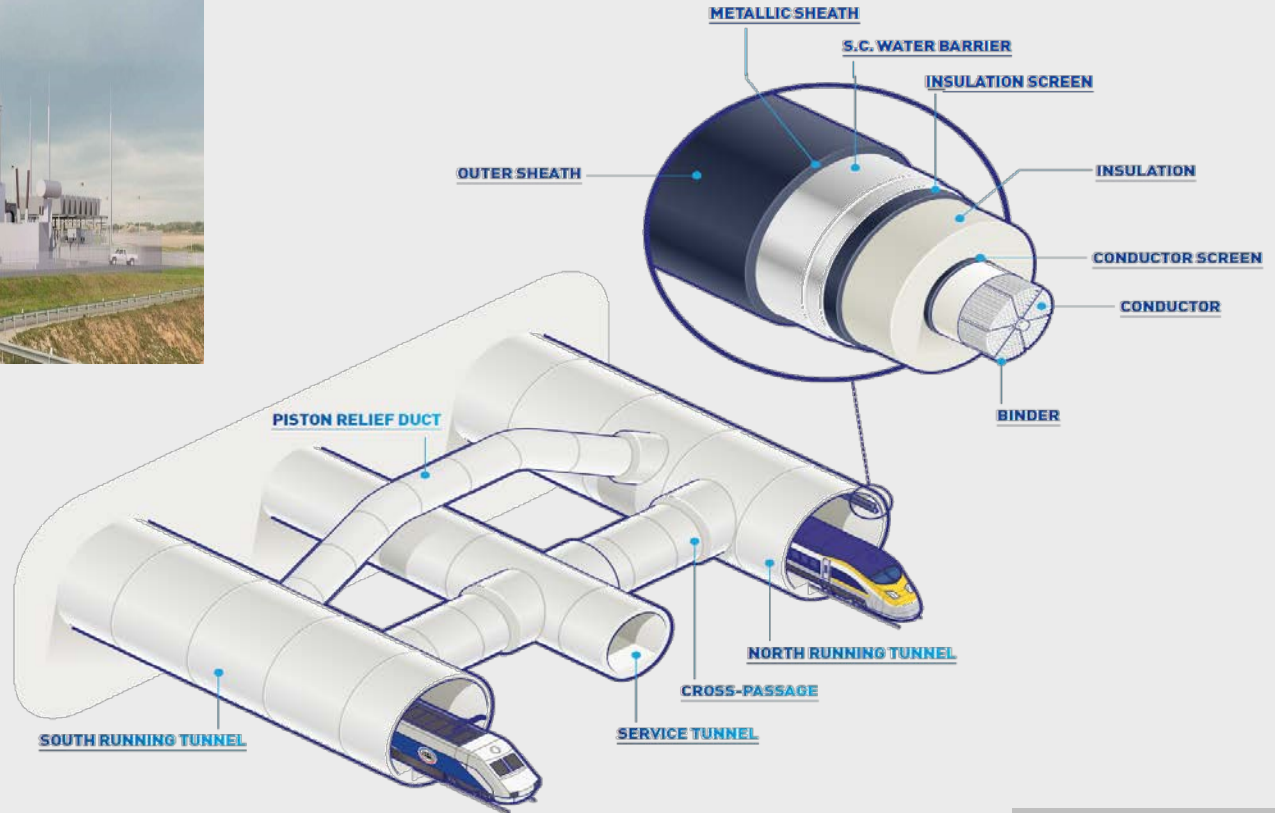
- ✓ Designated Project of Common Interest
- ✓ Awarded grants by INEA
- ✓ Granted 25-year exemption
- ✓ Awarded interconnector licence
- ✓ Obtained regulatory approval for access rules
- ✓ No subsea cables or overhead lines
- ✓ Minimal environmental impact
- ✓ Use of existing infrastructure
- ✓ Low transmission losses
- ✓ High reliability and availability



CONSTRUCTION WORKS

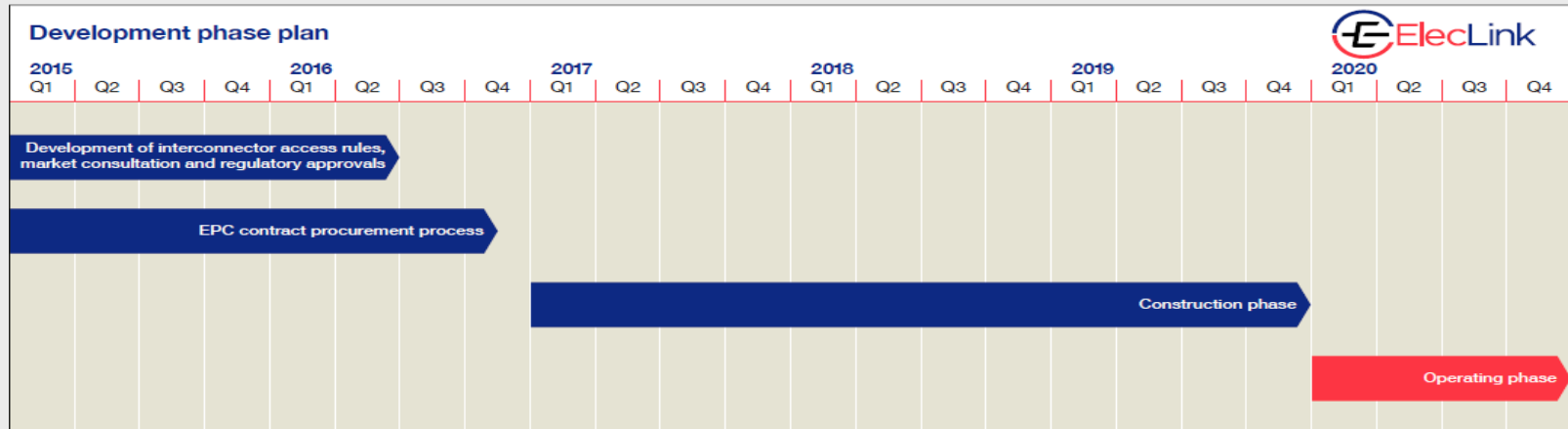


Converter stations



HVDC cables

- **Feb 2017:** Construction works commenced
- **Summer 2019:** Construction works end/Commissioning starts
- **Dec 2019:** End of commissioning
- **2020+:** Commercial operations



Three regulatory regimes possible for new interconnectors

REGULATED ASSET BASE (RAB)

Standard investment route for most European interconnection projects

Revenue: fully regulated, price controlled

CAP & FLOOR

A new regime open to electricity interconnectors in GB

Revenue “capped” at an upper limit. Downside protected by the “floor” with consumer underwriting

EXEMPTION

Developers can seek exemptions from regulatory requirements

Revenue: Greater access to revenue upside, subject to exemption conditions, but without consumer underwriting

Example in GB:
ElecLink

Article 17 of REGULATION (EC) No 714/2009

- New direct current interconnectors may, upon request, be exempted for a limited period of time from the following rules

Article 16(6) of Regulation 714/2009

Rules on how congestion revenues can be used by TSOs

Article 9 of Directive 2009/72/EC

Ownership unbundling requirements

Article 32 of Directive 2009/72/EC

Third party access rules

Articles 37(6) and (10) of Directive 2009/72/EC

Requirement for regulatory approval of access rules and charging methodologies

Six cumulative conditions for an exemption to be granted

1. the investment must enhance competition in electricity supply
2. the risk attached to the project is such that the investment would not take place unless the exemption is granted
3. the interconnector owner must be separate from the system operators in whose systems that interconnector will be built
4. charges will be levied on users of the interconnector
5. no part of CAPEX or OPEX have been recovered from transmission or distribution tariffs in the connected systems
6. the exemption is not detrimental to competition, the effective functioning of the internal electricity market or the efficient functioning of the regulated systems to which the interconnector is connected

ElecLink vs. fully regulated interconnectors

Third party access

ElecLink allowed to sell multi-year products for up to 80% (800 MW) of total capacity
Remaining 20% (200 MW) must be sold as shorter-term products (e.g. yearly, monthly, daily)

Multi-year products

- Max 800 MW
- 2 – 20 years in duration
- Average tenor must not exceed 15 years
- Tenors ≤ 5 years must be offered
- No user allowed more than 400 MW
- Users with 40% market share in GB or FR not allowed more than 200 MW

Medium term & daily products

- Min 200 MW
- Yearly, monthly and daily products
- No limits imposed on individual users

- Open, transparent and non-discriminatory auctions
- In Q4 2015, ElecLink consulted market participants on the ElecLink Access Rules
- In Q2 2016, ElecLink obtained regulatory approval from Ofgem and CRE on the ElecLink Access Rules

ElecLink vs. fully regulated interconnectors

Use of congestion revenues

RAB interconnectors must use congestion revenues only for:

- a. Guaranteeing the actual availability of the allocated capacity; and/or
- b. Maintaining or increasing interconnection capacities through network investments; and/or
- c. Setting network tariffs for system users.

Cap & Floor interconnectors have their revenues capped.

ElecLink is not subject to the above requirements.

- Congestion revenues can be retained as income and returns are not capped.
- However, a sharing mechanism applies for proceeds exceeding a predetermined IRR level set by the regulators.

Ownership unbundling

Partial exemption from ownership unbundling requirements subject to certain conditions.

A. Products

- Physical Transmission Rights (PTRs) with Use-it-or-Sell-it (UIOSI)
- Users may elect to:
 - Nominate physical flows; or
 - Be cashed-out at hourly market spread between FR and UK

B. Secondary market

- **Transfers:** users entitled to buy/sell capacity from/to other users
- **Returns:** users entitled to resell contracted capacity in later auctions

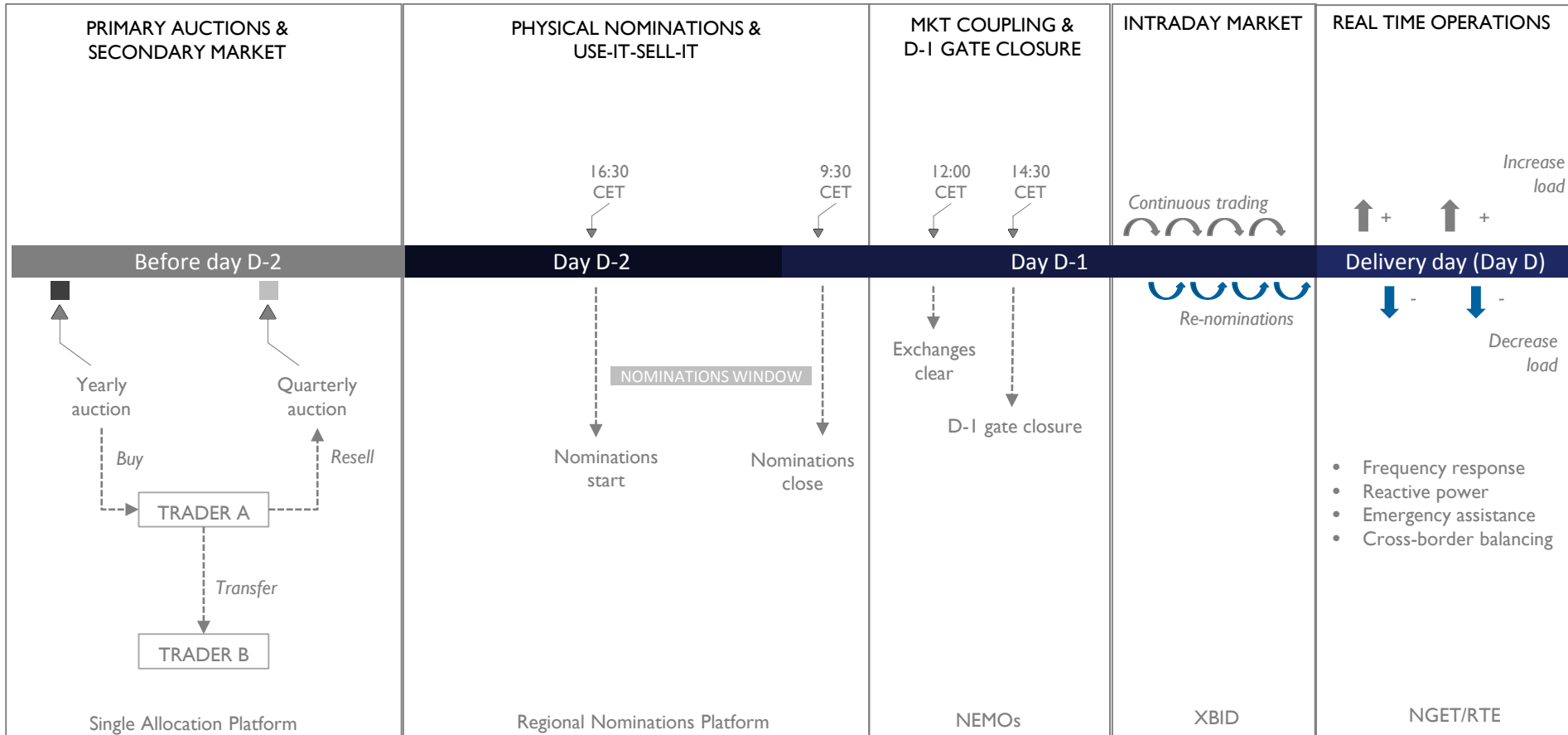
C. Firmness

- Curtailment and compensation rules harmonised with existing interconnector (IFA) and aligned with Forward Capacity Allocation network code

INTEGRATION WITH MARKET MECHANISMS



ElecLink will be fully integrated within the existing market arrangements

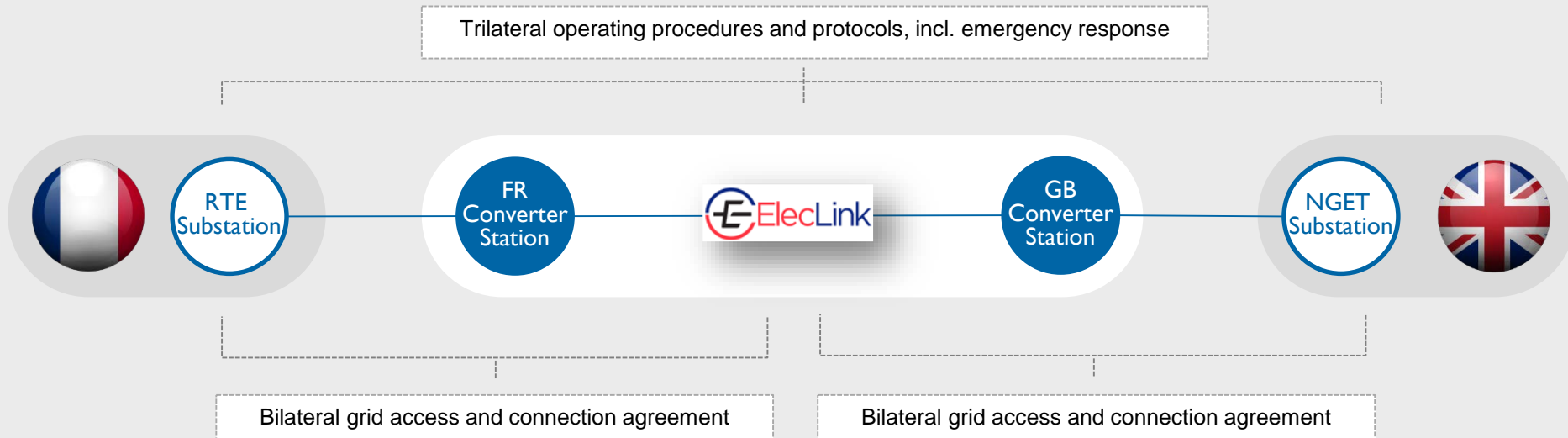


TSO INTERFACES

ElecLink will be 100% responsible for:

- Capacity allocation, nominations and congestion management; and
- Dispatch, operations, maintenance and repairs.

The interfaces with the TSOs, RTE and NGET, are governed by bilateral and tripartite agreements.



THANK YOU

