

Elia answer to Ofgem consultation
on Electricity interconnector policy
(Ref 12/10)

Introduction

Elia System Operator ("Elia") is Belgium's Transmission System Operator ("TSO"). The Elia Group owns all of Belgium's 150 to 380 kV grid infrastructure and almost 94% of its 30 to 70 kV grid infrastructure. Elia's grid infrastructure forms a key connection between France and the markets of Northern Europe.

Elia's main activities are:

- *transmission operation*: maintaining and developing grid infrastructure and connecting electrical installations to the grid;
- *system operation*: providing smooth, objective and transparent access to the grid, supplying all services to enable the transmission of electricity, monitoring electricity flows on the grid to ensure effective operation and constant management of the balance between electricity consumption and generation;
- *market facilitation*: taking initiatives to improve operation of the electricity market.

Elia is committed to providing solutions in order to enhance further integration of the electricity markets. Therefore, it brings significant contributions to the development of new interconnectors with neighbouring countries and solutions to increase cross-border capacity made available to market parties, as well as the design of mechanisms to promote efficient use of these capacities.

To this aim, Elia realised several projects to increase cross-border capacity with France and the Netherlands, and played a leading role in the development of the trilateral market coupling in France, Netherlands and Belgium. This market coupling is to be extended to the whole Central West Europe (CWE) region in the coming months, and eventually to Nordic countries as well.

Elia contemplates building new interconnectors with other countries, including Great Britain, and is therefore involved in the "Nemo" project. The "Nemo" project is a joint project of NGIL (branch of National Grid) and Elia for an interconnector of about 1000 MW between Great Britain and Belgium.

In this context, Elia welcomes the consultation on electricity interconnector policy launched by Ofgem.

General comments on issues raised in the consultation

With the adoption of the Climate Change package and the Third Energy package, special focus is given to the tasks of Transmission System Operators to develop, maintain and operate electricity grids with a view to accommodate and integrate growing injections from renewable energy sources, while ensuring the efficiency and reliability of the electric system.

Special focus is also given to the coordination between Transmission System Operators. This coordination is to take place in the planning phase of new investments, by the submission of a Ten Year Network Development Plan (TYNDP), summing up necessary investments in transmission grids, including cross-border interconnectors. This collaboration also relates to the tasks of system operation and market facilitation, among others, to elaborate and implement codes and procedures on capacity allocation, congestion management, inter-operability rules and balancing mechanisms.

To carry out these activities, Transmission System Operators need to rely on national schemes dealing with investments regulation and treatment of allowed revenues, as well as with capacity allocation and congestion management.

Therefore, co-partners in an interconnector project must have a common understanding of these respective national schemes and the way they will be considered for the transposition of the Third Electricity Package. It is also of utmost importance that national policies provide compatible provisions to facilitate the building of new interconnectors, as well as the design of market mechanisms aiming at promoting efficient use of cross-border capacities.

Elia understands that the consultation launched by Ofgem will trigger a fruitful discussion between concerned regulators, policy makers and operators on these topics, with the objective to provide correct incentives to project partners. Elia considers this is an essential step at a crucial moment (when all Member States are in the process of transposing the Third Electricity Package into national law), and will therefore actively contribute to this debate.

Answers to questions

1.1. Have we accurately captured the benefits of and demand for new interconnection? Are the projects under consideration all viable? Would they be sufficient? Are there other projects being developed?

Elia is involved with National Grid (NGIL) in the "Nemo" project, for an interconnector between Great Britain and Belgium of about 1000 MW. This project is only viable if the two partners can rely on a feasible framework, offering sufficient return to investors. A compatible legal and regulatory framework on both sides of the interconnector is essential and will probably determine the further progress of this project.

1.2. Are there other key aspects of the legal or regulatory framework that we should consider, or should some features be given a different emphasis?

Elia agrees with the key aspects considered in the consultation: capacity allocation and use, regulation of new interconnectors investments.

1.3. How can the Regional Initiative best contribute to development or implementation of policy? Do you agree with the priorities and approach outlined?

See answer to question 2.3.

2.1. Are the target models explained in this chapter appropriate for GB? What are the issues that need to be considered? Are there alternative approaches that would be better? Will the target models effectively accommodate increased intermittency?

In the light of provisions of Regulation 1228/2003 (Regulation 714/2009 under the Third Electricity Package), models for capacity allocation and congestion management should be based on implicit and explicit auctions, as the case may be, including continuous trading features. Elia considers that target models, as developed in the Market Integration Design Project, are appropriate because they allow the most efficient use of interconnectors.

Day-ahead capacity allocation

A single price coupling solution is generally considered as the enduring solution for day-ahead market coupling in Europe. One consequence is that day-ahead capacity made available to the market on all interconnectors between Great Britain ("GB") and the continent would take part in a single price coupling matching. The day-ahead power exchange operator(s) in GB should then participate in this mechanism.

Long term (year, month) capacity allocation

Concerning yearly and monthly capacity made available on the interconnectors between GB and the continent, Elia is of the opinion that the allocation methods can be similar to those used within the CWE region (without excluding CWE taking over some features from GB practice): explicit auction with “use-it-or-sell-it” faculty.

This implies that market parties can decide whether they effectively nominate a physical transaction or take the market spread as financial income. Such approach would allow the gradual decrease of part of the capacities which are auctioned (in yearly and monthly auctions) in favour of day-ahead market coupling capacity. A possible future evolution would also be that part of explicit auctions is replaced by Financial Transmission Rights. We expect these issues to evolve together with development of more mature and liquid coupled day-ahead market.

Increased intermittency can partly be managed by improving the day-ahead forecasts: this allows the day-ahead forecast volumes to be handled at the day-ahead coupled power exchanges. Incentives can be built into the market design, thereby obtaining the best possible day-ahead forecast and offering these forwards to the day-ahead market. Deviations will have to be treated on the intraday market and finally the balancing mechanism. Elia is not *a priori* in favour of reserving intraday capacity on interconnectors, since this may lead to loss of useful interconnector capacity. The question whether intraday capacity and/or capacity for cross-border balancing and cross-border ancillaries management should be reserved, should be further researched, until there is better insight in the way the markets evolve in the next years.

2.2. What should be our approach to firmness of interconnector capacity? Should this vary between new and existing interconnectors, or between regulated and exempt? What are the categories of costs and benefits from changing approach, where should they fall and can they be quantified?

Elia is in favour of the approach currently applied in CWE region as to firmness of capacity interconnector (see the “Rules for Capacity Allocation by Explicit Auctions within Central West Europe Region (CWE Auction Rules)”). Under this scheme, the capacity auctioned at year and month auctions is firm after nomination (programs), except in case of “force majeure” (article 5 of the CWE Auction Rules). Transmission System Operators may curtail capacity auctioned at year and month auctions, as long as this is announced to market participants before nomination time. In case of curtailment of such a capacity, some compensation may be given to concerned participants. Ideally, no difference on firmness should be envisaged between different interconnectors.

2.3. Should we seek regional solutions rather than individual project solutions for access rules, such as through a broader North West European solution for market coupling? What are the priority areas for greater regional coordination?

With respect to cross-border interconnectors, Elia suggests using the term "allocation method" instead of "access rules". There is indeed a difference between "access to the network" (access is a legal right each grid user is entitled to at his connection point with the grid), and "use of interconnectors" (interconnection capacity is allocated to wholesale market parties according to market based methods, as foreseen by Regulation¹ 1228/2003).

Elia is in favour of broad regional solutions for congestion management and capacity allocation, such as the one in development between CWE and the Nordic Region. Greater regional cooperation should first focus on the development of a unique price coupling solution for day-ahead capacity allocation, moving forward to the development of intraday capacity allocation and cross-border balancing solutions.

3.1. Does this chapter capture the key issues in regulation of new electricity interconnectors? Should we assume that all new interconnectors will seek exemptions?

Elia considers that this chapter of the consultation captures the key issues for regulating new electricity interconnectors.

On the regulation of investment by new interconnectors, Elia agrees with Ofgem that, under EU legislation, the default approach is the regulated model, and that exemptions should only be granted by exception. This view is confirmed by the new tasks devoted to TSOs, under the Third Electricity Package, among others, to establish a Community-wide Ten Year Network Development plan.

In this context, only a few situations should profit from an exemption to attract investors and developers, especially when the capacity of the interconnector will be limited for geographical reasons (e.g.: islands with few power plants, no connections to offshore or onshore big wind farm parks).

Elia is of the opinion that today – and in the future – there is a very limited scope for merchant (exempted) interconnectors and this is mainly because of the tasks and obligations of the TSO's regarding the transmissions systems and the interconnector linking them:

- in view of the Third Electricity Package², it is stressed that one of the essential tasks of a TSO - and consequently this also concerns the regulatory authorities - is to increase the capacity exchange on all borders by building new interconnectors to stimulate the electricity market as well as to secure the energy demand in EU;

¹ Regulation 714/2009 under the Third Electricity Package.

² *Whereas 59 of the Directive 2009/72/EC* underlines that regulatory issues about interconnectors should be one of the main goals of this directive and will be, by consequence, one of the main tasks of the regulatory authorities.

Whereas 23 of the Regulation (Ec) n° 714/2009 strongly advises Member States to promote investments in major new infrastructure, especially for direct current interconnectors, which can have a positive effect on competition and security of supply on the market.

- in view of the EU renewable energy policy (target 20/20/20), offshore interconnectors will have high priority for the coming two decades. They will allow exchange between several interconnected markets of renewable electricity coming from onshore or offshore sources.
- in addition, strong offshore interconnectors between Member States will play a major role in the future development of the North Sea Grid, supported by the Commission. Interconnectors with high capacity will be needed to transfer the "green" offshore wind energy between several markets but will also be essential to ensure the reliability of the electricity system.
- finally, an additional interconnector between GB and the continent will have a positive effect on the security of supply in GB. GB currently has, compared to other countries, less exchange and less possibilities of balancing capacities with other EU Member States.

In addition, the decision making process to obtain an exemption also imposes reserves, due to the Commission's right to set conditions when granting exemptions requested by a national regulatory authority. Due to this, the initial advantages of the exemption regime may be reduced in a significant way.

Unless there are specific reasons in favour of an exemption (e.g. geography, etc), Elia considers it is one of the basic tasks of a TSO to develop these infrastructures and that this forms part of its regulated activity, provided that the regulation delivers the right incentives and attractiveness for investors so as to secure financing for this development.

<p><i>3.2. Of the options set out, which are preferable and why? What are the key considerations in taking forward any of the options?</i></p>
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As explained in point 3.1, Elia is in favour of a regulated model, with appropriate incentives for the TSO's. However, comments on all models are described in point 3.17 of the consultation.

Option 1- Uncapped

Elia considers that this "merchant" model is generally not in line with EU policies, including the new Third Electricity Package. The fact that an exemption is subject to several conditions and that the granting of an exemption (contrary to a refusal of an exemption request) must be approved by the Commission, illustrates that the default approach is not the exemption regime.

One of these conditions is a separation between the TSO and the owner of the interconnector. As such, this condition prohibits any TSO to own an exempted interconnector. This issue might be overcome when creating another company (sister of the TSO) owning the interconnector.

As TSO in Belgium, Elia owns the entirety of the extra-high voltage grid, including interconnectors with neighbouring countries (currently France and the Netherlands). To date, there is no necessity to deviate from this approach, due to the regulated treatment of all interconnectors.

Elia considers it is very doubtful to stimulate the building of several "exempted" interconnectors in the North Sea, each owned by a separate entity, while EU policy sets forth the building of a meshed North Sea Grid as a TSO task.

Elia underlines the possible difficulties when several “players” on one interconnector are present in addition to TSO’s. The daily operation of one interconnector requires good coordination between TSO’s on both sides of the cable. This coordination could be complicated by the presence of another partner, owner of the installation, who could be, for example, less sensitive to questions which are under the full responsibility of the TSOs, such as the security and reliability of the entire electricity system.

Another condition to obtain an exemption is the assessment of the risk level attached to the interconnector. It must be demonstrated that the risk level attached to an investment is such that the investment is not feasible without exemption. If the risk is too high, a TSO would need to seek a regulated treatment. It is then for the regulatory authorities to judge, whether the risk is such that a regulated regime could have negative consequences for the customers and, consequently, protect them by requesting an exemption regime.

Finally, as explained above, the decision process for obtaining an exemption contains risks that reduce its attractiveness, due to conditions that may be imposed by the Commission.

Option 2 - regulated cap

Elia does not believe this model is acceptable for developers, because the developer of the interconnector is liable for all risks of the investment, as in a merchant regime, while his revenues are capped when the interconnector becomes profitable.

Option 3 - Regulated Cap & Floor

This option seems to be a compromise between the advantages and disadvantages of merchant and regulated models.

As long as such an option is feasible without obtaining an exemption, Elia considers this would be an acceptable option, combining the basic features of a regulated model, while providing some incentives to project developers. Symmetry of risks is an advantage, unlike under option 2. The existence of a cap should avoid large amounts being compensated by (national) network users, while the existence of a minimum helps to provide a reasonable guarantee on the rate of return.

Option 4 - Regulated

Elia considers the regulated approach to be the default approach, to be applied when the developer cannot justify all the cumulative conditions for an exemption.

This scheme is appropriate to facilitate interconnector projects being carried out by two TSOs. Under this scheme, the relevant (national) regulation provides a consistent method for handling all relevant questions stemming from the building of the interconnector: technical operation rules, rules for capacity allocation and congestion management, cost sharing for the interconnector and (onshore) network reinforcements, treatment of costs and revenues, etc.

Regulated regimes, in which all costs and revenues are socialised, are generally applied for common AC onshore investments. When dealing with [offshore] DC interconnectors, such a scheme must however be adjusted to provide an incentive for the realisation of investments. The DC connections require much higher budgets and the source for financing these investments could limit their further development. In any event, there is a need to have a regulatory regime in place with sufficient incentives to attract the potential investors in new interconnectors.

Therefore, Elia believes a specific solution is needed within the regulated model (see option 3), for the pre-financing of huge investments made by a TSO when planning these developments. It should recognize the specific nature of these investments and their priority at the level of each Member State and on a European scale.

3.3. Is it feasible to have a mixture of different approaches for different interconnectors – such as some exempt and others regulated? If not, why and how should this be resolved?

A mixture of different approaches for different interconnectors should be limited to existing cases. A unified approach should be contemplated for new interconnectors, with deviations only under specific conditions.

For a given interconnector, Elia recommends not to mix different models (regulated – merchant) at both ends of one and the same interconnector, due to the complexity this would create for its operation.

Among other difficulties, differences in treatment of “termination liabilities” for onshore transmission works related to an interconnector development might lead to obstacles in building the interconnector.

Elia understands that NGET’s price control only funds new load related investments that provide new outputs, i.e. provide capacity for which customers pay charges to receive.

As a consequence, developers of an interconnector project are required to deliver termination liabilities to NGET from an early stage of the project development.

Elia is of the opinion that, when an interconnector project is initiated between two countries, the two involved TSOs should endeavor to proceed simultaneously with the licensing procedures and initiation of transmission works at both sides of the interconnector. All onshore costs directly attributable to the project should be estimated ex ante and sharing keys agreed, but grid users of both countries should not bear the risk of termination in a fundamentally different way.