

Elia response to Ofgem-CREG consultation on cap and floor  
regime for regulation of project NEMO and future subsea  
interconnectors  
(Ref 86/11)

## Introduction

Elia System Operator ("Elia") is Belgium's Transmission System Operator ("TSO"). The Elia Group owns in Belgium all of 150 to 380 kV grid infrastructure and almost 94% of the 30 kV 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. It therefore makes 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 end, Elia has implemented several projects to increase cross-border capacity with France and the Netherlands, and has played a leading role in the development of trilateral market coupling in France, the Netherlands and Belgium. This market coupling has been extended to the whole Central West Europe (CWE) region and also to the Nordic countries.

Elia is keen to build new interconnectors with other countries, including Great-Britain. It is therefore involved in "Nemo", a joint project between NGIL (a branch of National Grid) and Elia for an interconnector of around 1000 MW between Great Britain and Belgium.

## General comments on issues raised in the consultation

As TSO in Belgium and a partner in the Nemo project, Elia welcomes the consultation launched by Ofgem and CREG on a cap and floor regime for regulation of project Nemo and future subsea interconnectors.

After the adoption of the Climate Change Package and the Third Energy Package, the Energy Infrastructure Package identified the need for further interconnection investment in Europe and specific actions were taken by several Member States to develop an integrated offshore energy grid across the North Seas of Europe (NSCOGI). Under these developments, Transmission System Operators need to develop, maintain and operate electricity grids with a view to accommodating and integrating growing injections from renewable energy sources, while ensuring the efficiency and reliability of the electric system, and to coordinate between them for grid investment planning, system operation and market facilitation.

In that framework, it is of utmost importance that transmission system operators and interconnector developers get a long term view on the allowed treatment of costs and revenues related to their activities, e.g. revenues accruing to an interconnector project. The initiative taken by CREG and Ofgem is a useful step in this direction.

Elia considers the proposed regime as a valuable tool for interconnector developers, since this should provide a common regulation scheme applicable at both ends of the interconnector. As it will provide compatible provisions to the co-partners in the project, this should facilitate a common decision-making process between both partners for the planning and efficient operation of the interconnector.

With that in mind, Elia recommends that a single set of parameters be applied in the regime for the interconnector, in order to operate under similar conditions at both ends of the interconnector. Unless "local" conditions require a different treatment of some items, Elia will support regulators in any attempt to define these parameters (cap and floor, duration, settlement practicalities, depreciation rates, etc.).

## Answers to questions

Question 3.1: Do you agree with principles of the regulated regime we have identified?

Question 3.2: Are there any other principles that should underpin the new regime?

Elia broadly agrees with the principles of the proposed regime.

Besides the need for coordinated regulatory treatment (principle n°4), there is a need to define returns that are commensurate with the level of risk exposure (principle n°3). These two principles should facilitate the process for new interconnector developers (by having a coordinated framework under which they may operate), and provide adequate incentives to attract investors. This is required for offshore DC connections, which require much higher budgets than usual grid investments. Moreover, the specific nature of a cross-border interconnector leads to much uncertainty regarding the revenues that will accrue to the interconnector operator (whether or not it is a TSO). These revenues (i.e. congestion rents) depend on market conditions in several countries of Europe and the willingness of market parties to use the interconnector and pay for its usage. Though the Nemo interconnector is considered as a valuable investment to foster market integration at European level and increase economic welfare in several countries, the impact on Elia's revenues is somewhat uncertain and could be volatile. This increased level of risk must be taken into account in the regulatory regime. Other benefits of the interconnector should also be recognised: such interconnectors usually help to increase economic welfare in several countries, to enhance security of supply and to foster integration of renewable energy sources, to the benefit of all end-users and in line with European energy policy goals. Congestion rents accruing to the interconnector operator are therefore not the only indication of the interconnector's value for the development of an integrated electricity market.

When achieving this, there is a need to strike the right balance between the protection of consumers' interests and the delivery of appropriate incentives to develop new interconnectors. An adequate consideration of principles n°1 and n°2 is therefore needed to assess the levels of the cap and the floor in the proposed regime.

Besides these principles, Elia also considers it important to allow a regulatory regime that may be applied without the need for an exemption, and the regulatory risk that could arise from such a process, as underlined in the consultation document.

Elia therefore assumes that the proposed cap and floor model would be applicable to non-exempt interconnectors. Furthermore, Elia considers that, contrary to what is stated in the regulators' consultation, the sizing and location of new interconnectors should be envisaged in relation to the tasks and obligations of the TSOs regarding the transmission systems and interconnections linking them, among which the establishment of a Community-wide ten-year network development plan.

Question 4.1: Is the cap and floor model the right approach to meet the principles of the new regulated investment regime for sub-sea interconnection? Are there any alternative approaches that we should be considering?

Elia considers the proposed regime as one right approach to meet the principles. Though other approaches are not excluded, an appropriate parameter-setting would possibly lead to similar effects.

Question 4.2: Do you see benefits in introducing a cap and floor regime with profit sharing arrangements? Do you have views on how a profit sharing approach could work?

Profit-sharing arrangements might be envisaged, as a way to mitigate some risks associated with lack of incentives when caps are reached. However, profit sharing within the cap and floor will not contribute to creating such an incentive. Such an arrangement will lead to a higher cap when allowing proportionate risk-sharing between the developers and consumers. It will also lead to a higher probability of activating the floor as the (cumulative) profits of the developer will be lower due to profit sharing. It is a shift from a simple to a more complex method for a given maximum allowed project return.

Profit sharing arrangements above the cap, on the other hand, will provide an incentive to the interconnector operator to ensure maximum availability and maximise the overall project returns.

Such arrangements would place greater focus on the regulated part of the regime, and should therefore be assessed by regulators with a view to consumer protection. The parameters (cap and floor) should in any case be assessed with this in mind, to allow a proportionate risk-sharing between the developers and the consumers.

Question 4.3: Do you agree with the potential risks of the new regime identified? Are there any other risks or issues we should be taking into account?

The lack of incentives to keep availability at a high level can be solved by a profit sharing arrangement above the cap.

A consistent cost allocation can be ensured by creating a separate legal entity for the interconnector with transparent and auditable cost and revenue allocation.

As an additional risk or issue, special attention should be paid to an in-depth analysis of the accounting treatment of the interconnector business. Indeed, Elia understands that the implementation of the proposed regime requires the use of "regulated assets and liabilities", but the current IFRS rules do not provide clear guidance on this.

Question 5.1: Do you agree with the proposed design parameters of the cap and floor mechanism? Are there any other parameters we should be taking into account when designing the cap and floor mechanism?

Elia agrees with the proposed design parameters of the cap and floor mechanism and does not believe any other parameters should be taken into account.

Question 5.2: Do you have a preference for the options presented under each parameter? Do you have a preferred combination or straw man proposal for a cap and floor design?

Elia makes some comments on the proposed parameters below. However, the assessment of any combination of these items should be done as a whole, since their combination will lead to a given risk-sharing between the interconnector developer and the consumers.

How long does the cap and floor mechanism persist for?

The lifetime of financing does not seem a good approach as the length of financing depends on the financing options and the behaviour of the financial markets, which can be very cyclical, as has been seen in the past 10 years.

The interconnector lifetime seems to be appropriate. Besides being compliant with the requirements of the EU's electricity regulations, it has the advantage of offering the same benefits to consumers and developers after the financing period. For instance, additional capex (for the refurbishments that will be required after a few years) will be treated in the same regime irrespective of the mode of financing.

When the capital costs are repaid, any additional project returns will be beneficial for consumers by reaching the cap. On the other hand, a floor is still needed to guarantee a minimal cost recovery to the owners. It is impossible to predict revenues arising from congestion rents by 2035. Congestion revenues could be zero but the interconnector would still have an economic value (consumer and producer surplus) for its users and consumers.

An alternative could be a cap and floor regime that persists for the commercial lifetime of the project, based on its business plan. This is consistent with the investment decision. After this lifetime, a different regime could be put in place for the remaining lifetime of the asset.

What is the cap and floor levied on?

An IRR approach is the preferred option. It is consistent with a project investment decision and can be related to lifetime project returns when setting the cap and floor values. It has been used in the past for the BritNed interconnector.

A cap and floor based on net profit is a less preferable option as this depends entirely on which GAAP the interconnector will apply in its accounting books. Consequently, there could be a big difference between the cash flow generated and the reported net profit for each evaluation period.

A cap and floor based on revenues is even less desirable. It offers no guarantee of a minimum return for the developer and offers less protection to consumers for excessive project returns. Such an approach could also lead to undesired results if combined with national regulatory provisions related to the treatment of the costs of the interconnector, when one of the interconnector owners is a TSO, as is the case with Elia.

How often is performance assessed against the cap and floor?

A one-off settlement does not reduce risks substantially for developers or consumers and is unacceptable from a legal accounting point of view as the company and the auditors will find it hard to close the financial books in a proper way. This is certainly a big problem for listed shareholders of the interconnector.

A yearly settlement will mitigate these risks but has some major drawbacks. As well as increasing the administrative burden, it will lead to multiple activations of the cap and floor since congestion revenues may be very volatile from one year to another.

A periodic settlement seems the best option. The length of the period should be not too long in order to reduce risks and uncertainty both for developers and consumers and it should be not too short in order to have some stability in triggering caps and floors that will have an effect on national transmission tariffs. Elia considers a periodic assessment (4 to 5 years) appropriate.

Whatever option is taken, from an accounting point of view, it is important to have a kind of yearly assessment (done by the interconnector company and approved by both regulators within 3 to 6 months after closing) in order to be able to make final financial accounts on a yearly basis (which is required by law). In that respect it is also important that the IFRS rules regarding regulatory assets and liabilities for regulated companies are clearly set by the IFRS board (cf. rules applicable in US GAAP).

How is the assessment for each period treated?

Although a discrete assessment is compatible with the principles of the cap and floor regime, a cumulative approach has the additional advantages that the overall lifetime project return will be the market valuation of the interconnector (if the lifetime project return falls between the cap and floor set) and that it reduces the probability of triggering caps and floors.

Are the caps and floor reset?

Resetting the cap and floor will generate substantially more risk and uncertainty both for developers and consumers. As well as the market risk, it will also create additional regulatory risks for developers and will have a negative impact on the cost of capital.

It is important that cap and floor levels are fixed before the investment decision.

Does the cap and floor level change over time or remain constant?

A variable setting of the cap and floor, with a bigger spread in the first periods, will increase financing risks and hence cost of capital considerably. Although depending on the exact levels of the cap and floor, a variable cap and floor setting could lead to insufficient levels of cash flow generation during the first periods of the project.

If the IRR approach is used, how is the project value determined?

Although both options are possible, the depreciated asset method has the advantage of being relatively simpler and being much more transparent and objective. Establishing the project's IRR for a periodic assessment based on the expected asset value requires the prediction of future expected cash flows. Given the volatile nature of the expected revenues, such a prediction has a lot of uncertainties and will always be partly subjective. As a consequence, this method will increase the project risks.

If the expected cash flow method is used, the project risk could be reduced by fixing the expected cash flows (used for ex post IRR determination) ex ante. This avoids the uncertainty surrounding periodic updates of expected cash flows.

Distance between the cap and floor?

This distance must be assessed taking into account all parameters in the model. Indeed, the combinations of these items lead to risk-sharing between the interconnector developer and consumers.

In any event, the cap and floor as well as the distance have to be determined in order to be able to attract enough capital (equity and financial debt) to finance the interconnector investments and to be able to generate a reasonable return for the shareholders, also taking into account the risk profile.

Approach to symmetry for the cap and floor?

Elia understands the basic principles of the proposed regime as being a way to share risk between the interconnector developer and the consumers. When the reference return is fixed as the expected outcome of the interconnector operation over a given period, one might expect equal risks of exceeding or under-reaching the reference return. This would lead to symmetric cap and floor, which is also more objective.

Treatment of revenues within the cap and floor

See answer on question 4.2

Preferred combination?

Although many combinations are possible, a preferred cap and floor design combination that fulfils the regime's principles could look like this:

- Lifetime of interconnector asset (or project commercial lifetime)
- IRR based on depreciated asset method
- Periodic cumulative assessment
- Ex ante one-off and constant cap and floor

- Symmetric
- No profit sharing within cap and floor

Question 5.3: Do you think additional incentives should be introduced to encourage desirable outcomes under the regime?

In general, incentives should only be put on outcomes over which the developer/interconnector operator has full control.

Elia is willing to further discuss potential additional incentives but believes this should not be the main focus of the regulation, certainly not in the first 5 to 10 years of operation. Incentive mechanisms often increase the risk profile and therefore mean a higher financing cost, which also implies a higher cap and floor.

### Additional comments

As part of the regulators' work on a coordinated regulatory regime, the issue of termination liabilities should be addressed. For Nemo, this issue stems from different treatments of these liabilities for onshore transmission works in Belgium and the UK. As a consequence of this difference, developers of an interconnector project are required to deliver termination liabilities to NGET from an early stage of the project development, while this is not requested on the Belgian side. Grid users of both countries therefore bear the risk of project termination in a different way. This might lead to increased exposure for Belgian consumers: in case of termination of the project before its completion, Belgian consumers would incur charges both for completed works in the Belgian grid and in the UK grid. Elia would welcome a coordinated approach on this issue, as is the case for the proposed regime in the consultation document, and is ready to contribute to this debate.

Another issue relates to the treatment of "use of system charges" at both ends of the interconnector. While no specific tariff is charged to an interconnector at the Belgian end for the use of the onshore grid, we understand that such a charge could be levied on the UK end. The treatment of these items should be clarified for the computation of the parameter (e.g. IRR) considered in a cap and floor mechanism.