

▶ **Request for Exemption: AQUIND Interconnector**

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6 Fulfilling the relevant exemption criteria

6.1 Introduction

This section of the Request for Exemption explains how AQUIND Interconnector meets the exemption criteria set out in Article 63 of the Regulation.

The promoters of AQUIND Interconnector have identified the need for additional capacity between GB and France and material positive benefits of the project for France and for the wider EU.

AQUIND's analysis shows that the Project will increase competition in GB and France and across Europe without causing detriment to the functioning of the internal market. Pursuant to this Request for Exemption, these benefits will be delivered in France without the need for network tariff in France.

As discussed in Section 5 of this Request for Exemption, this investment will not take place unless this exemption is granted. AQUIND requests an exemption that is proportionate and related to the Use of Revenues in respect of the revenues generated by the Project, which corresponds to the Exempt Portion. Further AQUIND has incorporated a proposed condition into the Request for Exemption to ensure French network users benefit in scenarios where AQUIND's revenues exceed a certain threshold.

Table 6-1 summarises the way that AQUIND fulfils the requirements of Article 63 of the Regulation.

Table 6-1 Fulfilling Article 63 exemption criteria

Criteria	Summary
Competition (criterion a)	<ul style="list-style-type: none"> ▶ No risk of any adverse impact of AQUIND on competition, given that no exemption from the prevailing capacity allocation rules is requested. ▶ Increase in traded volumes (liquidity) in the GB and French wholesale energy markets. ▶ Increase in competition in provision of capacity through the GB and French capacity markets, thus reducing the cost of meeting a desired level of security of supply in both countries. ▶ Increase in the range of providers of GB-France cross-border capacity.
Risk (criterion b)	<ul style="list-style-type: none"> ▶ AQUIND tested extensively the viability of potential investment routes with CRE, ACER and Ofgem and concluded that without an exemption, the investment will not take place. ▶ Due to provisions of French law, AQUIND is not entitled to operate AQUIND Interconnector in France without an exemption. ▶ For the Exempt Portion of the Project, AQUIND faces revenue risk from competing projects, macroeconomic and policy risks (including Brexit) and curtailment risk ▶ For the Exempt Portion of the Project, AQUIND also faces substantial construction risk arising from the size and technical complexity of the project.
Ownership (criterion c)	<ul style="list-style-type: none"> ▶ AQUIND is promoted by legal persons who have no affiliation with the system operators whose systems that interconnector will be connected to.
Charges (criterion d)	<ul style="list-style-type: none"> ▶ Charges will be levied on users of the interconnector for the full interconnector capacity.
Recovery of costs (criterion e)	<ul style="list-style-type: none"> ▶ No part of the capital or operating costs relating to the Exempt Portion has been (or will be) recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector.
Functioning of the internal market (criterion f)	<ul style="list-style-type: none"> ▶ Strong positive increase in total net social welfare as a result of AQUIND ▶ Improved generation dispatch across GB, France and Europe, optimising renewables dispatch and reductions in CO₂ ▶ AQUIND is projected to reduce the price spread between GB and France, an objective of European market integration ▶ AQUIND has no significant negative impact on the continental European transmission grid ▶ AQUIND is not expected to require additional investment in the network in France¹

6.2 Demonstrations of criterion (a) – Competition

The investment must enhance competition in electricity supply

¹ A comprehensive study of the impact of AQUIND on the French transmission system is provided in Exhibit 10 – “Consentec report on the impact of AQUIND on the French transmission system”. This study was completed by independent consultants, Consentec GmbH.

AQUIND will ensure competitive pressure through the sale of capacity through regulated markets, fully aligned with other interconnectors on the GB-France border.² AQUIND will therefore significantly increase capacity on the border.

6.2.1 Competition in cross-border capacity

AQUIND proposes to allocate all capacity on the basis of the prevailing allocation regulations and rules (i.e. without an exemption). As a result, the increase in cross-border capacity between France and GB cannot and will not have any adverse impact on competition.³

On the contrary, AQUIND is a non-incumbent-TSO investor and will therefore diversify the ownership of GB-France cross-border interconnectors, giving market participants additional choice across several markets:

- ▶ AQUIND Interconnector will widen the range of prospective providers of cross-border capacity for participants trading capacity on the interconnector. While this is not expected to fundamentally alter the nature of competition in the cross-border capacity market (under the prevailing capacity allocation rules), we consider it is beneficial to include another prospective provider of capacity, given that the majority of the capacity is owned by entities, related national transmission system operators of France and GB.
- ▶ AQUIND Interconnector will broaden the size of the wholesale market for energy in France and in GB, as well as increase their liquidity.
- ▶ AQUIND Interconnector will also, by participating in the GB Capacity Market, broaden the pool of participants in the GB capacity auction, thus increase the competitive pressures in that market (and/or increasing the security of supply in the connected markets).

In particular, AQUIND will triple the capacity offered by interconnectors that are not affiliated with national TSOs (from 1GW to 3GW).⁴ This will ensure that competition for AQUIND capacity is maximised.

AQUIND is not requesting any exemption in respect of the prevailing capacity sales rules, therefore all capacity will be sold through competitive, regulated products, in a way that is consistent with other interconnectors on the GB-French border and aligned with the prevailing capacity allocation legislation.⁵ As capacity will be sold through regulated products and timeframes, there will be no opportunity for any market participant to benefit from AQUIND in an anti-competitive way. Specifically, competition will be maximised through competitive allocation of capacity through capacity auctions and inclusion of Use-it-or-lose-it requirements on all capacity (both in compliance with requirements set out under the CACM and FCA Network Codes). Our existing high-level competition analysis supports these conclusions, indicating that AQUIND would not have any adverse impacts on market concentration.

² With the exception of ElecLink which plans to sell long-term contracts for up to 80% of its capacity.

³ We recognise that in a situation where an interconnector owner applies for a form of exemption that includes long-term capacity sales, this observation would need to be justified further. However, AQUIND is not applying for any exemption in this respect.

⁴ There is currently only one other non-TSO investor (ElecLink) building a GB-continental Europe interconnector and that cross-border interconnection is otherwise still dominated by national TSOs.

⁵ Specifically, the Capacity Allocation and Congestion Management (CACM) and Forward Capacity Allocation (FCA) Network Codes.

6.2.2 Price competition

AQUIND will provide market participants with a larger tradeable market on both sides of the connection. In simple economic terms, more buyers and sellers will increase competition in the GB and French wholesale markets. This increase in competition is expected to place downward pressure on wholesale electricity prices as market participants compete for market share. AQUIND's ability to flexibly respond to short-term price signals, will result in increased competitive pressure in North-Western Europe, to the benefit of electricity consumers.

6.2.3 Measures of market share and pivotality

Trading capacity through organised, regulated markets, provides assurances and safeguards against dominant (or larger) players unfairly increasing their market dominance in either GB or France. AQUIND will not be in a position to allocate capacity to specific parties using the interconnector, nor will any specific party be able to hoard capacity or withhold AQUIND's capacity for competitive gain.

To support this conclusion we have included high level competition analysis with AQUIND's Request for Exemption (and set out in Exhibit 2). This analysis shows that AQUIND could marginally reduce concentration in the French generation market, reducing EDF market share, and could marginally reduce the instances where EDF is a pivotal supplier in France.⁶

6.2.4 Transmission capacity

AQUIND Interconnector will be a 2000MW project, which will be the largest interconnector between GB and France since IFA. We consider that there are several advantages to selecting this capacity, summarised below. In addition, Section 4 provides a summary of the technical restrictions on the size of AQUIND Interconnector.

- ▶ The project benefits can be realised more efficiently when delivered through a single project compared to a number of independent developers.
- ▶ The cable capacity for HVDC interconnectors is somewhat standardised, with typical cable capacities available being 700MW and 1000MW. This implies that potential sizing of the cable is 'discrete' in pre-determined steps. For example, an interconnector of 843 MW would require first-of-a-kind tailored development which would be prohibitively expensive.
- ▶ An interconnector of 2000MW, composed of two separate monopoles, provides a high degree of security of supply as each monopole can continue operating in case of a failure of the other one.
- ▶ By contrast, an interconnector larger than 2000MW with two circuits would push current technology boundaries, significantly increasing the construction and operational risks, while exceeding TSO limitations on on-time infeed loss. In addition, building a third circuit would complicate the construction process and interfaces to a degree which would make the Project impractical.
- ▶ The chosen capacity maximises the utilisation of the existing connection points in France and in GB: it was the largest capacity that could have been practically connected to national

⁶ The pivotality analysis is based on the Residual Supplier Index (RSI). RSI considers the proportion of hours during the year where the dominant market participant is required to meet demand. The analysis shows that the introduction of AQUIND Interconnector, will not increase the opportunities for EDF to influence market prices in GB or France. The introduction of AQUIND Interconnector marginally reduces the number of hours in the modelled years when EDF is the pivotal supplier.

transmission systems at any specific connection location discussed with national transmission system operators.

On the basis of the above, we conclude that the capacity of the Project that has been selected to maximise the benefits of the Project for Europe.

6.3 Demonstration of criterion (b) – Risk

The level of risk attached to the investment is such that the investment would not take place unless an exemption is granted

Through testing the viability of potential investment routes with CRE, ACER and Ofgem, AQUIND has demonstrated that there is no alternative regulatory arrangement available in France and accordingly the development of AQUIND Interconnector will not take place without an exemption.

Further, AQUIND Interconnector is planning to finance the Project, including for the Exempt Portion, using project finance which means that prospective lenders and equity providers will be taking into account the Project's expected revenues in deciding whether (and on what terms) to offer finance. As such, prospective finance providers will evaluate whether the Project's future revenues are commensurate with the rate of return they expect to earn.⁷

Analysis undertaken by AQUIND for project financing purposes confirms this risk return relationship for infrastructure assets in GB and France. These equity return premia reflect the equity exposure for riskier projects, specifically relating to offshore construction and operating risk inherent with large infrastructure projects such as AQUIND (along with offshore wind and LNG infrastructure, for example).

The level of 'reasonable profit' is a well-known concept. In a competitive market "*an undertaking would be expected to earn 'normal profits' on any particular activity. These refer to the level of profits that an undertaking requires to provide a sufficient return to the lenders and shareholders that provide the undertaking with finance. This rate of return is referred to as the undertaking's 'cost of capital'*".⁸ In practical terms, this means finance providers will compare the return they earn on their activities to the 'next best' alternative and, if their actual return is lower than what they would expect to earn in other activities, they will re-deploy their capital accordingly.

- ▶ This position is consistent with finance theory, which states in general terms that the reasonable return required by finance providers (both shareholders and lenders) is a function of the level of investment (i.e. capital employed) and risk associated with the project.
- ▶ This position is also consistent with the recent judgment on Baltic Cable, which concluded that, in the context of Use of Revenue regulation, non-TSO operators of cross-border interconnectors may be authorised by NRAs to use part of their congestion revenues to make a profit, so that it can "carry out its activity in financially acceptable conditions, which includes making an **appropriate profit**" (emphasis added).⁹

We agree with the judgment on Baltic Cable and understand that the NRAs will seek to identify the level of "appropriate profit" as part of their detailed assessment of this Exemption Request.

⁷ We consider that as a project finance investment, AQUIND Interconnector may require a higher share of equity funding compared to an equivalent balance sheet financed project. However, in this assessment, we abstract from this consideration and focus on the total risk associated with AQUIND Interconnector as a project, independently of the financing arrangements.

⁸ OFT Guidelines, ¶12.9.

⁹ Case C-454/18, Judgment of the Court, 11 March 2020, Provisional text ([link](#)).

We explain below that AQUIND Interconnector faces specific risks in earning revenues (and incurring costs) that would adequately compensate finance providers for the risk they take on in financing the Project. AQUIND therefore requires, for the Exempt Portion, to have the flexibility to compensate finance providers commensurately, which in turn requires that AQUIND is exempted from the Use of Revenues provisions of Regulation 943/2019.

The following subsections explain that AQUIND Interconnector faces risks associated with: (i) restrictions in French law prohibiting any entity other than RTE from developing, constructing and operating regulated interconnectors;¹⁰ (ii) revenue uncertainty arising from competing projects, being exposed to market pricing in France and GB, macroeconomic and policy risks (including Brexit) and curtailment risk; and (iii) construction risk arising from the size and technical complexity of the project. The first point relates to the fundamental inability of the Project to progress without an exemption in France, while the second and third points relate to the revenue and cost risk that the finance providers would have to bear, which in turn justifies the need for an exemption from the Use of Revenue regulations for the Exempt Portion of AQUIND Interconnector. While these risks are discussed individually, it is important to note that all project risks together create an overall risk profile, which will be considered by investors against potential returns to determine whether the investment should be made.

AQUIND acknowledges that some revenue certainty would be achieved on the regulated portion (e.g. through the “cap and floor” regime in GB) of AQUIND Interconnector under the proposed partial exemption. However, AQUIND would retain significant revenue risk arising in connection with the Exempt Portion, which in turn means that the finance providers also require to be compensated commensurately with this level of risk.

In some instances, project risks could result in upside opportunities for AQUIND. AQUIND’s proposed profit sharing mechanism will ensure that any additional welfare attributable to the Exempt Portion is appropriately distributed between investors and French consumers.

6.3.1 No available regulated route

A key risk in the development of an interconnector is securing appropriate regulatory arrangements. Section 5 of this Exemption Request describes in detail the project history, engagement with regulators and regulatory decisions that led to this Request for Exemption. AQUIND has attempted and exhausted all other alternative approaches, [REDACTED]

[REDACTED] AQUIND has thereby conclusively demonstrated that the partial exemption requested in this Request for Exemption is the only route that will allow the development of AQUIND Interconnector to take place.

As discussed in Section 5, AQUIND also requires an exemption in order to operate transmission infrastructure in France. Under French law, RTE is currently the only entity eligible to develop, construct and operate regulated interconnectors. There is therefore a risk that AQUIND would be unable to operate the project unless an exemption is granted.

¹⁰ In France, article L-321-6 of the Energy Code restricts the right to develop, construct and operate interconnectors to the operator of the public electricity transmission system. The construction and operation of an interconnector by a private investor can therefore only undertaken on the basis of an exemption pursuant to article 63 of Regulation 2019/943 as set out in the Délibération de la Commission de régulation de l’énergie du 29 mars 2012 portant communication sur l’application de l’article 17 du règlement (CE) n° 714/2009 du 13 juillet 2009.

6.3.2 Revenue uncertainty

AQUIND Interconnector faces a number of risks associated with the inherent ex-ante uncertainty of future congestion (and other) revenues that the Project will earn over its lifetime. The revenue uncertainty is a common feature of any investment of this type and is a largely unavoidable risk that must be allocated to someone – either the investor or the network user. For regulated TSO-developed interconnectors, this risk is allocated to the network users. By comparison, for interconnectors developed by non-TSO entities such as AQUIND, without available network tariff support for the Exempt Portion, the revenue uncertainty risk remains with the developer. To compensate the bearer of this, it is necessary to provide investors with an upside opportunity to earn higher returns. Such returns will be required to secure necessary investment and ensure that the Project happens.

In the following subsections, we illustrate two specific sources of revenue uncertainty: (1) uncertainty driven by the presence of other, competing, providers of capacity and (2) the inherent volatility of energy markets which determine the value of the capacity between the connecting regions, and we explain why they require AQUIND to obtain an exemption from the Use of Revenues regulations.

6.3.2.1 *AQUIND Interconnector will face direct competition*

AQUIND will face direct competition with the regulated interconnector IFA and the significant volume of GB-French interconnector capacity planned to commission over the next decade. AQUIND will therefore be in a direct competition with a number of other providers of interconnector capacity between GB and France. The regulatory arrangements for AQUIND's competitors are varied: IFA is a regulated link (compliant with the Use of Revenue regulations), ElecLink, which is currently under construction, has obtained an exemption from the GB and French authorities and other proposed links are likely to be regulated under the Cap & Floor regime. AQUIND will therefore face competition with a range of other regulated and exempt interconnectors

Based on the National Grid interconnector register,¹¹ the TYNDP, and Ofgem's Cap and Floor window, two electricity interconnector projects are currently under construction between GB and France:

- ▶ ElecLink (1000MW) developed by GetLink; and
- ▶ IFA2 (1000MW) developed by National Grid and RTE.

AQUIND is expected to commission after the two GB-France interconnectors listed above.¹²

In addition, two other projects are under development: FABLink (1400MW) developed by RTE and Fab Link limited¹³ and GridLink (1500MW) developed by iCON Infrastructure Partners III, L.P.¹⁴ FABLink has been suspended following the publication of CRE deliberation in 2019.¹⁵ Subject to further progress, would be expected to commission after AQUIND.

AQUIND's understanding from numerous discussion with the relevant French authorities that they are concerned that the project is too "risky" and that they do not wish for French network users to support the Project and would strongly prefer that the equity risk of the Project is borne by investors.

¹¹ National Grid's Interconnector Register is available on the ESO website here:
<https://www.nationalgrideso.com/connections/registers-reports-and-guidance>

¹² Ofgem's letter of 18 November 2016: "Decision on project eligibility as part of our cap and floor regime for electricity interconnector applicants from the second window" –
https://www.ofgem.gov.uk/system/files/docs/2016/11/w2_cf_eligibility_decision_letter.pdf

¹³ <https://www.fablink.net/about-us/>

¹⁴ <https://www.gridlinkinterconnector.com/about-us/>

¹⁵ CRE Deliberation No 2019/170. See also <https://www.exmouthjournal.co.uk/news/cre-two-year-delay-for-investment-in-fab-link-project-1-6334829>

By developing the Project without any French network user support, the revenue risk will be transferred from the network users to AQUIND finance providers. To be willing to take this risk away from French network users, the finance providers need to be appropriately compensated and the only way such compensation can be provided by AQUIND is if the Exempt Portion of the project obtains an exemption from the Use of Revenues regulations, such that an “appropriate profit”, i.e. compensation, can be provided for the finance providers in the form of an upside revenue opportunity.

6.3.2.2 Market volatility in France

AQUIND’s revenue in France will be wholly reliant on the market, mainly driven by congestion revenue. Volatility in congestion revenue is a risk that is allocated to network users in the case of non-exempt interconnectors. However, in the case of AQUIND, such allocation is not possible and AQUIND will bear this risk on behalf of French network users. As explained in the previous subsection, transferring this volatility risk away from network users to AQUIND increases the total quantum of risk faced by investors, who will only be willing to take on such risk if they have a prospect of earning an appropriate rate of return, commensurate with such risk. In order to be able to offer such upside opportunity to investors, AQUIND requires an ability to earn and retain a sufficient level of revenues and therefore an exemption from the Use of Revenue regulation.

To evaluate this risk, AQUIND has projected congestion revenue using scenario analysis. This analysis shows the range of arbitrage revenue projections for AQUIND. This analysis is presented in Figure 6-1 (in respect of all projected arbitrage revenues) and Figure 2 (in respect of projected arbitrage revenues for the Exempt Portion, assuming for these purposes that the Exempt Portion constitutes 30% of AQUIND Interconnector). These figures show that across the three market scenarios, and on an annual basis, the AQUIND arbitrage revenue projections range from ██████ per year to ██████ per year (or ██████ to ██████ per year for the Exempt Portion).

Figure 6-1 AQUIND projected arbitrage revenue, three main scenarios

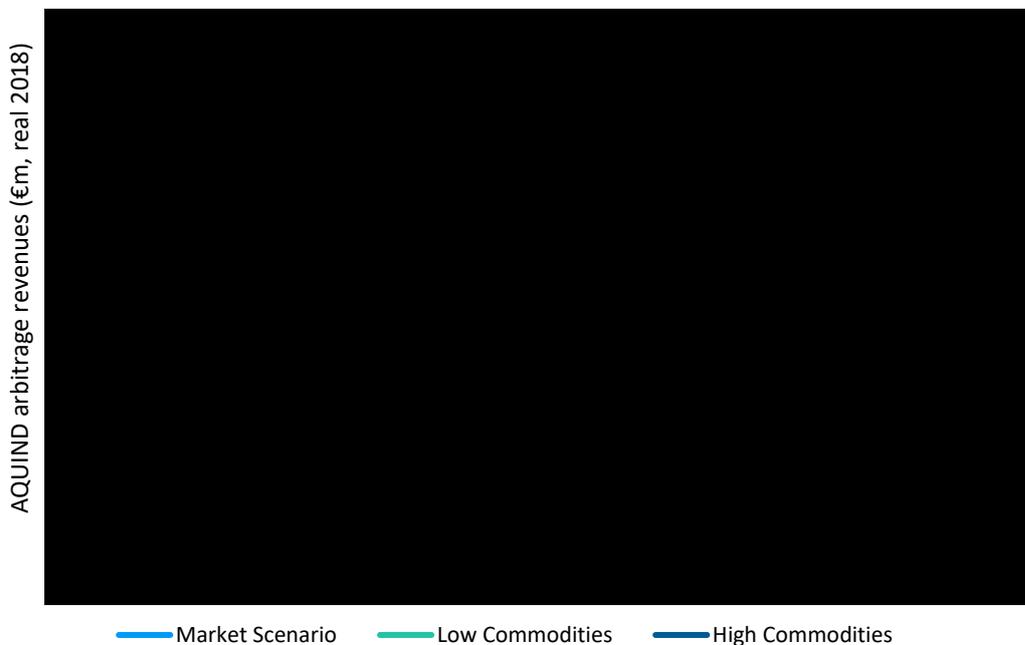
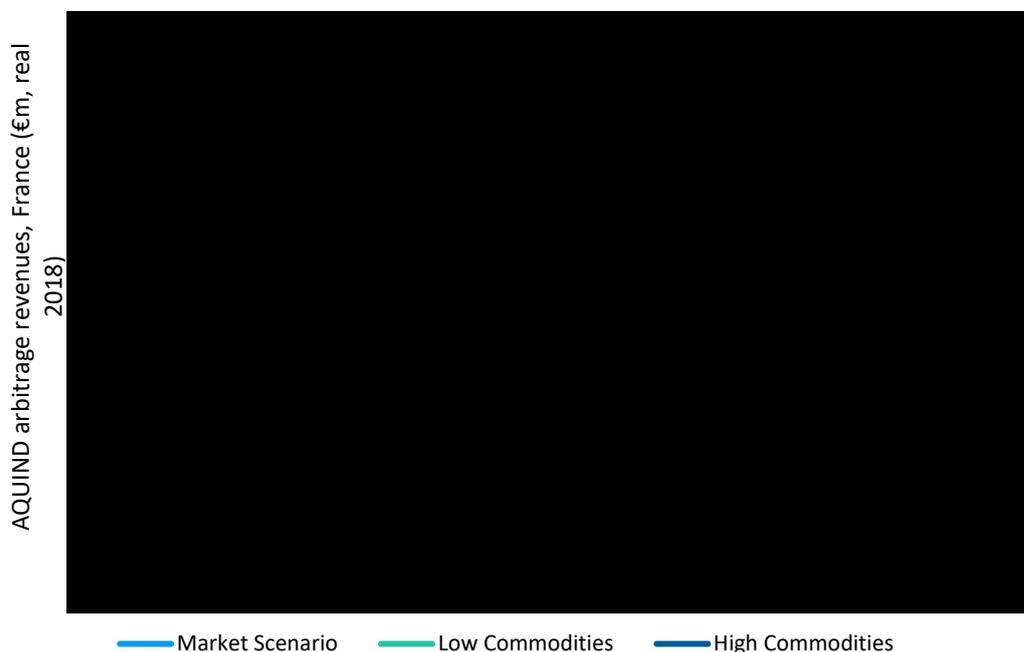


Figure 6-2 AQUIND projected arbitrage revenue for the Exempt Portion of the project, three main scenarios



6.3.2.3 Macroeconomic and policy risk

Government and regulatory decisions have a significant impact on GB, French and wider European wholesale electricity markets. Future regulatory, policy and macroeconomic uncertainty presents revenue risk for AQUIND as an interconnector that relies to a significant extent on market based revenues. Key macroeconomic and policy risks faced by AQUIND include:

- ▶ **No Carbon Price Support:** UK carbon policy, Carbon Price Support, is set to end in April 2021. In the AQUIND Market Scenario case, we assume that this policy is extended until the UK Carbon Price exceeds the EU-ETS (expected in the late-2020s). The uncertainty in the future treatment of CPS in GB presents a significant policy risk for AQUIND.
- ▶ **Exchange rates:** Exchange rate movements are a significant risk for AQUIND as an investor across currency zones. The nature of cross-border trade, where European power is typically € denominated, creates a significant risk for AQUIND returns. This is further increased through construction where contracts may be awarded in both GBP and €. Whilst some elements of the exchange rate movements can be hedged, the significant uncertainty the market is currently experiencing creates additional costs for AQUIND and its potential investors.
- ▶ **Interest rates:** Rise in interest rates might make financing less available and/or more expensive, thus putting more emphasis on the robustness of AQUIND’s business case.
- ▶ **Capacity markets:** The GB capacity markets provide an opportunity for additional revenues for GB-FR interconnectors, however value fluctuates significantly from auction to auction. AQUIND does not currently assume any value from the French Capacity Market. In addition, the EU is currently progressing regulations on direct cross-border generator participation in Capacity Markets. While the modalities of the arrangements are as yet uncertain (ENTSO-E consulted on its initial proposals in early 2020), there is a risk that not all value generated

by interconnectors is allocated to the interconnector owners, but that some of the value is allocated to either generators or the operators of the capacity mechanisms.

In addition, there are potential “unknown” risks that AQUIND faces in developing a project of this type. In contrast to the four risks above, which are to an extent known and can be partially managed, the “unknown” risks represent genuinely unexpected outcomes that it is not possible to prepare for and which may affect the costs and/or the benefits of the investment. One such example is the current Covid-19 pandemic, which is an unpredictable risk that could not have plausibly been planned for by AQUIND or indeed any other party. The possibility of such risks materialising in the future has two implications:

- ▶ First, the actual cost of financing cannot be well known and understood ex-ante. In the case of Covid-19, we now perceive a risk that finance providers will require a higher expected rate of return in order to deploy capital in a more cash-constrained world; and
- ▶ Second, the availability of different types of finance (debt and equity) may also change significantly. In the case of Covid-19, we now perceive a risk that a lower share of debt than previously expected may be available.

The implication of the above is that similar “unknown” and unpredictable risks may occur in the future. By transferring all the revenue risk for the Exempt Portion away from network users to AQUIND, the interconnector owner necessitates a sufficient flexibility in its ability to retain future revenues to attract finance providers and to compensate them commensurately with the risk that they hold (and which has been transferred to them from French network users).

6.3.2.4 Operation, Connection and curtailment risk

AQUIND’s connection to the GB transmission system will be subject to operating restrictions until 2029. Between 2024 and 2029, under the terms of its connection offer, the connection agreement will be “non-firm” which means that National Grid may limit AQUIND’s available export (as well as import) capacity.

During the non-firm offer period National Grid may curtail AQUIND Interconnector due to planned and unplanned outages in certain parts of the grid without financial compensation. The curtailment of AQUIND in GB due to the planned outages can only occur between April and September and the level of curtailment will be known once such outages are scheduled by National Grid. Based on historical average circuit date and the estimated time circuits may be out of service due to non-scheduled outages (faults) National Grid has calculated the probability of forced outages of AQUIND Interconnector due to unplanned faults to be 1.1 hours per year which is around 0.1% per year. National Grid is due to undertake further stability studies this year to provide further clarity on potential outages. In any case, AQUIND notes that no assurance or financial compensation is provided in relation to such outages and AQUIND therefore retains the risk of further outages.

This will limit the capacity that AQUIND can make available to market participants. This could reduce demand for AQUIND capacity and may require AQUIND to pay curtailment costs to capacity holders.

AQUIND faces full exposure to these curtailment costs.¹⁶

As a result of the above, AQUIND will bear the operation, connection and curtailment risks (instead of French network users). Finance providers will be willing to take on such risk if they have a prospect of

¹⁶ Subject to, for example, curtailment/firmness caps associated with the allocation of non-exempt capacity. The precise nature of these caps will depend on the timeframe for which curtailment occurs (for example in the forward time, and as defined by the FCA Network Code, firmness exposure is capped at the monthly revenue on the border).

earning an appropriate rate of return, commensurate with bearing such risk. In order to be able to offer such upside opportunity to investors, AQUIND requires an ability to earn and retain a sufficient level of revenues and therefore an exemption from the Use of Revenue regulation.

6.3.3 Construction risk

AQUIND Interconnector will be larger than any other operating or planned interconnector in GB or France.¹⁷ The project size and configuration increases the social welfare and security of supply benefits, compared to a smaller (single monopole) design, but also increases technical complexity and construction costs and therefore the risk of cost overruns.¹⁸

In addition to the potential cost overruns, these risks may also cause delays to the development of AQUIND Interconnector. As AQUIND will only earn revenue when the project is operational, delays to commissioning represent a serious risk to AQUIND's financial model. With a project of this scale, delays to commissioning or cost overruns represent significant risks with potentially serious financial implications.

As a result of the above, AQUIND will bear the construction risk for the Exempt Portion (instead of French network users). Finance providers will be willing to take on such risk if they have a prospect of earning an appropriate rate of return, commensurate with bearing such risk. In order to be able to offer such upside opportunity to finance providers, AQUIND requires an ability to earn and retain a sufficient level of revenues and therefore an exemption from the Use of Revenue regulation.

6.4 Demonstration of criterion (c) – Ownership

The interconnector must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that interconnector will be built

As discussed in Section 4.2, AQUIND Interconnector is promoted by AQUIND SAS (France), AQUIND Limited (UK) and their 100% holding company AQUIND Energy Sarl in Luxembourg. Each of these entities is a legal person, none of whom has any affiliation with the national TSOs in either GB or France (National Grid or RTE).

Whilst at the date of this application, AQUIND has no direct or indirect links to energy producers, generators or suppliers, it is anticipated that equity investments may be obtained from entities that hold such interests. In future, AQUIND shareholders may also wish to invest in energy produces, generators or suppliers. In all cases, AQUIND will ensure compliance with any applicable ownership unbundling requirements.¹⁹ See Section 4 for further details of AQUIND's ownership structure.

6.5 Demonstrating criterion (d) – Charges

Charges are levied on users of that interconnector

¹⁷ The AQUIND interconnector will be built as two independent symmetrical monopole HVDC links, each with a capacity of 1037.5MW. This scheme provides at least 50% power availability under all credible scenarios, as the two poles are designed to operate completely independently.

¹⁸ The two-monopole design provides an additional security of supply benefit, not present with smaller or single monopole designs.

¹⁹ Including where applicable, those requirements set out in Article 43 of Direction 2019/944 and Section 10A of the Electricity Act 1989.

All of AQUIND's capacity will be allocated through competitive auctions. Interconnector users will be charged based on the results of the auctions, in line with the prevailing regulations.

6.6 Demonstrating criterion (e) – Recovery of costs

Since the partial market opening referred to in Article 19 of Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector

The exemption from the Use of Revenues sought in this Request for Exemption applies only to the Exempt Portion of AQUIND Interconnector (and therefore only a fixed share of revenues generated by the project, which include congestion income from the capacity auction, as well as potential revenues from Capacity Market auctions and ancillary services). In respect of the Exempt Portion that is the subject of this Request for Exemption, AQUIND stresses that it has no access to, or receipt of, revenue recovered through network tariffs in GB or France. Accordingly, no part of the capital or operating costs of the Exempt Portion has been or will be recovered through charges for the use of the transmission or distribution systems in GB or France.

The capital costs of the Exempt Portion will be financed by loans and equity. In arranging this financing, AQUIND Interconnector will act completely independently from the French TSO. In particular, there is no framework for any cashflows to AQUIND Interconnector from regulated transmission charges in France.²⁰ Any cashflows to AQUIND Interconnector from regulated transmission charges in GB will, in the unlikely event that these materialise, solely relate to capital or operating costs incurred in connection with the non-exempt portion of AQUIND Interconnector.

In this regard, this Request for Exemption is directly analogous to the partial exemption granted to the Piemonte Savoia electricity interconnector.²¹ In that case, an exemption was only requested (and was granted) in relation to the Italian portion of one of the two lines that forms the interconnector. In their assessment of that exemption request, the relevant NRAs and the Commission found that criterion (e) was met for the exempt portion of the project. It was not relevant to consider if the criterion was met in respect of the non-exempt portion.

In conclusion, AQUIND's development, capital or operational costs have not been, to date, recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector. Going forward, we will work in good faith with the NRAs to ensure that AQUIND continues to be compliant with this criterion. For the avoidance of doubt, we do not envisage any difficulties in achieving the compliance with this criterion for the Exempt Portion of the project.

²⁰ AQUIND wishes to draw attention to the COMMISSION DECISION of 9.12.2016 on the exemption of Piemonte Savoia S.r.l (Italy) under Article 17 of Regulation (EC) No. 714/2009 for an electricity interconnector between Italy and France, paragraph 65.

²¹ Commission Decision of 9.12.2016 on the exemption of Piemonte Savoia S.r.l (Italy) under Article 17 of Regulation (EC) No. 714/2009 for an electricity interconnector between Italy and France, https://ec.europa.eu/energy/sites/ener/files/documents/2016_piemonte-savoia_decision_en.pdf

6.7 Demonstrating criterion (f) – Competition and Functioning of the internal market and the regulated system

The exemption must not be to the detriment of competition or the effective functioning of the internal market in electricity, or the efficient functioning of the regulated system to which the interconnector is linked

The functioning of the internal market has been considered by taking into account:

- ▶ The AQUIND **welfare distribution**, which shows positive social welfare for France and for the EU as a result of more efficient dispatch of electricity.
- ▶ Market modelling, which shows an overall reduction in **carbon emissions**.
- ▶ The benefits of AQUIND for **competition**.
- ▶ The independent assessment of the impact of AQUIND on the **French transmission system**.

6.7.1 Welfare distribution

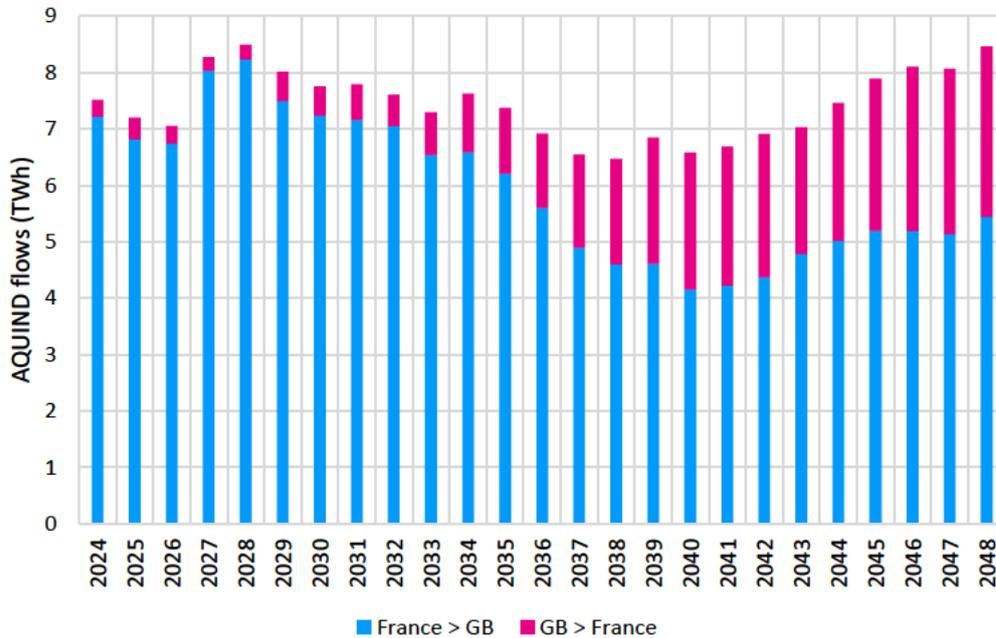
The AQUIND social welfare analysis²² shows the positive impact of AQUIND Interconnector over the 25 year exemption period. AQUIND is projected to enhance European social welfare by over €1.3bn in the Market Scenario, or €400m excluding the AQUIND costs and benefits, and French social welfare by around €1bn. This outcome is a result of the combined welfare AQUIND creates for producers, consumers and other cross-border infrastructure in GB and France.

Over the modelled period, AQUIND is projected to flow predominantly from France to GB, reflecting the economic price signals. The projected AQUIND flows in the AQUIND Market Scenario are presented in Figure 6-3.²³

²² Presented in full in Exhibit 1 and summarised in Section 3.

²³ The price projections in GB and France are a function of the underlying assumptions with respect to capacity and demand which we have set out in full in Exhibit 1.

Figure 6-3 AQUIND projected interconnector flows, AQUIND Market Scenario



AQUIND delivers significant welfare French producers who benefit from an increase in the French wholesale price as a result of exports via AQUIND.

The opposite is true for French consumers who face a welfare reduction in the CBA as a result of comparatively higher prices in France and lower prices in GB as a result of AQUIND. However, the total net benefit for France is positive.

Impact on other electricity interconnectors

AQUIND will increase price harmonisation between GB and France. This will reduce the expected revenue for other GB-FR interconnectors. The change in the GB and French prices will also change the revenue expectation of other interconnectors connecting to third countries. This is an inevitable consequence of price harmonisation across Europe, noting that the latter is one of desired policy goals of the EU.

The change in revenues of other interconnectors, built by the time AQUIND commissions in 2023, is taken into account in the CBA. Even with these impacts, the expected welfare as a result of AQUIND is significant in the AQUIND Market Scenario and High Renewables/Commodities scenarios and when taking account of the Brexit sensitivity. The full breakdown of the CBA sensitivities is provided in Exhibit 1.

6.7.2 Efficient trade and CO₂ reduction

AQUIND will allow for a more efficient dispatch of generation, thereby contributing to the efficient functioning of the French (as well as GB) market. Given the renewables ambition of both countries, efficient cross-border dispatch via AQUIND will help to reduce carbon emissions over the modelling horizon.

The AQUIND Market Scenario market modelling identifies a reduction in the EU and UK CO₂ emissions as a result of AQUIND of 2.8 MtCO₂.

6.7.3 Impact on the French transmission system

AQUIND employed an independent technical consultancy to assess the impact of the Interconnector on the continental European transmission system.²⁴ The study focuses on:

- ▶ System stability after an outage in the transmission grid (especially in the transient time period).
- ▶ Compliance with network security requirements such as the (n-1)-criterion.
- ▶ Voltage levels on the transmission grid as a result of increasing import/export capability between France and Great Britain.

The analysis concludes that the introduction of a new Direct Current interconnector “between France and Great Britain has no severe negative impact on the continental European transmission system concerning the aspects taken into account in this study. Any problems that might arise could be managed by the design of AQUIND Interconnector and the respective converter stations itself. In particular, the realisation of AQUIND Interconnector would not cause additional investments in the transmission grid (for instance in order to restore the fulfilment of network security requirements)”.

Based on this assessment, AQUIND concludes that the project will not have a material impact on the functioning of the internal system in continental Europe.

²⁴ The 2020 study, by Consentec GmbH, is provided in full in Exhibit 10.