



# **AQUIND Interconnector: Request for Exemption**

**Response to NRA additional questions 1.a-c**

PRIVATE AND CONFIDENTIAL

© AQUIND LIMITED, 2020

## Table of Contents

1	DETAILS OF THE AQUIND COST SPLIT (1.A).....	3
2	JUSTIFICATION FOR THE AQUIND COST SPLIT ASSUMPTION (1.B).....	5
3	IMPACT OF THIS ALLOCATION ON THE EXEMPTION CRITERIA CONSIDERING THE DIFFERENT REGULATORY FRAMEWORKS IN FRANCE AND GB (1.C).....	7
4	SUMMARY .....	9

# 1 Details of the AQUIND cost split (1.a)

AQUIND has undertaken a detailed assessment of the different cost components associated with the project in order to estimate the cost split. This was presented in Figure 5-1 of the Exemption Request and is replicated below. We find that in AQUIND’s specific circumstances, i.e. the geographical location of the project, features of the grid connection locations and associated constraints impacting the construction of the project in each location, generally higher costs of civil construction in Britain, greater level of various construction constraints in the more populated counties of the South East and the South of England, the cost of the UK land elements of the project will be higher in any case and that would be equally applicable, at least at the level of a rule of thumb, to any other interconnector between GB and France.

Cost category	Total	...of which the Exempt Portion
Capex – Converters	██████	██████
Capex – Cables + Connections	██████	██████
Capex – (CAR, Project mgmt)	██████	██████
Devex	██████	██████
<b>Subtotal Capex + Devex</b>	<b>████████</b>	<b>██████</b>
Opex (Present value)	██████	██████
Repex (Present value)	██████	██████
<b>Total Capex + Devex + Opex + Repex</b>	<b>€1,537m</b>	<b>€488m</b>
<b>Cost split</b>	<b>100%</b>	<b>32%</b>

## Capex – converters

The total costs of converters have been based on supplier quotes obtained by AQUIND in 2019. The split between GB and France is based on a █████% (UK) and █████% (France) split, which has been informed by WSP expert input and discussions with suppliers. It takes into account for example a longer access road from the nearest highway to the construction site and other factors.

## Capex – HVDC cables

The total costs of the HVDC cables have been based on supplier quotes obtained by AQUIND, expressed in terms of cost per km for manufacturing, marine installation and civil construction costs on land, including locations of horizontal direct drilling (HDD).

While the HVDC cable route between Barnabos and Hautot-sur-Mer landing point is longer than the HVDC cable route between Lovedean and the landing point at Eastney and requires on average a slightly large diameter of conductor, the land cable route in England passes through more urban and populated areas. That means higher underground service congestion, seasonal work restrictions and other constraints. It also requires a number of HDDs in addition to the landing point HDD.

The marine cable has the same characteristics throughout based on 1800mm<sup>2</sup> conductor. Each cable pair will be installed by the same vessel from end to end. The total costs of the 182km marine HVDC cable route were then allocated to the part of the cable route within the French territorial waters, which equals 29km, on the by-kilometer basis.

### **Capex – HVAC cables**

The Exempt Portion also includes € [REDACTED] of RTE costs associated with the French HVAC connection works according to the PTF as modified on 11 May 2020.

The cost of HVAC connection to Lovedean substation are determined by National Grid in the amount of £ [REDACTED]. A relevant modification to the Construction Agreement is being finalised.

### **Capex – CAR and Project management**

This category of costs includes Project management costs, based on quotes from potential suppliers and AQUIND's internal estimates. It also includes Construction-At-Risk ("CAR") insurance, based on quotes from an insurance company received by AQUIND, and where the marine works are the main contributor to the cost and respectively most of the CAR costs sit outside of the Exemption Portion. These costs, as well as other (non-CAR) insurance have been allocated pro-rata based on the capex and devex costs, while also taking into account the territorial waters principle.

### **Devex**

The devex costs have been based on AQUIND's estimate based on actual historical costs incurred, the projections and budget of remaining devex required for the project. This assessment allocates the costs of the Development Consent Order process to the UK (and hence outside of the Exempt Portion), which is the largest category among the project development costs.

### **Opex**

The Opex costs are based on AQUIND's own estimates and benchmarks with similar projects. The costs include (1) cable inspection and converter station opex; (2) general, trading and insurance costs; and (3) in the UK, costs of National Grid operating the HVAC cable. Depending on the cost category, the split has been based either on a pro-rata approach (based on the converter costs, or based on the total capex + devex costs), or using AQUIND's own estimates.

[REDACTED]

## 2 Justification for the AQUIND cost split assumption (1.b)

---

AQUIND makes a proposal for the territorial scope of the Exemption based on its view of the economic substance of the project and the most efficient way to carry out the investment. It is within the regulators purview to either agree with that proposal or make a different decision. As we have observed with the past submissions, views on the composition of social welfare benefits of interconnectors may differ among regulators in the case of connecting such complex and evolving markets as Great Britain and France. The costs of the investment and the risk being undertaken are a more objective foundation for such a decision.

We have observed that the cost allocation has varied historically, and it is not the case that all interconnector projects have allocated their costs 50:50 between the connecting regions. For example, both FAB Link and Celtic Link have allocated costs in different proportions (but on different grounds). We do not consider that a 50:50 cost allocation is in any way “better” than our proposed allocation and there is no regulatory requirement or guidance requiring or suggesting that. The 50-50 rule might be easier, but it does not make it better. We consider that in the case of AQUIND Interconnector that rule is not reflecting the economic substance of the project adequately as it does not take into account the actual risk undertaken by project investors.

The social welfare benefits accumulating in France from trading electricity via AQUIND Interconnector are not affected by the cost split. France’s social economic welfare remains strongly positive irrespectively of such split. French power generators, among which EDF, 83.6% shares of which belong to the French Republic<sup>1</sup> and who employs more than 150 thousand people in France, is holding the largest by far share of the market and logically stands to benefit the most.

In terms of the rationale for the proposed cost split, AQUIND has applied the following principles:

- ▶ The Exemption is being requested to **address specific project risks**. The Exemption is required to enable the project to proceed in France. That has also been established through a number of engagements with DGEC and CRE and representatives of CRE attended one of such meetings in March 2020.
- ▶ The Exemption should be **proportionate**. AQUIND requests the Exemption for the minimum scope that is necessary to allow the investment to happen, i.e. AQUIND has requested an Exemption that covers the French territory - onshore and the part of the marine cable route within the French territorial waters and only in respect of the Use of Revenues. This is the physical territory within CRE’s jurisdictional scope and also the territory over which an independent (non-RTE) project promoter is unable to proceed with the investment in the absence of an Exemption.
- ▶ The optimal financing solution for AQUIND would consist of approximately █% of project finance debt and █% - equity. This conclusion is based on the █ analysis of the investor feedback in respect of regulatory arrangements for AQUIND Interconnector in 2019<sup>2</sup> █ with debt █

---

<sup>1</sup> From here - <https://www.edf.fr/groupe-edf/espaces-dedies/investisseurs-actionnaires/l-action-edf/structure-du-capital>

<sup>2</sup> █

tenor of 20 - 25 years. It is expected that the equity part of financing may nearly match or be somewhat greater than the share of the project's costs and risk bourn by equity investors in respect of the Exempt Portion without any form of revenue certainty – neither regulatory underwriting nor long-term capacity allocation. Respectively, it is unlikely that the share of debt in the final financing package will exceed the share of █%.

Based on the principles above, AQUIND considers that a request for the Exempt Portion to be 32%, i.e. the portion of the project costs and risk that falls to the French territory is both **necessary** (in order for the investment to take place), **sufficient and proportionate** to enable the investment to happen and **within CRE's jurisdiction**. This is also consistent with the precedent of the Pi.Sa interconnector, where a part of the project on the Italian side, financed by a group of companies, was exempted.

There is no inconsistency with either the Request for Exemption in 2017 or the █, none of which were considered by either regulators on substance. In both cases, the 50/50 cost allocation was just an assumption made by the applicant, which was clearly stated in both requests. The Request for Exemption 2017 was based on the broader exemption, including Third-Party Access rules, and proposed long-term capacity allocation, applicable to all parts of the interconnector. From that standpoint, it would have been irrelevant for the project promoter which approach to the cost split the regulators could have adopted in that instance.

█  
█  
█  
█  
█  
█  
█

The difference of the Request for Exemption 2020 that it requests only the Use of Revenues exemption and only in respect of the Exempt Portion, where revenues of the project will neither have any tariff support like in the █ nor the support of long-term capacity allocation like in the Request for Exemption 2017.

Nevertheless, this proposal remains indicative and is obviously subject to the regulators' approval.

### 3 Impact of this allocation on the exemption criteria considering the different regulatory frameworks in France and GB (1.c)

---

AQUIND has assessed the impact of the proposed cost split on the conditions listed in Article 63(1) of the Regulation (EC) 943/2019 and that was included in Section 5 of the Request for Exemption. In relation to the Exempt Portion, AQUIND considers that:

- ▶ In the absence of the requested Exemption, the project cannot progress in France, as the project promoter is a non-RTE entity. This particular risk associated with the investment will, however, be mitigated through the requested Exemption.
- ▶ The proposed cost split reflects, by the principle of proportionality, the least amount of costs (and revenues) that would be subject to the Exemption.

The proposed cost split is therefore necessary and appropriate in relation to the **risk criterion (b)** of Article 63(1).

In addition to the risk criterion (b), AQUIND considers that the proposed cost split does not have any adverse impact on the risk criterion (f). This is because, as explained in the Request for Exemption, AQUIND does not seek an exemption for Unbundling (Article 43, Directive 2019/944), Third Party Access (Article 6, Directive 2019/944) or the approval of charging and access rules (Article 59(7) and 60(1) of Directive 2019/944). Indeed, AQUIND envisages that all capacity will be sold through competitive, regulated products, in a way that is consistent with regulated interconnectors on the GB-French border and aligned with the prevailing capacity allocation legislation.

AQUIND also considers that the proposed cost split does not have any adverse impact on any other risk criteria listed in Article 63(1). In this context, AQUIND also notes that each of the criteria listed in Article 63(1) has been previously evaluated by ACER in the context of the Request for Exemption 2017. ACER has, in its Decision 05/2018, observed that AQUIND has met (or could meet, subject to appropriate safeguards), all the relevant criteria with the exception of criterion (b). AQUIND considers that the necessity of an Exemption to overcome the project's risks (i.e. criterion (b)), has now been amply demonstrated as the project cannot progress in France in the absence of an Exemption. ■■■■■

■■■■■  
■■■■■  
■■■■■  
■■■■■

The impact of AQUIND Interconnector on other regulated and exempt interconnectors is incorporated in the 'interconnector welfare' elements of the AQUIND CBA presented as part of the Request for Exemption.

In addition to the analysis provided with the CBA, we show the change in revenue on each relevant interconnector in the following file: *'Additional analysis\_Impact of AQUIND on other interconnectors\_v1\_0'*. This shows how the revenues of individual projects and capacity on each border will be impacted by AQUIND. Larger impacts are found on the projects that compete directly with AQUIND, i.e. on the GB-France border.

AQUIND's CBA shows that the benefit of building AQUIND is significantly positive, even when taking into account the impact on other interconnectors. In addition, AQUIND provides a significant increase in capacity on the GB-France border, and more generally the GB border with mainland Europe, providing competitive pressure on wholesale electricity markets, capacity markets, and ancillary services markets.

We can see from the accompanying analysis that the projects on the GB France border still earn significant revenues even with AQUIND's additional capacity on the border. For example, projects on the GB-France border earn an average of close to ████/kW over their lifetimes in the scenario where AQUIND is also developed. This includes IFA, a project that is now nearly fully depreciated.

This points towards the need for more capacity and provides a strong incentive for investment. AQUIND's Request for Exemption would provide both countries with all the same benefits as IFA2 (capacity will be allocated in the same way). There will be no risk transfer to the French grid users, while French energy producers will be earning significant additional revenues from sales of electricity to GB, while benefiting from the increased security of supply during certain stress events. AQUIND's projections show that under the cap and floor regime as proposed by AQUIND, the project will not have to rely on the floor, while GB consumers will benefit strongly from reduced energy prices, further decarbonisation of the GB energy mix and the increase security of supply. It is therefore hard to see how AQUIND's Request for Exemption would have any detrimental impacts on the French system.

In GB, it is also important to note that AQUIND will offer a direct competitive alternative to the other regulated links on the GB-France border (IFA and IFA2). This will provide significant competitive benefits for capacity holders, and offer an alternative to a National Grid owned interconnector product (we note that ElecLink can offer a different set of non-regulated products as set out in their exemption decision). To this extent, the proportion of regulated and exempt capacity is irrelevant – all capacity will be the same in the eyes of capacity holders.

## 4 Summary

---

The Request for Exemption does not propose the allocation of benefits as social welfare benefits arise, and are retained, by various groups of stakeholders depending on the fundamentals of the connected electricity markets. The Request for Exemption is made in respect of the Exempt Portion of the project based on:

- ▶ The factual split of project costs and associated risks
- ▶ The territorial competence of CRE
- ▶ The fact that the investment will not take place unless an exemption in France is granted
- ▶ The project promoter will face the full downside risk in respect of the Exempt Portion as the arrangements for AQUIND will include neither regulatory underwriting nor long-term capacity contracts.

This fulfils the condition (b) of Article 63(1) of Regulation (EC) 2019/943, with the conditions imposed on the Request for Exemption, by AQUIND, resulting in a proportional request based on AQUIND's specific circumstances.

The proposed allocation of the project's costs and revenues between the Exempt Portion and the cap and floor portion of the project will improve competition in and the effective functioning of electricity markets in the connected countries as would a project with any different allocation. There is no impact on the efficient functioning of both regulated systems as AQUIND does not request an exemption from Third-Party Access or Unbundling rules, while other interconnectors will continue to earn sufficient revenues.