

First Expert Workshop: Review of the existing framework

5th April 2011 - Meeting note

Introduction

Ofgem and DECC are jointly undertaking work to consider whether any additional measures will be required to deliver co-ordinated networks through the competitive offshore transmission regime and, if so, how these measures might work in practice. To assist us in this project, we have established an Offshore Transmission Coordination Group (OTCG)¹ and associated stakeholder community to provide support to Ofgem and DECC.

Formal meetings of the OTCG are being supplemented with expert workshops, involving different stakeholders when appropriate. These workshops are by invitation only, with some involving technical experts from within OTCG member organisations and members of the wider stakeholder community. This meeting note summarises the key outputs from the first expert workshop.

Workshop overview

The purpose of this first workshop was to review the existing framework and explore stakeholder views on key current constraints and drivers for delivering a coordinated offshore transmission network, along with emerging views on potential solutions to key identified barriers. The workshop followed the following format:

- i. Welcome & Introductions
- ii. Framing the key issues - understanding where one another are coming from conceptually
- iii. An industry perspective on barriers - presentation by RenewableUK to seed discussion
- iv. Incentives, obligations and barriers - Table based group discussion and report back
- v. Potential solutions - initial brainstorm based on table based group discussion and report back.

Outputs

The slides presented at the workshop are available on the Ofgem website. This paper provides a summary of the views expressed during discussions under agenda items four and five. Appendix 1 lists the organisations that participated in this workshop.

This note reflects the Secretariat's summary of the views expressed at the workshop and should not be considered to reflect either DECC's or Ofgem's views. **A draft of this meeting note and the following attachments were discussed at the OTCG meeting held on 18 April 2011. The final versions also reflect views expressed at that OTCG meeting - these are shown in italics.**

¹ More information on the OTCG can be found on the [Offshore Transmission Coordination Project page](#) of the Ofgem website.

Summary Note 1: Incentives, obligations and barriers

Introduction

Participants were asked for their views on relevant constraints or drivers affecting delivery of different network scenarios. Discussions were held in smaller groups which then reported back to the group to allow for an open discussion.

For ease, comments from discussion have been grouped according to four broad themes: what to build and who decides; who pays for co-ordinated assets; the consenting of offshore transmission assets; and project uncertainties. However, we note that many issues cut across a number of themes.

Theme 1: What to build and who decides?

The view was expressed that there may be cases in which the initial **over sizing of assets** (landing points or capital assets) could lead to lower total capital expenditure. This would be the case when there was subsequent demand for the initial assets. It was also noted that the over sizing of assets also creates a risk of a stranded investment - if the assets are not subsequently utilised. There was some debate around whether Generators or Offshore Transmission Owners (OFTOs) would be likely to absorb the risk of such anticipatory investments under the current regulatory arrangements (see also Theme 2). It was suggested that sub-optimal networks would be delivered as a result.

The OTCG felt that there might be a distinction between the treatment of aspects of pre construction investment against the treatment of more significant capital expenditure. It was felt that onshore preconstruction investments at, for example, landing points could be made ahead of demand as an enabler for subsequent (and more significant) capital investments. The OTCG felt that the cost of these investments was likely to be relatively low against the potential savings that such investments could be expected to deliver. It was noted that this issue was likely to have key interactions with the planning regime (see also Theme 3).

There was also a concern with regards to the lack of **standardisation across equipment manufacturers**. It was felt that without 'plug and play' standards the realisation of a co-ordinated network would be less likely to be achieved and slower to be developed. The challenge for the supply industry in developing common standards was noted, with particular regards to competition concerns that such activity could cause.

The OTCG noted that there were a range of different bodies working separately on standardisation and also the noted the development of European Networks, as well as requirements within the Third Package.² It was noted by the OTCG that the degree to which different technologies are interoperable will impact on the scope for efficient coordination. It was

² More information on the Third Package can be found on the [Ofgem website](#).

also noted by the OTCG that standardisation could jeopardise technological innovation if standards were made too specific. It was also felt that whatever 'guidance' was given now, would likely drive the development of second phase of HVDC technology. Four 'levels' of standardisation were identified by a member of the OTCG:

- 1. Network codes*
- 2. Block sizes (e.g. 500 MW)*
- 3. Technical specification*
- 4. Requirements for the interoperability of DC systems.*

It was recognised that individual parties may hold vested interests that precluded co-ordinated action therefore some stakeholders held the view that there may be a need for an **independent central design authority** to create a blueprint for aspects of the offshore network or propose investments based on future demand requirements.

Some members of the OTCG felt this function was absent under the current regulatory arrangements, whilst others felt that the National Electricity Transmission System Operator (NETSO) could be expected to fulfil this role. However, it was also noted by one OTCG member that there remained the potential for conflicts of interest to arise given National Grid Electricity Transmission's (NGET) onshore transmission interests.

Theme 2: Who pays for co-ordinated assets?

There was a discussion as to the appropriate balance of risk between parties to deliver against the project objectives.

Several stakeholders felt that the current arrangements for the **securitisation of assets** meant that co-ordinated outcomes were less likely. Some expressed the view that security requirements were too high to allow for relatively high probability demand to be reflected in network planning at a sufficiently early stage. This was due to developers being unable to bear the cost of providing the requisite security at an early enough point in the project's development.

It was noted by the OTCG that providing the appropriate level of securitisation against the various stages of a project's development could be challenging for some developers. It was felt that a decision around a co-ordinated approach was needed early on - when the projects within a given zone come forward for connection. However, it was noted that the difficulty this created was that later projects within the zone would not have reached financial approval at this early point - and would therefore be unable to provide the necessary securities to be considered when the decision about the initial assets was taken.

The OTCG noted that the risk profile for anticipatory investment relating to 'early GWs' of offshore wind was likely to be quite different to that relating to 'later GWs'.

The **charging regime** was also felt by some to cause a problem, as the targeting of costs at developers would incentivise them to seek connections designed to minimise local works. Several stakeholders noted the key interaction between the co-ordination project and the TransmiT project, which Ofgem is currently undertaking.

Theme 3: The consenting of offshore transmission assets

A large number of stakeholders raised issues connected with planning as being a particular barrier to the development of a co-ordinated offshore network. Four key points of concern were raised:

- i. **Sterilisation of landing points.** There was a concern that initial projects may sterilise onshore landing points, and impact on the delivery of the most efficient connection solutions for subsequent projects.
- ii. **Holistic planning applications.** It was also felt that planning processes may be delayed if future generation demand is not considered as part of 'holistic planning applications'. It was noted that there could be opportunities to share cable corridors and beach landing points. Some felt that the requirements of the planning process would create positive incentives for industry participants to co-ordinate effectively.
- iii. **The onshore/offshore interface.** It was noted that the consenting of the offshore network is not the only planning issue. Given the expected level of offshore generation, significant onshore network reinforcements will be required – which will also require consenting.
- iv. **Timeframes for consenting.** It was noted that there was a disjoint between the timing of the planning application process and the investment decision of individual generation projects. This disjoint created some uncertainty around the planning process.

The OTCG noted that it was also necessary to consider which party should be responsible for consenting different element of the project. It also noted that land ownership and access requirements should be considered in this regard. It was also noted that future demand requirements would need to be well justified to planning authorities. It was not clear what level of justification would prove sufficient (i.e. who should sign off the need case for future demand?).

Theme 4: Project uncertainties

Stakeholders also highlighted a number of specific factors which created general uncertainty which made it difficult to deliver co-ordinated solutions. These included:

- i. **Regulatory issues.** Some stakeholders expressed a view that regulatory uncertainty with regard to the offshore regime was creating a barrier to investment. Various issues

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were raised including the treatment of offshore under the connect and manage approach, the treatment of coordinated assets through Ofgem's cost assessment process, and wider European policy drivers.

- ii. **Technology risk.** It was noted that as scale of projects increases technology risk increases. Larger scale assets are not currently as mature as smaller equipment and this increases project risk for developers.

Summary Note 2: Potential solutions - initial brainstorm

Introduction

As part of the first OTCG workshop stakeholders were asked to give their initial views as to potential measures that could improve the probability of the delivery of a co-ordinated offshore network. This discussion was not to pre-empt the continued process of data collection and analysis that Ofgem and DECC would be undertaking, but rather was aimed at getting ideas 'out into the open' at an early stage so that they could be debated and tested.

Stakeholders were split into groups for individual discussions and then reported back to the whole of the workshop. This note reflects the Secretariat's summary of the issues raised. For ease, comments from discussion have been grouped according to themes identified in summary note 1.

Theme 1: What to build and who decides?

It was noted that different approaches may be needed in different areas of the country. Some projects would be best served by radial connections, whilst others would be better served by more integrated networks.

The OTCG agreed with this point and felt that it would be useful to consider whether there might be different solutions dependent on the characteristics of different offshore zones.

Some stakeholders considered that there should be a central designer to create a vision for the offshore grid. Some felt that this role could be undertaken through a collaborative industry forum, akin to the Electricity Networks Strategy Group (ENSG). Other believed that this role could be performed by a new independent body or the NETSO. Whatever approach was adopted, stakeholders felt that there needed to be clarity over the role and responsibilities of different industry participants. One group proposed a process map which could be followed to facilitate decisions regarding the construction of over sized assets.

The OTCG noted the role of the ENSG, but also felt it was important to make a distinction between this sort of approach and a formal blueprint for the grid. It was felt that the continued development of technology would make it difficult to create a meaningful detailed blueprint. The OTCG felt that identifying investments which would allow for future flexibility was a key area to focus on.

There was a strong view that common technical standards should be developed. The group discussed various approaches to the delivery of common standards, including the development of new codes requirements.

Theme 2: Who pays for co-ordinated assets?

Various stakeholders expressed the view that there would need to be a reallocation of risk between industry participants and consumers if co-ordinated networks were to be delivered. It was generally felt that consumers would need to take more risk if they were to share in the benefits of co-ordinated networks.

With regards to securitisation, it was felt that developers should be required to demonstrate more than a trivial commitment, but less than the full securitisation which is currently required. It was suggested that there would need to be some sort of list of criteria/measures/standard of what is enough to trigger anticipatory investment.

The OTCG noted that such criteria could need to be tailored to different project development phases.

Theme 3: The consenting of offshore transmission assets

The OTCG felt that the interaction with the planning regime was an area that Ofgem and DECC should consider setting up a separate, specific workshop to consider it.

Theme 4: Project uncertainties

There was a view that early certainty about any amendments to the offshore regime and other regulatory and policy initiatives would provide more certainty for investment. It was also stressed that any co-ordinated solution should not delay existing projects or increase the delivery risk which developers are exposed to as this would have a detrimental impact on their financing.

Appendix 1: List of participating organisations – Expert Group

- Alstom Grid UK Limited
- Balfour Beatty
- Bury not Blight
- Centrica Energy
- CG Power Solutions
- Crown Estate
- DONG Energy
- EDF Energy
- Infrastructure UK
- Joint Nature Conservation Committee (JNCC)
- Mainstream
- Marine Management Organisation (MMO)
- Mott MacDonald
- National Grid Electricity Transmission (2 representatives on behalf of TO and NETSO)
- National Grid Offshore Limited
- Petrofac
- RenewableUK
- RES Offshore
- RWE Npower Renewables
- Scottish Power Energy Networks
- ScottishPower Renewables
- Scottish Renewables
- SHETL
- Siemens Energy
- SSE
- Statkraft AS (Norway)
- Statkraft UK Limited
- Statoil
- Suffolk County Council
- TNEI Service Ltd
- Transmission Capital