Offshore Transmission Network Review (OTNR) Summer Webinar

22 July 2021

OTNR Summer Webinar - 22nd July 2021

Department for Business, Energy & Industrial Strategy

Agenda

| Time | Subject | Speaker |
|-------|---|--|
| 12:00 | Welcome | Chris Fox, OTNR Lead, BEIS |
| 12:05 | Opening remarks from the Minister for Energy, Clean Growth and Climate Change | The RT Hon Anne-Marie Trevelyan MP, Minister for Energy, Clean Growth and Climate Change |
| 12:10 | Project update | Mark Darby, OTNR Project Manager, BEIS |
| 12:15 | Early Opportunities, Pathway to 2030 & MPI Updates | Safa Jahan, Early Opportunities Lead, BEIS Christian Glenz, Pathway to 2030 Lead, BEIS Rob Mangan, Multi-Purpose Interconnector Lead, BEIS |
| 12:30 | Consultations overview | Stuart Borland, Head of Interconnectors and Offshore Coordination, Ofgem |
| 12:45 | National Grid ESO Offshore Coordination Project | Alice Etheridge, Offshore Coordination Senior Manager, National Grid ESO |
| 12:55 | National Policy Statements & Nationally Significant Infrastructure Projects regime | Jenny Stafford, Environment & Planning Lead, BEIS Jenny Preece, Deputy Director for Planning Infrastructure, MHCLG |
| 13:05 | Role of the OTNR Expert Advisory Group | Zoe Keeton, Head of Regulatory Affairs UK & Ireland, RWE Tania Davey, Marine Planning Manager, The Wildlife Trusts |
| 13:15 | Q&A | Chris Fox, OTNR Lead, BEIS |
| 14:00 | Close | Chris Fox, OTNR Lead, BEIS |





Project update

Mark Darby, OTNR Project Manager, BEIS

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Overview of progress

Engagement throughout the year - newsletters, roundtables with MPs, discussions with local authorities, correspondence and more

Early Opportunities: Near term connecting mid-late 2020s

What we've done

- Worked with developers on initial pathfinder proposals
- · Launched consultation

What comes next

- More ambition from developers discussions through the summer
- Government action to support more ambition
- Draft energy National Policy Statements
- Further consultation in late 2021

Key challenges

- In the near-term, better coordinated outcomes may mean delays to connections
- Managing Anticipatory Investment

Pathway to 2030: Medium term connecting by 2030

What we've done

- Set clear expectation of coordination by default
- Launched consultation
- Begun Holistic Network Design

What comes next

- Complete Holistic Network Design (Jan 22), a key prerequisite for connection offers
- Further consultation on delivery models

Key challenges

- Achieving speed in delivery
- The charging regime for coordinated infrastructure will be complex to resolve

Enduring Regime: Long term Connecting post 2030

What we've done

- Established need for more upfront strategic planning of offshore wind and onshore join-up
- Extensive industry engagement

What comes next

- · Policy consultation in late summer 2021
- Potential for a more detailed consultation, in early 2022
- If required and available, primary legislation

Key challenges

 Aligning long-term reform with wider policy and technology changes



Workstream updates

Safa Jahan, Early Opportunities Lead, BEIS Christian Glenz, Pathway to 2030 Lead, BEIS Rob Mangan, Multi-Purpose Interconnector Lead, BEIS

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Early Opportunities

Projects in scope

Primarily focuses on projects that are:

- Currently seeking a CION
- In pre-planning
- Currently applying for a DCO

Less likely to focus on projects that are:

- Pre-CION
- Have a DCO
- Have a CfD
- Early Opportunities focuses on facilitating coordination by encouraging developers to opt-in.
- Thus far, approximately **16 projects** across most major developers have volunteered some form of coordination.
- We are **continuing our assessment** of these proposals.
- Ofgem recently published their **consultation** on changes to facilitate pathfinder proposals.
- Joint Ofgem/BEIS cover letter:

"We would strongly encourage developers to proactively consider opportunities for coordination with others in the same region where they have not already done so"





Pathway to 2030

Challenge & setting:

- Less advanced projects will be required to coordinate to overcome potential limitations of opt-in approach. This plan-led approach constitutes a major change from present.
- Consider **environmental and community** concerns early, i.e. in the network design.
- This will also reduce risk and speed up connection for projects.

Progress:

- Completed Generation Map
- Developed approach for Holistic Network Design
- Set up Central Design Group
- Developed a range of delivery models



In particular, projects coming through TCE Leasing Round 4 (below) and ScotWind Leasing Round (right).







Multi-Purpose Interconnectors (MPIs)

- Interconnectors 6 GW currently operational, 18 GW by 2030 ambition in Energy White Paper
- Multi-Purpose Interconnection = combining interconnection and offshore transmission
- July consultation considering MPIs within current legislative framework
- Later BEIS-led consultation considering whether legislative change is necessary or beneficial
- International engagement UK Hybrid Project Forum in March, engagement with specific countries e.g., treaty with Norway, commitment to cooperation

Tomorrow's solution: Offshore wind and interconnectors in harmony



Source: National Grid

Department for Business, Energy & Industrial Strategy

Ofgem Consultations

Stuart Borland, Head of Interconnectors and Offshore Coordination, Ofgem

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Offshore Transmission Network Review Ofgem update







Key messages in this presentation

Early Opportunities

Pathway to 2030

Multi-purpose interconnectors

Next steps

Introduction

- First consultation documents published 14 July
- Summary of three key chapters:
 - Early Opportunities
 - Pathway to 2030
 - Multi-Purpose Interconnectors
- Next Steps and Timelines

| Workstream objective | Identify and facilitate opportunities for increased coordination in the near term. | Key messages in this presentation |
|---------------------------------------|--|---|
| Scope of potential regulatory changes | Current legal framework including secondary legislation. | Early Opportunities Pathway to 2030 |
| Consultation approach | Core policy proposals address treatment of anticipatory investment (AI), to help enable six coordination concepts. | Multi-purpose interconnectors Next steps |

Six concepts identified following engagement with developers of offshore wind projects and multi-purpose interconnectors. This workstream is seeking to facilitate these concepts.

- **1. Shared offshore transmission system**, where multiple offshore generators use a single offshore transmission system.
- 2. Quasi-bootstrap, which involves installation of a circuit between the offshore substations of two offshore generators, where those substations are not connected to a common onshore substation.
- **3. OFTO-led multi-purpose interconnector (MPI)**, which involves the connection of an offshore generator to transmission infrastructure comprised of distinct OFTO and interconnector elements.
- **4. Interconnector-led MPI**, which involves the connection of an offshore generator in the GB market to transmission infrastructure that is classified as an interconnector.
- **5. Connection to a TO-owned bootstrap**, which involves the connection of an offshore generator to a subsea electricity link between two points in the onshore system, which is owned by a TO.
- **6.** Connection of electricity storage or a demand user to an offshore transmission system, which may involve connections to the onshore or offshore elements of an offshore transmission system.





 This would require changes to the cost assessment processes that we apply to offshore transmission systems and to interconnectors; and changes to the cost recovery (i.e. transmission charging) arrangements through industry-led code modification proposals.

| Workstream objective | Drive coordination of offshore projects progressing through current ScotWind and Crown Estate Leasing Round 4, and other potential projects connecting before 2030. | Key messages in this presentation Early Opportunities | |
|---------------------------------------|--|---|--|
| Scope of potential regulatory changes | Current legal framework including secondary legislation. Changes to primary legislation potentially in scope if required for optimum framework. | Pathway to 2030 Multi-purpose interconnectors | |
| Consultation approach | Core policy proposals address the development of a generation map, how we intend the network to be designed and seek views on different delivery models for coordinated offshore transmission. | Next steps | |

 We have worked with BEIS, The Crown Estate, Crown Estate Scotland, the ESO and TOs to develop a Generation Map that illustrates where offshore generation will be connected across GB between now and 2030.

1. Building block for holistic network design

- Provide data to network designer for holistic transmission network design for 2030.
- Locational and timing indication.

2. Support for anticipatory onshore investment

- Additional source of information for Ofgem when deciding on potential RIIO-2 re-opener submissions.
- Map supports Ofgem's assessments by giving added certainty on expected offshore generation.





- We have proposed three aspects to **network design** to help better drive coordination:
 - A **holistic network design (HND)** will be produced to ensure that all network infrastructure (both onshore and offshore) is designed in a coordinated manner with an optimum engineering solution that at the same time considers the economic, environmental and community impacts.
 - A **detailed network design (DND)** will be established for the next level of technical detail based on the requirements of the HND, for both onshore and offshore. The DND should also seek to address key environmental and cumulative impacts indicated in the HND and include mitigations as needed.
 - The **DND Onshore** will be developed by the TOs. We have yet to decide who will undertake the **DND Offshore** as it will depend on the delivery model adopted. We are seeking stakeholder views on this.

Key messages in this presentation

Early Opportunities

Pathway to 2030

Multi-purpose interconnectors

Next steps



• The models differ in the allocation of the responsibilities for detailed network design offshore, development, construction and operation. Five of the six models incorporate competition to determine the OFTO, at different stages of this process.

Key messages in this presentation

Early Opportunities

Pathway to 2030

Multi-purpose interconnectors

Next steps

| Delivery Model | Holistic Network Design | Detailed Network Design | Pre-Construction (eg Consenting) | Construction | Operation |
|---|----------------------------|----------------------------|-------------------------------------|-----------------------|-----------|
| 1. TO Build and Operate | ESO | ТО | ТО | ТО | ТО |
| 2. TO Build > OFTO Operate | ESO | ТО | то | то | OFTO |
| 3. TO Design > OFTO Build and Operate | ESO | то | то | ΟΓΤΟ | OFTO |
| 4. Early OFTO Competition | ESO | ESO <u>or</u> TO | OFTO | OFTO | OFTO |
| 5. Very Early OFTO Competition | ESO | OFTO | OFTO | OFTO | OFTO |
| 6. Developer design and build, OFTO operate | ESO | Offshore generator | Offshore generator | Offshore generator | OFTO |





| Workstream objective | Make tactical changes to facilitate early opportunity MPIs;Key messages in thisDevelop an enduring MPI regime for 2030 onwards.presentation | |
|-------------------------------|---|-------------------------------|
| Scope of potential regulatory | Current legal framework for early opportunity MPIs; | Early Opportunities |
| changes | changes up to and including primary legislation for any | Pathway to 2030 |
| | potential enduring MPI regime. | Multi-purpose interconnectors |
| Consultation approach | We are keen to hear from developers on how the component assets of an MPI are expected to be used and their views on the feasibility and risk associated with some of the options we set out. | Next steps |

- Interconnectors have a dedicated regulatory route to market through our cap and floor regime, which has been in place since 2014. There are currently six electricity interconnectors in operation connecting into GB, with a total capacity of 6GW, and another three projects under construction.
- An MPI serves more than one purpose, with current proposals to combine interconnection with offshore transmission.
- As our seas become more crowded, and we work to achieve greater coordination offshore, it is increasingly
 important for BEIS and Ofgem to explore how to facilitate MPIs. A benefits case for MPIs will be set out by BEIS in
 later OTNR consultations.
- Ofgem's recent Interconnector Policy Review consultations (Workstream 4) recognised the benefits MPIs can deliver and noted that we need more certainty to enable these projects. We also concluded that the cap and floor regime might be suitable to be adapted for MPIs.



- We are at an early stage of policy development our scope is limited to how we could facilitate an MPI in current legal framework (via early opportunities), and working closely with BEIS as they consider an enduring regime (which may consider legislative change).
- Barriers that are common to all concepts eg charging and anticipatory investment are addressed through our Early Opportunities proposals.
- Consultation also focuses on the licencing, classification, and ownership barriers specific to MPIs.
- We consider two MPI models shown in Figure 1: Interconnector-led (top) and OFTO-led (bottom).



Figure 1: MPI models under consideration

Key messages in this presentation

Early Opportunities

Pathway to 2030

Multi-purpose interconnectors

Next steps





You can access our consultation here:

https://www.ofgem.gov.uk/publications/consultation-changes-intended-bring-about-greater-coordinationdevelopment-offshore-energy-networks

Any questions? Please get in touch at: Offshore.Coordination@ofgem.gov.uk



Ofgem is the Office of Gas and Electricity Markets. We are a non-ministerial government department and an independent National Regulatory Authority, recognised by EU Directives. Our role is to protect consumers now and in the future by working to deliver a greener, fairer energy system.

We do this by:

- working with Government, industry and consumer groups to deliver a net zero economy at the lowest cost to consumers.
- stamping out sharp and bad practice, ensuring fair treatment for all consumers, especially the vulnerable.
- enabling competition and innovation, which drives down prices and results in new products and services for consumers.

www.ofgem.gov.uk

ESO: Offshore Coordination Project

Alice Etheridge, Offshore Coordination Senior Manager, National Grid ESO

Department for Business, Energy & Industrial Strategy

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ESO Offshore Coordination Update

July 2021



Agenda

- 1. Context Setting
- 2. What we're delivering across the OTNR workstreams
- 3. Progress update
 - Early Opportunities
 - Pathway to 2030
- 4. Find out more



Context Setting

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£3 billion (8%) potential savings by 2050 if integration starts from 2030



The number of assets could be reduced by up to 30% creating significant environmental & social benefits

- A step-change in speed and scale of deployment of offshore wind is required to achieve net zero by 2050
- A new, more coordinated approach can benefit consumers, the environment and communities
- For further details, please see our Final Phase 1 Report: <u>https://www.nationalgrideso.com/future-energy/projects/offshore-coordination-project</u>

Our involvement in the OTNR

- We are a project partner and our Offshore Coordination project sits under the OTNR
- We are now progressing the activities within the OTNR that are within the ESO's remit, in order to deliver the identified benefits



What we're delivering across the OTNR workstreams



Early Opportunities

Working with developers of in flight projects, the TOs and other stakeholders to assess the costs, benefits and implications on codes of opt-in projects.

Pathway to 2030

Delivering a holistic network design for a coordinated onshore and offshore network to 2030.

Identifying and delivering changes to required codes, standards and ESO processes.

Enduring Regime

Developing a new approach to offshore network planning in line with the agreed enduring regime model.

Identifying, engaging on and delivering the required changes to industry codes, standards and ESO processes.

Stakeholder engagement



Early Opportunities

This is an indicative plan of the ESO's tasks to work towards the delivery of Early Opportunities projects – dates could be subject to change.

October 2021

- Detailed Models presented
 to Ofgom/REIS
- to Ofgem/BEIS

Summer 2021

Ofgem and BEIS consultations

The ESO will be exploring feasibility, codes & charging changes, CfD allocation, connection agreements & other internal processes for each Model.

We will continue to work closely with BEIS and Ofgem on the scope and emerging findings

May 2021

- Opt-in projects presented to Ofgem and BEIS
- Models Developed.





Via the CDG, the HND will consider environmental, community and offshore developer feedback

nationalgridESO

Find out more

ESO Autumn Progress Publication: approx. 22 September 2021

Contact details:

box.OffshoreCoord@nationalgridESO.com

https://www.nationalgrideso.com/future-energy/projects/offshorecoordination-project



National Policy Statements (NPS) & Nationally Significant Infrastructure Projects (NSIP)

Jenny Stafford, Planning & Environment Lead, BEIS Jenny Preece, Deputy Director for Planning Infrastructure, MHCLG

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Draft energy NPS – Offshore Transmission

- Draft energy National Policy Statements (NPS) are due to be published for consultation soon.
- Policy indicates offshore transmission should be "co-ordinated wherever possible".
- Policy usually has a life of a few years, maybe longer, so is written with that intent.
- Draft policy for consultation and feedback.
- Current NPS remains relevant government policy basis for Secretary of State decisions on DCOs.
- Emerging draft NPSs are "potentially capable of being important and relevant considerations in the decision-making process" – a matter for the Secretary of State to consider within the framework of the Planning Act 2008.
- Final NPS due to be adopted by end of 2021.

Ministry of Housing, Communities & Local Government

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The National Infrastructure Planning Reform Programme, operational review and offshore wind

Project Speed was announced by the Prime Minister in Summer 2020 and the National Infrastructure Strategy set out commitments arising from Project Speed. This included the National Infrastructure Planning Reform Programme to refresh how the Nationally Significant Infrastructure Projects (NSIP) regime operates, making it more effective and bringing government departments together to deliver more certainty in the process and better and faster outcomes.

The reform programme will:

- Set an ambition to cut timescales by up to 50% for some projects entering the system from September 2023;
- Establish a project "acceleration team" of planning experts to accelerate infrastructure projects through the system, identifying innovative ways to deliver faster planning consents; and
- Monitor the performance of the NSIP regime, coordinate with relevant departments on the need for a review of their National Policy Statements and ensure effective engagement with infrastructure departments, statutory consultees and the Planning Inspectorate and industry.

Supported by:

 A new system of environmental assessment (including Strategic Environmental Assessments and Environmental Impacts Assessments) – to deliver a new framework that provides clarity, removes duplication, and ensures environmental considerations are embedded effectively in decision making at an early stage.



The NSIP process



Ministry of Housing, Communities & Local Government

Current NSIP regime and its performance

The **NSIP** regime has now seen **100** important energy, transport, water, wastewater and waste developments determined with a **95% approval rate**.



Ministry of Housing, Communities & Local Government

The Rt Hon Christopher Pincher MP, Minister for housing, recently published a letter he sent to the National Infrastructure Planning Association. In the letter he asked seven questions to all users of the NSIP regime to frame the operational review of the regime:

- 1) What Government, its Arms-Length Bodies and other statutory bodies could do to accelerate the speed at which NSIP applications can be prepared and more generally to enhance the quality of submissions
- 2) Following submission, whether there are any aspects of the examination and decision process which might be enhanced, and how might these be improved.
- 3) Where a development consent order has been made, what impediments there are to physically implementing a project which could be removed.
- 4) How digitalisation might support the wider improvements to the regime, for example are there any specific aspects that you feel could benefit from digital enhancements.
- 5) What issues are affecting current NSIPs that you are working on that would benefit from enhanced cross-government coordination including Government Departments and Arms-Length Bodies.
- 6) Whether the NSIP regime successfully interacts with other consenting and regulatory processes and the wider context within which infrastructure projects operate.
- 7) Areas where limits in the capacity or capability of NSIP applicants, interested parties and other participants are resulting in either delays or adversely affecting outcomes.

To communicate with NSIP users about the reform programme and operational review we have set up a mailing list – <u>InfrastructurePlanning@communities.gov.uk</u>. Please send an email to be added to the mailing list and we will update on how you can input into the operational review.

Expert Advisory Group

Zoe Keeton, Head of Regulatory Affairs UK & Ireland, RWE Tania Davey, Marine Planning Manager, The Wildlife Trusts

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Role of the Expert Advisory Group



- **Sounding Board** ٠
- **Enduring models** ٠

- Considerations for MPIs
- Environmental, spatial planning and consenting

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Environmental Considerations



- Sub-group: Industry, NGO, Government, Regulator and Statutory Nature Conservation Bodies (SNCB)
- Holistic planning land and sea together
- Incorporate environment at earliest stage
- This will reduce risk to:
 - Environment
 - Projects
 - 40GW by 2030 & net zero by 2050



Q&A

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