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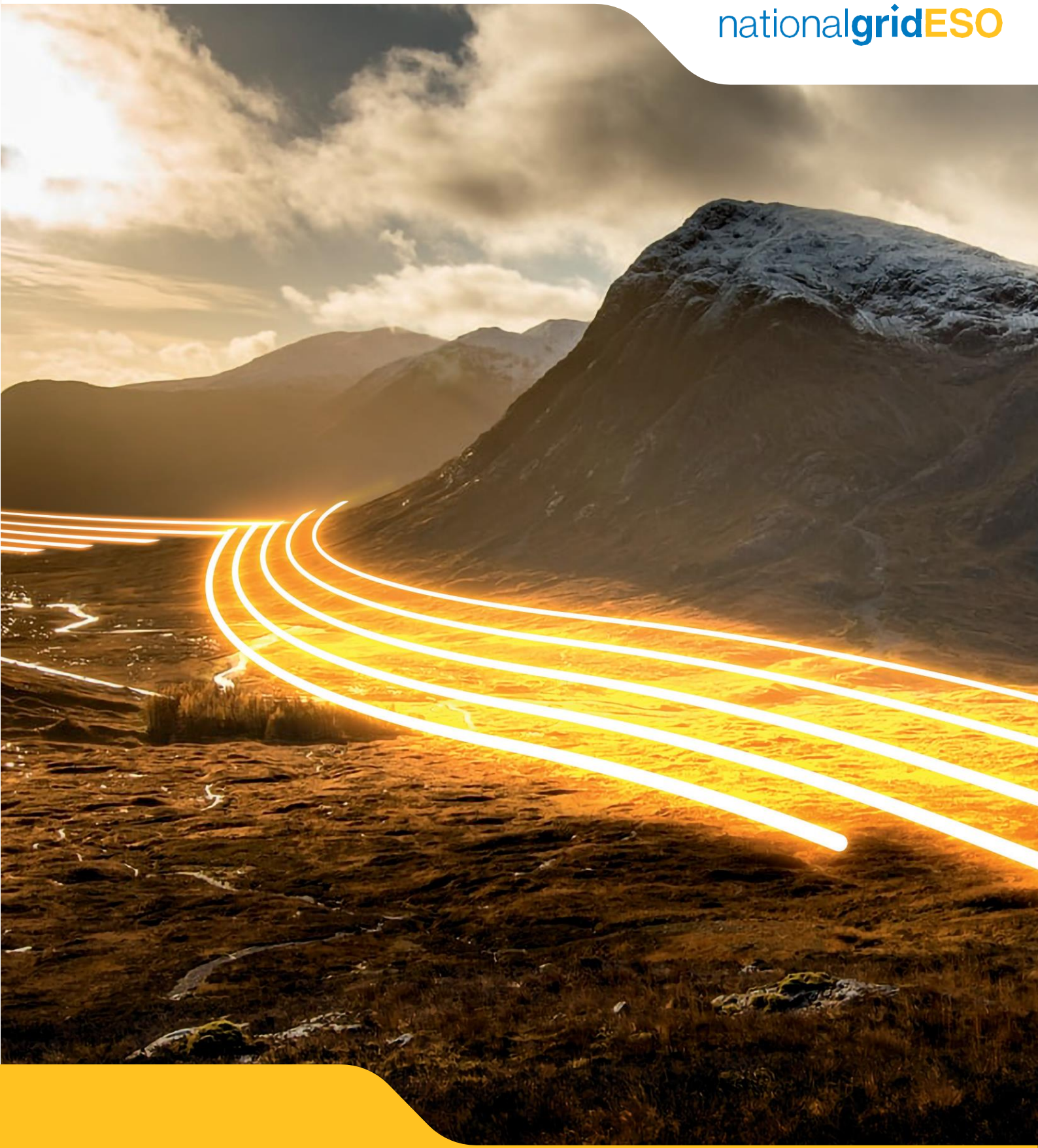

Offshore Co-ordination project: scope for phase 1

This document outlines our scope for phase 1 of the project including what we will deliver and when.

Why have we started to look at this?

Offshore wind will play a key part in the UK reaching the government's commitment to net zero carbon emissions by 2050, in part enabled through the agreed Offshore Wind Industry Council sector deal. The government has stated targets for offshore wind of 40GW by 2030 and up to 75GW by 2050. This is a huge increase from today's 10GW and will potentially require a very different approach to the development and implementation of the offshore transmission network to deliver a beneficial outcome for consumers and local communities.

Ofgem has recognised this challenge through Action 3 in its Decarbonisation Action Plan. This includes a commitment for them to explore options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network. And within that as a first step working with the ESO to ensure we can take forward an options assessment for offshore transmission. This project is fulfilling that action.

Scope of project – what will we deliver?

We initially explored a broad scope for the work. BEIS is progressing the scoping out of a broader programme, in the interim we are focusing on the areas we consider need to be taken forward first and that we are best placed to lead on. This has potential to inform later work to remove barriers to a more integrated approach, if recommended. The deliverables for phase 1 are:

1. **Technology readiness for offshore integration**

   A report of the current and future availability of technology, what will be needed to bring it to market, the likely costs and how the technical challenges to an integrated network can be overcome.

   This will help us understand what technology is available to deliver a more coordinated network and therefore whether there is value in progressing work to unlock barriers to its delivery. This understanding is needed to feed into the cost-benefit analysis and will pull on work already carried out across industry as well as engagement with key stakeholders.

2. **An options assessment for offshore transmission**

   A cost-benefit analysis for different conceptual network designs that takes account of the costs of different technologies and their likely availability, the impact on coastal communities, the level of redundancy on the network and the economic benefits for consumers.

   A number of conceptual network designs will be developed with stakeholders to help identify how different network options will impact on communities and stakeholders. We will carry out power system analysis to understand the impact of an integrated offshore network on the onshore point of connections, security of supply and onshore network boundaries.

   The CBA methodology will specifically consider how to balance national needs (e.g. constraint savings) with coastal community considerations. There is the potential for different recommendations for different geographies and different for transmission capacity requirements.

   The costs and benefits of the different options will be a key steering factor for the recommended approach or approaches and will inform the areas of focus for future phases of the project.

3. **A review of the offshore connections process**

   Developing options for different timescales, including medium-term (options not including changes to standards) and longer-term (changes to standards) for how to encourage and drive more coordination in offshore connections.

   Focus will be on, but not limited to, the drivers for funding, prioritisation of connections, timescales, securities, lead times, planning, onshore build limitations/improvements and leases as well as looking at what can be done to tweak the Connections and Infrastructure Options Note (CION) processes.

   This will deliver a report on the options that are available for greater coordination on offshore connections with potential actions in the different timescales, along with a high-level plan for implementation. The report will cover the benefits, risks, challenges and opportunities, with recommendations on what actions should be undertaken and who is best to undertake them.

4. **Gap analysis**

A gap analysis and document review of the delivered and in progress work on offshore coordination that has been tested with stakeholders.

Stakeholders have indicated that there are a number of pieces of work already in progress or already delivered that identify issues with the current approach and solutions to overcoming it. We do not want these to be lost and are reviewing the documents to understand where there is work we can build on and give an indication of the priority areas to focus on in a potential second phase of the project.

For each document we will produce a summary and an assessment for each of the topics in the scope of issues listed above against a set of criteria including robustness, impartiality and how recently they were issued. From that we will take a view on which areas have gaps that need addressing to progress to the recommended approach and who they are best addressed by. We plan to test and refine the recommendations with stakeholders, including BEIS and Ofgem, and also take inputs from workstreams one to three.

Timescales – when will this be delivered?

We are aiming to deliver the final cost-benefit analysis by the end of October, with interim papers published as we go along. We will also be working with stakeholders throughout the development of the outputs to test and refine with their feedback. Our intention is that the second phase of the project delivers by the end of March 2021 although this will be refined as we develop the scope.

We envisage the outputs of the project will take effect with offshore developments at the early stages of development. We are progressing the project as rapidly as possible to impact on new projects as early as possible[1].

[1] Please note the indicated timings have been updated from the first version of the scope document following stakeholder feedback to more accurately reflect our expectations on timing.