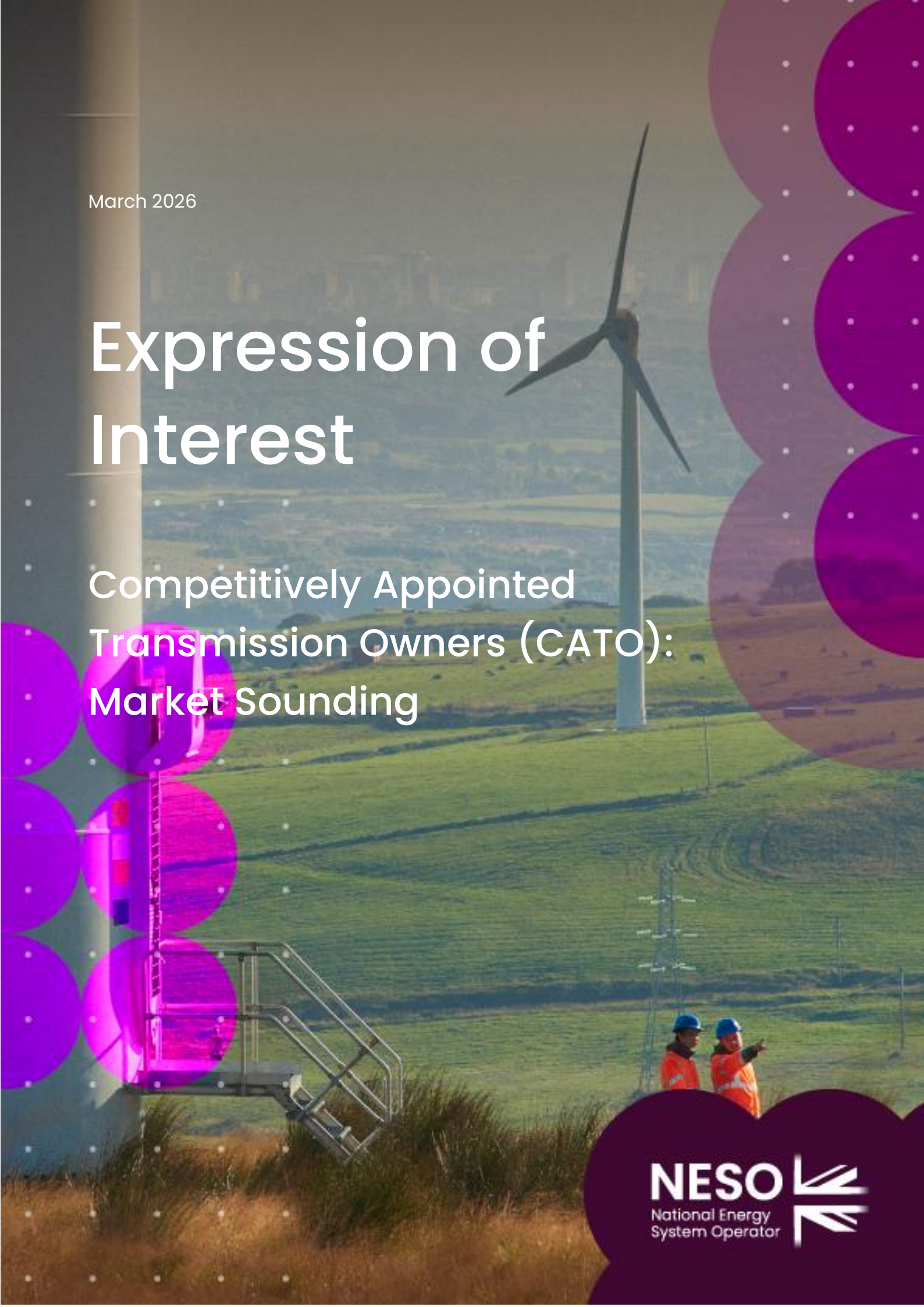
March 2026

Expression of Interest

Competitively Appointed Transmission Owners (CATO): Market Sounding



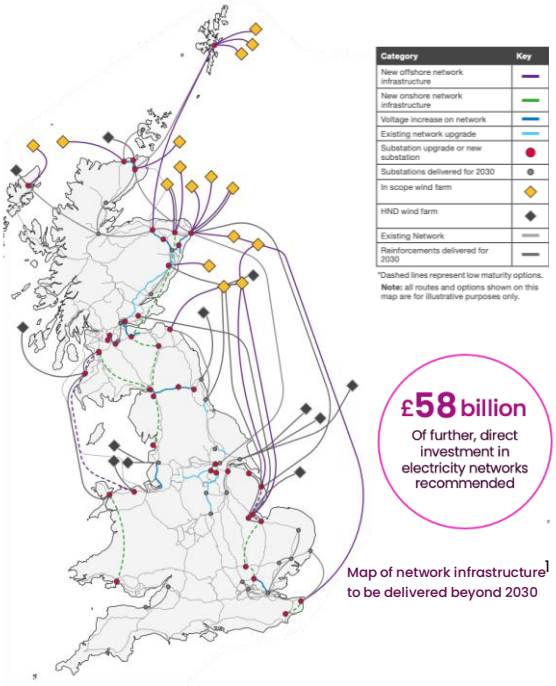
NESO
National Energy System Operator

Introduction

The UK electricity transmission system is operating in a period of unprecedented expansion. The scale of change underway is comparable to a once-in-a-generation build-out. It is driven by electrification of heat, transport, and industry, increasing digitalisation which includes the growth of energy-intensive data centres and large-scale digital infrastructure, and the changing geography of electricity generation. These trends imply not only higher volumes of electricity, but fundamentally different power flows across the transmission network.

Over the past decade, investment in renewable generation has outpaced investment in transmission capacity, creating network constraints that now impose material costs on the system through curtailment and redispatch. The existing grid, while highly reliable, is increasingly operating at the limits of its original design assumptions, highlighting the need for significant reinforcement and reconfiguration to maintain system performance.

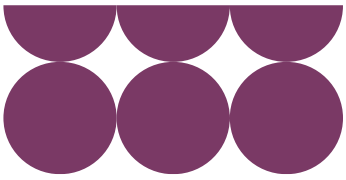
Historically, new transmission infrastructure has been delivered exclusively by incumbent Transmission Owners under the RIIO framework. Looking ahead, the scale and pace of future build-out are unprecedented. In response, government and Ofgem have confirmed the role of competitive delivery models to work alongside TOs. This approach is designed to complement the proven capability of incumbents, expand overall delivery capacity, and ensure the system has the flexibility and resilience needed to meet future requirements.



Map of network infrastructure[1] to be delivered beyond 2030

Under the Competitively Appointed Transmission Owners (CATO) framework, competitively selected parties would be licensed to design, build, finance, and operate defined transmission assets. In return they will receive a long-term,

[1] The Beyond 2030 report sets out network recommendations throughout the 2030s and identifies around £58 billion of direct investment required for offshore and onshore network upgrades. www.neso.energy/document/315516/download



inflation-linked, availability-based revenue stream. Assets remain part of the electricity national transmission system, subject to system operation and regulatory oversight. However, delivery and operational responsibility sit with the competitively appointed entity rather than the incumbent Transmission Owner.

The early-model CATO represents a deliberate and targeted application of competition, focusing on projects where risks can be clearly defined, interfaces managed, and competitive delivery is most likely to deliver value for consumers. National Energy System Operator (NESO) has been tasked with identifying where early competition is most likely to succeed and with shaping a pipeline that is investable, deliverable, and proportionate for consumers and the market.

While UK transmission experience is valuable, NESO recognises that relevant delivery capability exists across adjacent infrastructure sectors. The competitive model is expected to support consortium structures that combine long-term capital with specialist technical and construction expertise.

Market Context

The early-model competitive tender process is being developed against a set of structural market conditions that shape both delivery risk and investor participation:

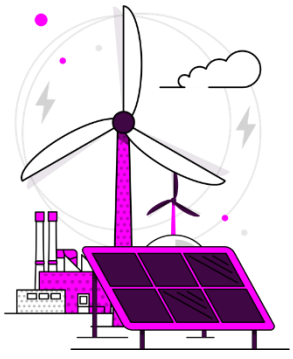
- **Electrification and structural demand growth**
  Electrification of heat, transport and industry, alongside wider system decarbonisation and digitalisation, is driving sustained growth in electricity demand and changing the geography of power flows. This creates a durable, long-term need case for transmission investment extending well beyond the current regulatory period.
- **Scale of incumbent Transmission Owner programmes**
  Incumbent Transmission Owners are progressing substantial capital programmes under RIIO-T2 and preparing for further expansion under RIIO-T3. The scale, complexity and concurrency of these programmes place increasing demands on organisational capacity, capital allocation, and delivery resources, particularly where major reinforcements are required within compressed timeframes.

- **Affordability, financing capacity, and evolving delivery models**
  The scale of required network investment coincides with constrained public finances and heightened scrutiny of consumer bills. Against this backdrop, there is increasing recognition of the role that competitive delivery models and private capital can play in supporting timely, efficient investment in regulated infrastructure while maintaining appropriate regulatory oversight and consumer protection.

Taken together, these conditions support a targeted use of early competition as a complementary route to market, expanding delivery capacity, diversifying execution risk, and supporting timely investment while maintaining regulatory oversight and system integrity.

CATO at a Glance – Key Commercial Features

Feature	Description
Revenue model	Fixed 35-year Tender Revenue Stream, availability-based and independent of energy demand
Inflation linkage	Revenue partially indexed to CPI-H
Preliminary Works Payment	Up to 50% of NESO's estimated early-stage costs, reducing pre-construction risk
Construction risk	CATO bears construction cost overruns, subject to predefined exceptions
Cost adjustment protection	40% Cap on upward adjustments for non-foreseeable construction costs post-Post Pre Works Cost Assessment (cap level to be informed by market engagement)
Availability regime	98% target availability, with penalties for underperformance.
Financing structure	Flexible capital structure, including potential for higher leverage (up to c.85%)
Payment counterparty	Revenue recovered through TNUoS charges, providing a strong system-level credit profile



Expected participants

Early Competition is expected to attract a mixture of equity investors, major construction contractors/EPCs, and large utilities or TOs, typically forming consortium structures that combine long-term capital with technical delivery capability. The model is well-suited to infrastructure funds, sovereign wealth funds, pension schemes, and strategic utilities. It also allows lead sponsors, co-investors, and technical partners to participate in a scalable, de-risked platform.

What we are asking

NESO is seeking to identify transmission projects that may be suitable for network competition under the early-model competitive tender process[2]. To inform our project identification work, **we are conducting a market sounding exercise to understand:**

- investor capability and appetite across different project types
- cost drivers and delivery assumptions that influence project viability
- financial capacity and relevant experience of potential market participants
- how projects are packaged, sequenced and brought to market under the early-model competitive regime

This Expression of Interest (EoI) seeks to develop our understanding of:

1. Your organisation's credentials and relevant delivery experience
2. Your interest across our illustrative project portfolio
3. Your perspectives on cost drivers and delivery assumptions

What this is not

This EoI is **not**:

- A request for formal bids or pricing
- A commitment to compete any specific project
- Part of the Pre-qualification (PQ) or Invitation to Tender (ITT) stages of the tender process

[2] Further information on the early-model competitive tender process for onshore electricity transmission infrastructure can be found here: https://www.neso.energy/about/our-projects/early-competition.

Confidentiality and use

Responses will be treated as commercially confidential and used in aggregate to inform NESO's competition strategy. Individual cost assumptions will not be shared with Ofgem or other parties without your consent.

Information provided by respondents to this EoI will be used in aggregate for the following purposes:

1. **Competition sequencing** – understanding which projects are likely to attract the most interest will help NESO determine which competitions to launch first, in the interests of building market confidence and demonstrating that the regime works
2. **Project packaging** – identifying capability overlaps and gaps will inform decisions about whether to bundle or separate projects, and at what scale
3. **Competition design** – process complexity will be calibrated to market capacity; we want competitions that are robust but not unnecessarily burdensome
4. **Regulatory engagement** – your responses provide an evidence base for discussions with Ofgem regarding appropriate returns, risk allocation, and realistic delivery assumptions
5. **Pipeline development** – understanding cost drivers helps inform early-stage project development and packaging decisions

Individual responses will not be:

- Shared with Ofgem or other government bodies without your consent
- Used to pre-qualify or exclude parties from future competitions
- Disclosed to other market participants
- Treated as binding commitments or proposals

NESO recognises that investor and contractor confidence depends on pipeline visibility, regulatory clarity, and realistic delivery assumptions. The insights gathered through this EoI will inform how early competition is applied in practice, with the aim of launching competitions that are credible, proportionate, and capable of being delivered at pace.

EoI next steps

Directly following the EoI process, NESO in Q2 2026 will:

1. analyse responses and prepare aggregated market intelligence
2. engage with Ofgem regarding market appetite, capability, and project packaging

From an overall early-model competitive tender perspective, the learnings from the EoI will feed into the methodology of the next phase of the tender process, Project Identification. Following the publication of the Transitional Centralised Strategic Network Plan (tCSNP) in Summer 2026, NESO will work to shortlist and prioritise favourable projects for early competition. NESO will then recommend selected projects to Ofgem for confirmation to advance to the next phase, Invitation to Tender.

Submission instructions and timeline

Deadline for submissions: 30th April 2026
Email submission to: box.earlycompetition@neso.energy
File format: Return Expression of Interest (EoI) excel workbook

If you have any questions, please reach out to us at box.earlycompetition@neso.energy

Expression of Interest (EoI) workbook instructions

Worksheet tab: 0. Declaration

NESO objective: Gather information on your main point of contact in relation to the completion of the EoI.

Questions asked:

0.1 Contact details

0.1.1 Primary contact name and title

0.1.2 Organisation

0.1.3 Email

0.1.4 Phone

0.2 Declaration

Worksheet tab: 1. Organisation and credentials

NESO objective: Develop an understanding of your experience in major infrastructure development, and what role you anticipate playing if you decide to bid for a CATO (individually or as part of a consortium).

Questions asked:

1.1 Organisation overview

1.1.1 Legal entity name

1.1.2 Jurisdiction of incorporation

1.1.3 Ultimate parent/sponsor

1.1.4 What is your existing UK operational presence?

1.1.5 What is your primary business model?

1.1.6 Which role(s) could your organisation fulfil in a CATO bidding structure?

1.2 Infrastructure delivery experience

1.2.1 Provide examples demonstrating your experience in delivering projects relevant to electricity transmission infrastructure

1.3 Key capabilities demonstrated

1.4 Geographic experience - Please indicate the total number of projects your organisation has delivered in each category below.

1.5 Financial capacity and intended role

1.5.1 Please provide the most relevant financial metrics for your organisation

1.5.2 Has your organisation reported positive EBITDA for each of the last three financial years?

1.5.3 Indicate your indicative equity investment range for a single transmission asset

1.5.4 Debt raising capability

1.5.5 What is your organisation's indicative minimum required Internal Rate of Return (IRR) for UK transmission investments?

1.6 UK delivery capability

1.6.1 Indicate whether you have a UK presence or can readily access UK delivery capability

1.6.2 Indicate whether you have or can readily-access UK specific experience

Worksheet tab: Illustrative project portfolio (to support the completion of worksheet tab 2 and 3).

The following projects are illustrative examples of the type of projects that may be competed via the early-model competitive tender process. The project descriptions have been developed purely to gauge market appetite across different project types, scales, and complexity levels. They do not represent the actual projects that will be available in the tender process.

Projects are categorised into three broad types:

- **Onshore reinforcement** – projects which increase power transfer across network boundaries via entirely onshore infrastructure (e.g. overhead line and/or buried cable circuits)
- **'Wet' onshore reinforcement** – projects which increase power transfer across network boundaries via marine based infrastructure (e.g. HVDC bootstraps)
- **Onshore connections** – projects to connect generator(s) and/or demand user(s) to the national electricity transmission system

For each of the broad project types, illustrative examples of varying scale and complexity are given below.

Onshore reinforcement

Project A: 400 kV overhead line

Approximately 50 km of new 400 kV overhead line in rural Scotland, comprising:

1. **New 400 kV double circuit overhead line** connecting two existing substations
2. **Planning and environmental context:**
    - Predominantly agricultural land with cooperative landowner base
    - Route likely to exist which avoids all sensitive environmental designations
    - Existing access tracks suitable for construction traffic

Project B: 400 kV overhead line and new 400 kV substation

Approximately 80 km of new 400 kV overhead line across rural Wales into England, comprising:

1. **New 400 kV double circuit overhead line** connecting one new substation (in scope of project) and one existing substation
2. **Construction of new 400 kV substation** with turn in to existing overhead line as connection to the main interconnected system (turn-in delivered by incumbent Transmission Owner (TO))
3. **Planning and environmental context:**
    - Predominantly agricultural land
    - Likely to be some landowners resistant to the project
    - Several environmental designations along the route, including a large National Landscape
    - Several major river crossings

Project C: 400 kV overhead line and two new 400 kV substations

Approximately 120 km of new 400 kV overhead line between southern Scotland and northern England, comprising:

1. **New 400 kV double circuit overhead line** through diverse landscape of agricultural lowland, upland and coastal areas
2. **Construction of one new 400 kV substations mid-route of the overhead line circuit** (with multiple connection points for customers)
3. **Planning and environmental context:**
    - Project located in Scotland and England
    - Crosses agricultural land, as well as upland and coastal areas
    - Multiple environmental designations, including internationally designated heritage and nature conservation sites
    - Large parts of the route are remote, with challenging access

Project D: 525 kV UHVDC overhead line and underground cable

Approximately 80 km of UHVDC (note direct current) overhead line and underground cable in northern England, comprising:

1. **70 km of new 525 kV overhead line** through diverse landscape of agricultural lowland and upland areas
2. **10 km of new underground 525 kV cable**
3. **Connecting to two existing substations** requiring build of convertor stations at each interface point to the AC system
4. **Planning and environmental context:**
    - Project located in northern England
    - Crosses agricultural land as well as upland areas
    - Multiple environmental designations, including internationally designated heritage and nature conservation sites

Wet onshore reinforcement

Project E: HVDC subsea cable

Approximately 150 km of new HVDC subsea cable connecting two existing substations in south-east England, comprising:

1. **New HVDC subsea cable** off the coast of south-east England
2. **Two new landfall points**
3. **Two new onshore convertor stations**
4. **Approximately 5 km onshore cable to new convertor stations**
5. **Connection to the main interconnected system delivered by incumbent TO**
6. **Planning and environmental context:**
    - Multiple on- and offshore environmental designations that cannot be avoided by the route
    - Landfall points outside of any environmental designations
    - Short onshore cable sections which avoid major settlements

Project F: HVDC subsea cable

Approximately 400 km of new HVDC subsea cable off the west coast of GB, connecting two new convertor stations, comprising:

1. **New HVDC subsea cable** off the west coast of GB
2. **Two new landfall points**

3. **Two new onshore convertor stations** (one located in Scotland and one in Wales)
4. **Approximately 10 km of onshore cable to new convertor stations**
5. **Connection to the main interconnected system delivered by incumbent TO**
6. **Planning and environmental context:**
    - Multiple on- and offshore environmental designations that cannot be avoided by the route
    - Landfall points outside of any environmental designations
    - Potentially lengthy onshore cable routes, which may pass several settlements

Project G: HVDC subsea cable

Approximately 700 km of new HVDC subsea cable off the east coast of GB, connecting two existing substations, one in Scotland and one in England, comprising:

1. **New HVDC subsea cable** off the east coast of GB
2. **Two new landfall points**
3. **Two new onshore convertor stations** one in north-east Scotland and one in eastern England
4. **Approximately 20 km of onshore cable to convertor stations**
5. **Connection to the main interconnected system delivered by incumbent TO**
6. **Planning and environmental context:**
    - Multiple on- and offshore environmental designations that cannot be avoided by the route
    - At least one landfall point is within statutory designated sites
    - Potentially lengthy onshore cable routes, which may pass several settlements and environmental designations

Onshore connections

Project H: Single customer connection

Approximately 20 km of new 400 kV overhead line connecting an onshore generator to an existing substation in England, comprising:

1. **New 400 kV double circuit overhead line** through lowland agricultural landscape
2. **New substation at generator end and works at existing substation to connect to wider network**
3. **Planning and environmental context:**
    - Predominantly agricultural land with cooperative landowner base
    - Route likely to exist which avoids all sensitive environmental designations
    - Existing access tracks suitable for construction traffic

Project I: Multiple generator connections

A total of approximately 50 km of new 400 kV overhead line to connect three onshore generators to a single new substation in Scotland, comprising:

1. **New 400 kV overhead line**
2. **A new substation** to connect three generators in scope of project plus space for future customers
3. **Planning and environmental context:**
    - Largely in upland environment with sensitive habitats
    - Challenging access and ground conditions

Project J: Multiple generator and demand user connections

A total of approximately 80 km of new 400 kV overhead line to connect three onshore generators and a single demand user to a single new substation in Scotland, comprising:

1. **New 400 kV overhead line**
2. **A new substation** to connect three generators and single demand user in scope of project plus space for future customers
3. **Planning and environmental context:**
    - Crosses agricultural land, as well as upland and coastal areas
    - Multiple environmental designations, including internationally designated sites
    - Large parts of the route are remote, with challenging access
    - Also passes at least one major settlement, with local objector groups

Worksheet tab: 2. Interest and capability

NESO objective: Understand what type of project interests you most from a CATO bid submission, and the specific characteristics you are looking for in a project that would attract a bid

Questions asked (based on illustrative project portfolio):

2.1 For each of the illustrative Projects A-J described in worksheet Illustrative project portfolio

2.2 Portfolio preferences

2.2.1 Preferred project value range

2.2.2 Maximum number of concurrent CATO projects you would deliver

2.2.3 Preferred project types

2.2.4 Would your organisation be interested in forming or joining a consortium for project delivery?

2.3 Open response questions

2.3.1 Which project characteristics most influence your interest? (Open text - 200 words max)

2.3.2 Which characteristics would make a project non-viable for your organisation? (Open text - 200 words max)

Worksheet tab: 3. Cost drivers and assumptions*

NESO objective: Gather information on how you would evaluate CATO project opportunities from a cost perspective.

Questions asked (based on preferred 2-3 projects from the illustrative projects portfolio selected by you):

3.1 Delivery timeline

3.1.1 Estimated construction duration from Notice to Proceed to energisation (years)

3.1.2 Key delivery risks or potential bottlenecks (list 2-3)

3.2 Cost drivers and risk contingencies

3.2.1 Rank the following factors by their expected impact on project cost (1=Highest impact)

3.2.2 Indicate what contingency you would typically carry for the selected illustrative project (%)

**Some of the questions are optional, and respondents may complete it only if they are comfortable doing so. You may skip these without affecting your EoI.*

3.2.3 Which risks would you seek to transfer to supply chain vs retain? (Open text, 150-word max)

3.3 Delivery model

3.3.1 Preferred execution strategy

3.3.2 Unit cost assumption

3.3.3 What UK/European transmission projects do you consider most comparable to this project in terms of cost/complexity? (list up to 3)

3.3.4 What annual cost inflation assumption do you typically apply for transmission construction projects? (please specify a %)

3.3.5 Please select up to three items that you consider most supply-constrained for UK transmission projects.

3.3.6 Please select your assumed supply chain sourcing strategy

3.3.7 Please provide your typical annual operational expenditure as a percentage of capex (%)

3.3.8 Based on the illustrative project description provided, indicate the order of magnitude capex range you would estimate

**Some of the questions are optional, and respondents may complete it only if they are comfortable doing so. You may skip these without affecting your EoI.*

Worksheet tab: 4. Additional information

NESO objective: Capture any additional reasons that would increase/decrease your desire to take part in the CATO bid process.

Questions asked:

4.1 What factors would prevent or discourage your participation in an early-model competitive tender?

4.2 What would increase your confidence in early-model competitive tender process and likelihood of participation?

4.3 Do you have any questions or clarifications you need from NESO regarding the early model competitive tender process?

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