

STC Modification Proposal Form

CM087: Introducing Connections Process to facilitate Competitively Appointed Transmission Owners

Overview: This modification is concerned with issues around TO-CATO Connections process to facilitate the introduction of Competitively Appointed Transmission Owners (CATOs) to the STC. This is to enable Onshore Network Competition for the design, build and ownership of Onshore Transmission assets.

Modification process & timetable



Status summary: The Proposer has raised a modification and is seeking a decision from the Panel on the governance route to be taken.

This modification is expected to have a: Medium impact

ESO, Transmission Owners and CATOs (by introducing CATO arrangements).

Proposer's recommendation of governance route

Standard Governance modification with assessment by a Workgroup.

Who can I talk to about the change?

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What is the issue?

On 28 March 2022 Ofgem published its decision¹ to proceed with implementation of the competition model for the UK's transmission network. This has been underpinned by the publication of the Energy Security Bill², which makes provision to enable competitive tenders for delivery of onshore electricity network assets. The party who wins a competition is often referred to as a Competitively Appointed Transmission Owner (CATO). The Bill will introduce powers to enable the Secretary of State to appoint a body to run tenders and to set criteria to determine a network project's eligibility to be competed. It will also extend Ofgem's power to make regulations which will set out the process by which tenders will be run.

To allow onshore electricity network competition to be implemented effectively, the competition processes, obligations, technical requirements, charges, and remuneration principles need to be embedded within the relevant codes and standards. The introduction of competition affects the STC, Grid Code, CUSC and SQSS among others. ESO are proposing this modification in association with the modifications that will be progressed to the other GB Codes and frameworks during the period between Autumn 2022 and Autumn 2023.

The introduction of BETTA in 2005 led to the concept of Transmission Owners with the requirements between the ESO and Transmission Owners being specified in the STC. In 2009 the STC was further adapted to introduce the concept of Offshore Transmission Licensees.

The STC Connections Process as drafted in STCP18-1 is dependent upon a User Connection to the Transmission Network. In this case the User Connection could arise from Generation or Demand Connections.

The concept of CATOs develops from network re-enforcement which arises from the Network Options Assessment (NOA) process where User Connections may not be involved. Therefore, ESO believe that consideration should be given to what the appropriate connections process should be with respect of CATOs connecting to the National Electricity Transmission System.

Why change?

For the UK to reach Net Zero by 2050 and achieve independence from all fossil fuels the UK needs an extensive programme of development and investment in the electricity transmission network. As part of this green energy transition, ESO expect to see a doubling in electricity demand driven in part by the electrification of heat and transport. This will require significant reinforcement and repurposing of the National Electricity Transmission System. The introduction of CATOs is aimed at contributing to this by introducing new parties to design, deliver and finance investment and to optimise delivery efficiency.

The Department for Business, Energy and Industrial Strategy indicate that, through the introduction of competition, consumers could see savings of up to £1 billion by 2050 on projects tendered over the next ten years. Ofgem requested for ESO to plan how competition could be included within the process of designing, building, and owning onshore transmission assets in the early stages of the project lifecycle, known as 'Early Competition'. ESO's Early Competition Plan (ECP) was published in April 2021.

¹ <https://www.ofgem.gov.uk/publications/decision-early-competition-onshore-electricity-transmission-networks>

² [Energy Security Bill - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/bills/2022/energy-security-bill)

Introducing the concept of CATOs to the relevant industry codes ensures the safe, secure, and coordinated operation of the Transmission System by establishing both the obligations on CATOs and those entities interacting with CATO assets and CATOs themselves. The first phase of the Early Competition procurement process (the pre-tender) is set to commence in the first quarter of 2024, necessitating that the proposed modifications be raised and progressed in line with the Code Administrator proposed timetable.

Following the completion of a competitive tender, a CATO will be awarded a Transmission Licence and categorised as an Onshore Transmission Owner. CATOs will differ from incumbent TOs insofar as, for instance, they will consist of project companies funded through a tender revenue stream to deliver a specific project based on network requirements. As a Licensed TO, CATOs will be subject to broadly the same obligations and frameworks.

What is the proposer's solution?

ESO seek consultation with an STC Work Group to consider and determine the appropriate connections process for CATO – TO connections.

Our initial assessment has identified 3 options:

1. A new STCP process based on the existing Connections Offer Process STCP 18.1 using a Transmission Owner Connection Offer (TOCO) amended to facilitate a TO-TO connection based upon the *early* OFTO process.
2. A bespoke connection process featuring two bilateral agreements, one between the ESO and a CATO (site-specific requirements) and another between the CATO and the incumbent TO.
3. Utilise reinforced Section D Part 1, 2.3- Co-ordination of Transmission Investment Planning
 - All options above require STCP 23.2 creating

This modification is the second of three proposed modifications to the STC as part of the work being done to implement Onshore Network Competition. The first and third modifications are seeking to:

- Introduce the concept of CATO throughout the STC.
- Establish the obligations of CATOs in relational to completing additional works on their system.

The subjects of modifications 1 and 3 are out of scope of this first modification, although all three will be presented to Ofgem simultaneously.

Draft legal text

Legal text changes details are attached as a per Annex 1

Clerical changes to the suite of STCP to make reference to CATO are also being made as part of the work to introduce the concept of CATO.

What is the impact of this change?

Proposer's assessment against STC Objectives

Relevant Objective	Identified impact
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<p>(a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act</p>	<p>Positive</p> <p>The proposed modification ensures that commercial and technical obligations of CATOs, as transmission licensees, are clearly established.</p>
<p>(b) development, maintenance, and operation of an efficient, economical, and coordinated system of electricity transmission</p>	<p>Positive</p> <p>The introduction of these modifications will ensure that the development of CATO assets will be progressed safely and reliably in line with the relevant standards specified and help comply with the Energy Security Bill.</p>
<p>(c) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity</p>	<p>Positive</p> <p>The proposed code changes allow us to create transparency and fairness for competition participants, which is a requirement to set Onshore Network Competition up for success</p>
<p>(d) protection of the security and quality of supply and safe operation of the national electricity transmission system insofar as it relates to interactions between transmission licensees</p>	<p>Positive</p> <p>Introducing the concept of CATO into the relevant industry codes establishes the obligations of CATOs and those entities interacting with the CATO assets, ensuring the safe, secure, and coordinated operation of the System.</p>
<p>(e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC</p>	<p>Neutral</p>
<p>(f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;</p>	<p>Neutral</p>
<p>(g) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.</p>	<p>Neutral</p>

<p>Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories</p>	
<p>Stakeholder / consumer benefit categories</p>	<p>Identified impact</p>

Improved safety and reliability of the system	Neutral
Lower bills than would otherwise be the case	Positive Provide commercially efficient growth of the NETS
Benefits for society as a whole	Positive The introduction of competition to onshore electricity networks has a key role to play in improving efficiency in network investment and driving innovative solutions to network needs. These modifications will ensure that the development of CATO assets do not compromise safety and reliability standards
Reduced environmental damage	Neutral

When will this change take place?

Implementation date

Target date Q4 2023

Date decision required by

November 2023 to achieve implementation in time for receiving bids from Q1 2024.

Implementation approach

No system or process change required

Proposer’s justification for governance route

Governance route: Standard Governance modification with assessment by a Workgroup

The Proposer has suggested this route because they would like the Workgroup to check the proposed solution, particularly the proposer’s rationale for the definition of Transmission System.

Interactions

- Grid Code BSC CUSC SQSS
- European Network Codes Other modifications Other

The proposed code changes form part of the package of work to establish the frameworks for competition in onshore electricity networks, which has a key role to play in improving efficiency in network investment and driving innovative solutions to network needs, helping us meet our decarbonisation targets at the lowest cost to consumers.

Introducing the concept of CATO into the relevant industry codes establishes the obligations of CATOs and those entities interacting with the CATO assets, ensuring the safe, secure, and coordinated operation of the System.

Grid Code, CUSC and SQSS modifications have been raised. Initial engagement with Elexon indicated no consequential changes to BSC but engagement ongoing to ensure any potential changes are identified.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BETTA	British Electricity Trading and Transmission Arrangements
BSC	Balancing and Settlement Code
CATO	Competitively Appointed Transmission Owner
CM	Code Modification
CUSC	Connection and Use of System Code
OFTO	Offshore Transmission Owner
STC	System Operator Transmission Owner Code
SQSS	Security and Quality of Supply Standard
TO	Transmission Owner
TOCO	Transmission Owner Connection Offer

Reference material

- [Energy Security Bill](#)
- [BEIS Guidance Note: Energy Security Bill factsheet: Competition in onshore electricity networks](#)
- [ESO Early Competition Plan final publication](#)
- [Ofgem's Decision on the development of early competition in onshore electricity transmission networks sets out the model of early competition and criteria for network project eligibility to be competed \(2022\)](#)