

Workgroup Report

GC0159: Introducing Competitively Appointed Transmission Owners

Overview: This modification aims to introduce the concept of Competitively Appointed Transmission Owners (CATOs) to the Grid Code to enable Onshore Network Competition for the design, build and ownership of Onshore Transmission assets.

Modification process & timetable



Have 5 minutes? Read our [Executive summary](#)
Have 40 minutes? Read the full [Workgroup Report](#)
Have 120 minutes? Read the full Workgroup Report and Annexes.

Status summary: The Workgroup have finalised the proposer’s solution. They are now seeking approval from the Panel that the Workgroup have met their Terms of Reference and can proceed to Code Administrator Consultation.

This modification is expected to have a: **High impact** on the ESO, Transmission Owners, prospective CATO entities (by introducing CATO arrangements) and **Low impact** on Users

Modification drivers: Transparency, Cross-Code Change, Efficiency, Governance, Harmonisation, Ofgem-led, System Planning, Energy Act 2023

Governance route	Standard Governance modification with assessment by a Workgroup	
Who can I talk to about the change?	<p>Proposer: Stephen Baker & Alana Collins-Dugmore Stephen.Baker@nationalgrideso.com & alana.collis-dugmore@nationalgrideso.com 07929 724347 & 07843 804628</p>	<p>Code Administrator Chair: Catia Gomes Catia.gomes@nationalgrideso.com 07843816580</p>

Contents

Contents 2

Executive summary 3

What is the issue? 4

 Why change? 4

What is the solution?..... 4

 Proposer’s solution 4

Workgroup considerations 6

 Consideration of the proposer’s solution..... 6

 Workgroup consultation summary 7

 Legal text..... 10

What is the impact of this change? 10

 Workgroup vote 11

When will this change take place? 11

 Implementation date 11

 Date decision required by 12

 Implementation approach 12

Interactions..... 12

Acronyms, key terms and reference material..... 13

Annexes..... 13

Executive summary

This modification aims to introduce the concept of Competitively Appointed Transmission Owners (CATOs) to the Grid Code to enable Onshore Network Competition for the design, build and ownership of Onshore Transmission assets.

What is the solution and when will it come into effect?

Proposer's solution: The objective of this modification is to implement minimum change to the Grid Code to facilitate the introduction of CATOs. The approach taken is to extend existing relevant Onshore TO provisions as far as appropriate, reflecting Ofgem's expected licencing regime.

Implementation date: Q3 2024

Workgroup conclusions: The Workgroup concluded unanimously that the Original better facilitated the Applicable Objectives than the Baseline.

What is the impact if this change is made?

The introduction of the CATOs concept will impact the ESO, Transmission Owners, prospective CATO entities (by introducing CATO arrangements) and Users.

Interactions

The introduction of competition affects the STC, Grid Code, CUSC and SQSS. Modifications [CM086](#), [CM087](#), [CMP403](#), [CMP404](#) and [GSR031](#) have also been raised alongside this one.

Potential interactions with Grid Code modifications GC0103, GC0117, GC0156 and the [Transmission Acceleration Action Plan](#) :

- [GC0103](#) seeks to introduce harmonised Applicable Electrical Standards across GB in compliance with EU Electrical Codes, which if implemented will remove potential for conflicts between Standards across different TO areas and make CATOs bound by common GB-wide Standards.
- [GC0117](#) (Improving Transparency and consistency of access arrangements across GB through a pan-GB commonality of Power Station Arrangements) if implemented will impact all TOs and will in effect simplify the Code change provisions contained in this Modification, removing regional differentiation through standardisation.
- [GC0156](#) (Facilitating the Implementation of The Electricity System Restoration Standard) will have implications on CATOs when they are established, in obligating them to meet the requirements of the ESRS, for example in terms of Communications Infrastructure.
- [Transmission Acceleration Action Plan](#), similar to GC0103 aims to promote a level playing field as it addresses manufacturing efficiency and international compatibility benefits associated with standardisation proposals, involving a forum created between the Future System Operator (FSO), Transmission Owners (TOs), equipment manufacturers and Ofgem to review and update equipment standards used within Great Britain.

What is the issue?

On 28 March 2022 Ofgem published its decision to proceed with implementation of the Early Competition model. This has been underpinned by the publication of the Energy Security Bill, which was introduced to Parliament on 06 July 2022. This received Royal Assent on 26 October 2023 and makes provision to enable competitive tenders for delivery of onshore electricity network assets. The Bill introduces 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 also extends Ofgem's power to make regulations which will set out the process by which tenders will be run.

To allow Early Competition to be implemented effectively, the competition processes, obligations, technical requirements, charges, and remuneration principles need to be embedded within the relevant codes. The introduction of Early Competition affects the Grid Code, SQSS, CUSC and STC among other codes. The ESO have proposed this modification in association with modifications [CM086](#), [CM087](#), [CMP403](#), [CMP404](#) and [GSR031](#).

Why change?

Introducing the concept of CATOs to the relevant industry codes ensures the safe, secure, and coordinated operation of the National Electricity Transmission System (NETS) by establishing both the obligations on CATOs and those entities interacting with CATO assets. The first phase of the Early Competition procurement process (the pre-tender) is set to commence in 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. As a Licensed TO, CATOs will be subject to broadly the same obligations and frameworks as other Onshore Transmission Owners, endeavouring to ensure a level playing field.

Note: while TOs (and CATOs) are not subject to the requirements of the Grid Code, since the Grid Code is User facing, the STC does require TOs to meet specific Grid Code obligations.

What is the solution?

Proposer's solution

The objective of this modification is to implement minimum changes to the Grid Code to facilitate the introduction of CATOs. The changes listed below are made on the assumption that a CATO will be granted a Transmission License and will be categorised as an Onshore Transmission Owner.

Legal Text changes:

Glossary & Definitions

Additions	Commentary	Purpose
Competitively Appointed Transmission Licensee	new definition	Introduces CATO to Grid Code and ensures captured by it provisions
Competitively Appointed Transmission Licensee Interface Point	new definition	Introduces the electrical point of connection between NGET's and/ or SPT's and/or SHETL's Transmission System and a Competitively Appointed Transmission Licensee's Transmission System

E&W Transmission System	addition of CATO to definition	Clarifies requirements/standards placed on CATOs will be consistent with NGET's
Local Safety Instructions	addition of CATO to definition	Clarifies that requirements placed on Users connecting to CATO in NGET's transmission area will align with the current provisions
Onshore Transmission Licensee	addition of CATO to definition	Introduces CATO to Grid Code and ensures captured by its provisions
Relevant E&W Transmission Licensee	addition of CATO to definition	Clarifies requirements/standards placed on CATOs will be consistent with NGET's
Relevant Scottish Transmission Licensee	addition of CATO to definition	Clarifies requirements/standards placed on CATOs will be consistent with SPT and SHETL'
Relevant Transmission Licensee	addition of CATO to definition	Introduce CATO as TO
Scottish Transmission System	addition of CATO to definition	Clarify that CATO/s can be collectively added to SPT and SHETL within Scottish transmission system
Transmission Interface Circuit	Change of wording of definition to remove reference to specific TOs	Clarifies requirements of CATO's based on location in which they connect.
Transmission System	Inserted definition used in SQSS GSR031 modification	Separates out where CATO connects to onshore TOs with one and for with more than one Onshore TO, negating need for clarifications to CATO in Small, Medium and Large Power Stations

Planning Code

Code section	Commentary	Purpose
Appendix C, PC.C.1	Insertion of word 'Area'	Housekeeping change
Appendix C, Part 1	With additional comment after Part 1 – SHETL's technical and design criteria to state that the criteria will be used by a CATO at the interface point with SHETL's transmission system	Enables CATOs
Appendix C, Part 2	With additional comment after Part 2 – SPT's technical and design criteria to state that the criteria will be used by a CATO at the interface point with SPT's transmission system	Enables CATOs

Operating Code 9

Code section	Commentary	Purpose
OC9.4.6	Insert reference to "relevant Scottish Competitively Appointed Transmission Licensee Transmission Systems"	Clarify distinction with PTOs in Scotland
OC9.4.7.3	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO
OC9.4.7.4	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO, differentiates with PTOs
OC9.4.7.7.5	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO

OC9.4.7.8.1	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO
OC9.4.7.8.2	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO, differentiates with PTOs
OC9.4.7.8.4	Insert reference to Competitively Appointed Transmission Licensees	Enables CATO, differentiates with PTOs

General Conditions

Code section	Commentary	Purpose
GC.A.1.1	Change of spelling of Licencees to Licensees	Housekeeping change

Workgroup considerations

The Workgroup convened 7 times to discuss the perceived issue, detail the scope of the proposed defect, devise potential solutions, and assess the proposal in terms of the Applicable Objectives.

Consideration of the proposer's solution

The proposer delivered a presentation on the Competitively Appointed Transmission Owners (CATOs). Issues highlighted by Workgroup members were as follows:

- Concerns that this modification presents a lot of changes and complexity and that it might rely on STC changes for support.
- Interactions with other codes, specifically the STC. Workgroup members highlighted that impacts on TO obligations need to be clear to avoid issues further down the line.
- Clarity on CATOs obligations and specifics from Ofgem were required to better facilitate the understanding of the change.
- Considerations with representation from CATOs in Panels – considering their obligations and the way they are financed, as OFTOs are not represented in Grid Code the Panel.
- One Workgroup member stated that they expect CATOs to have the same obligations as TOs.

Legal text discussions

The Workgroup discussed the legal text focusing on the following:

- The need to clarify the approach to geographical areas/position and how the CATOs will fit within this.
- It was queried whether a CATO could be appointed to build transmission assets that terminate in two different TO areas. Workgroup members queried which standards the CATO would follow if this was possible. One Workgroup member stated that CATOs should have their specific Relevant Electrical Standards RESs (as they are specific to the company not to the area).
- A Workgroup member advised that if in the future the CATO's need to be removed from Grid Code it will be simpler if they have their own definition rather than if they are merged into definition. CATO's need to have their own definitions to make the distinction with Onshore Transmission Licensees.

- A group member highlighted the need to consider [GC0117](#) and the decisions that would come from that modification, when looking into the Control Point.
- The Proposer suggested to remove the concept of England & Wales (E&W) competitively appointed Transmission system to accommodate the comments made by workgroup members to the draft Legal text regarding the geographical position of the CATO. The Workgroup was happy for this to go ahead but advised the Proposer to be mindful of other definitions where there can be an impact and implications.
- As a licenced TO, CATOs will be required to maintain a set of Relevant Electrical Standards (RES). Following Workgroup discussion, it was decided that it wasn't appropriate to reference within the General Conditions the obligation for CATOs to initially form/create a set of Relevant Electrical Standards. This is as per the suggestion of the Workgroup and reflects the fact that TO obligations to maintain RES are not currently borne out of the Grid Code. It is the Workgroup view that prospective CATOs will be required to put in place a robust set of RES in reference to any prevailing guidance or appropriate governance processes (which may be established via other on-going policy development initiatives referred to in this report).

Workgroup Consultation summary

The Workgroup held their Workgroup Consultation between 25 January 2023 – 15 February 2023 and received 6 responses. The full responses and a summary of the responses can be found Annexes 3 and 4. Out of 6 respondents, 5 agreed that the Original proposal better facilitates 1 or more of the applicable Grid Code objectives (mostly a, b, c); 1 respondent did not support the proposal.

There was a split between respondents who supported the implementation approach (4) and respondents who did not (2).

Main highlights were:

- 1 respondent believed it would be in the interest of the wider industry, for CATOs to demonstrate the same accountability as incumbent TOs to ensure reliability and security of the transmission system.
- 1 respondent agreed with the proposed implementation approach, although thought it would be prudent to await the passage of the enabling legislation before submission of the modification report to the Authority.
- 1 respondent believed the concept of CATOs should not be codified until sufficient evidence has been provided by policy makers that four key tests have been satisfied prior to its introduction; another respondent stated that the draft legal text was flawed in relation to Planning Code Appendix C. This legal text was later reviewed and agreed with the Workgroup.
- 1 respondent believed that the modification has the inbuilt assumptions that CATOs will be granted a Transmission License and will be categorised as an Onshore Transmission Owner. The codification of CATOs should always reflect this assumption.

All respondents expressed their views on the CATO RES topic, comments included:

- Any RES should be inherited from the incumbent TO, and the CATO shall maintain them.
- Existing RES documents should not be automatically applied to CATOs.

- CATOs RES documents should be initially determined through the tendering process. Modification of this CATO RES in future would be done through the existing documented process in the Grid Code.
- It should be the responsibility of the individual transmission owner to determine and establish what a relevant suite of standards for connection to its network are.
- It would be pragmatic for CATOs to initially create their RES in a way that is cognisant of, and with reference to, the RES applicable to the TO in whose licence area they are located.
- The team managing the tendering process should require the CATO to comply with the RES published in the appendices of the SQSS.

No alternative solutions were raised from the workgroup consultation responses.

The full Workgroup Consultation Responses summary file can be found in Annex 4.

Post Workgroup Consultation Discussions

Workgroup members were concerned with ESO's position in terms of the Proposal and their rationale; one Workgroup member questioned if this modification was a directive from Ofgem or if the ESO has taken upon to do it at this stage.

The Workgroup felt that the evaluation of the objectives (a, b and c) in the Proposal form were not clear, and some Workgroup members advised that clarity is needed around whether the Workgroup is being asked to assess the benefits of the CATO regime against the baseline and for consumers or if this modification is only intended to introduce the CATO concept to the codes as there is new Legislation coming.

The Proposer confirmed that this modification is intended to guide the CATOs as they enter the industry and facilitate the Early Competition model within the code environment, not to advocate for the CATO regime.

Taking in the Workgroup general view and suggestions, the Proposer agreed to reassess the modification against the code objectives. The assessment below is reflective of this.

Some Workgroup members suggested that the primary Legislation should be passed before the modification is approved. The proposer agreed to have the primary legislation in place prior to submitting the modification.

The Ofgem representative advised that in their perspective, they are very confident in terms of the development of the CATO regime and that Ofgem has made a clear and strong case, hence the Legislation being brought forward. They also advised that the worst outcome would be that the CATO regime is approved, without the changes in the codes to support it.

Post Energy Bill 2023 Royal Assent

The Workgroup convened on 24 November 2023 to progress the work on this modification, as the [Energy Bill 2023](#) received Royal Assent on 26 October 2023.

It was agreed by the Workgroup that the Legislation was as expected, and that all work done within this modification is accurate and reflective of it.

The Workgroup confirmed their view regarding the RES and agreed that prospective CATOs will be required to put in place a robust set of RES in reference to any prevailing guidance or appropriate governance processes.

The Workgroup Report was presented to the Grid Code Review Panel on 14 December 2023.

The Panel agreed that clarification was needed in the legal text regarding the interactions with GC0156 and decided that to send GC0159 back to Workgroup for further work.

The Workgroup convened on the 28 February 2024 and agreed with the Proposed changes to the legal text; the final legal text is captured in the Proposer's solution above, and in Annex 6. The tables below outline several legal text considerations that were initially part of the GC0159 solution, however were not taken forward into the final solution. The rationale for this is outlined in the tables.

Glossary & Definitions

Additions	Commentary	Purpose
Control Point	Remove Competitively Appointed Transmission Licensees as covered by change to "Transmission System" definition	Removed CATO references in "Small, Medium and Large Power Stations" definitions as have covered this in the amended "Transmission System" definition:
Large Power Station	Remove Competitively Appointed Transmission Licensees as covered by change to "Transmission System" definition	Removed CATO references in "Small, Medium and Large Power Stations" definitions as have covered this in the amended "Transmission System" definition
Medium Power Station	Remove Competitively Appointed Transmission Licensees as covered by change to "Transmission System" definition	Removed CATO references in "Small, Medium and Large Power Stations" definitions as have covered this in the amended "Transmission System" definition
Small Power Station	Remove Competitively Appointed Transmission Licensees as covered by change to "Transmission System" definition	Removed CATO references in "Small, Medium and Large Power Stations" definitions as have covered this in the amended "Transmission System" definition

Planning Code

Code section	Commentary	Purpose
Appendix C, PC.C.1	Remove of Competitively Appointed Transmission Licensee reference	WG7 decided that this is out of scope and for future modifications.

Operating Code 9

Code section	Commentary	Purpose
OC9.4.7.12	No longer required	No longer required due to being deleted as part of GC0156.

Balancing Code 2

Code section	Commentary	Purpose
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BC2.5.5.1 and BC2.5.5.2	Reversed addition of CATO into paragraphs for participation in Balancing Mechanism	"Transmission Area" definition now covers this with change undertaken.
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General Conditions

Code section	Commentary	Purpose
GC.11.5	Reverse introduction of this line for Application of Electrical Standards	Originally designed to ensure Users connected to CATOs applies CATO standards. WG7 determined that this does not resolve defect for introducing CATO specifically.

In initial Workgroup discussions, Planning Code Appendix C was developed with an additional "Part 3". On review, the Workgroup agreed to remove "Part 3" from the Planning Code Appendix C proposed Legal Text.

Part 1 and Part 2 exist within Appendix C for SPT and SHETL, and the proposed legal text adds CATO provision for those. Provision for NGET exists elsewhere throughout the Grid Code, however, no such table exists within Appendix C for NGET which is why the Workgroup initially introduced "Part 3" of the proposed legal text to align with the other TOs. The Workgroup recognises that a "Part 3" could be useful however noted that it would need development via a separate modification. The scope of the development required is out of scope of GC0159.

Legal text

The legal text for this change can be found in Annex 6.

What is the impact of this change?

Proposer's assessment against Code Objectives

Proposer's assessment against Grid Code Objectives

Relevant Objective	Identified impact
(a) To permit the development, maintenance, and operation of an efficient, coordinated and economical system for the transmission of electricity	Positive The proposed modification facilitates introduction of Competitively Appointed Transmission assets deemed necessary for required expansion and reinforcement of the NETS.
(b) Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);	Positive Network Competition will introduce CATOs as part of the NETS through a Competitive procurement process.
(c) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national	Neutral

electricity transmission system operator area taken as a whole;	
(d) To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	Neutral
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	Neutral

Note: the proposer has revised the stated impact of these changes, taking on feedback from Workgroup during post-consultation Workgroup discussions.

Workgroup vote

The Workgroup met on 24 November 2023 to carry out their Workgroup vote. The full Workgroup vote can be found in Annex 5. The table below provides a summary of the Workgroup members view on the best option to implement this change.

The Applicable Grid Code Objectives are:

- a) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity
- b) Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);
- c) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;
- d) To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and
- e) To promote efficiency in the implementation and administration of the Grid Code arrangements

The Workgroup concluded unanimously that the Original better facilitates the Applicable Objectives than the Baseline.

Option	Number of voters that voted this option as better than the Baseline
Original	5

The Workgroup confirmed their voting decisions at the final Workgroup on 28 February 2024, following review of the amended legal text.

When will this change take place?

Implementation date

10 Working Days after Authority decision

ESO**Date decision required by**

Q3 2024

Implementation approach

No systems or processes will be required to change as a result of this modification.

Interactions

<input checked="" type="checkbox"/> CUSC	<input type="checkbox"/> BSC	<input checked="" type="checkbox"/> STC	<input checked="" type="checkbox"/> SQSS
<input type="checkbox"/> European Network Codes	<input checked="" type="checkbox"/> EBR Article 18 T&Cs ¹	<input type="checkbox"/> Other modifications	<input type="checkbox"/> Other

In addition to this modification, STC, CUSC and SQSS modifications have been raised, as follows:

- [CM086: Introducing Competitively Appointed Transmission Owners & Transmission Service Providers](#)
- [CM087: Introducing Connections Process to facilitate Competitively Appointed Transmission Owners](#)
- [CMP403 and CMP404: Introducing Competitively Appointed Transmission Owners & Transmission Service Providers \(Section 14 and 11\)](#)
- [GSR031: Introducing Competitively Appointed Transmission Owners](#)

¹ If the modification has an impact on Article 18 T&Cs, it will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CATO	Competitively Appointed Transmission Owner
CUSC	Connection and Use of System Code
EBR	Electricity Balancing Regulation
ESO	Electricity System Operator
E&W	England & Wales
GC	Grid Code
NETS	National Electricity Transmission System
RES	Relevant Electrical Standards
SIL	Stable
STC	System Operator Transmission Owner Code
SQSS	Security and Quality of Supply Standards
T&Cs	Terms and Conditions
Q1	Quarter 1 (January to March)
Q2	Quarter 2 (May to June)
Q3	Quarter 3 (July to September)
Q4	Quarter 4 (October to December)

Reference material

- [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 \(2022\)](#)
- [BEIS Guidance Note: Energy Security Bill factsheet: Competition in onshore electricity networks](#)
- [ESO Early Competition Plan final publication](#)
- [Energy Act 2023](#)

Annexes

Annex	Information
Annex 1	Proposal form
Annex 2	Terms of reference
Annex 3	Workgroup consultation responses
Annex 4	Workgroup consultation summary table
Annex 5	Workgroup vote
Annex 6	Legal Text
Annex 7	What is a CATO?
Annex 8	Distribution List