
Annex to Call for Volunteers – FSO Codes Change Programme – Code Modifications

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This document sets out the proposed code modifications identified in advance of convening the FSO Cross-Code Workgroup (CCWG). It follows in the spirit of standard modification proposals, describing the issue, categories of change, and proposed solutions based on analysis by and with our Project Partners.

It forms part of the Annexes which are published as part of the FSO Codes Change Programme (FSO CCP) Call for Volunteers.

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Glossary

BETTA	British Electricity Trading and Transmission Arrangements
BSC	Balancing and Settlement Code
BSUoS	Balancing Services Use of System
CCWG	Cross-Code Workgroup
CUSC	Connection and Use of System Code
CUSC Framework Agreement	Is defined in the CUSC to mean “as defined in the Transmission Licence”
Day 1	Day 1 is the date by which both the designation of the FSO and the new FSO gas system planner and electricity system operator licences come into effect
D-CODE	Distribution Code
DCUSA	Distribution Connection and Use of System Agreement
Energy Bill	The Energy Bill (as amended) that was introduced to Parliament in July 2022, and will set the overarching legislative framework for the FSO. Cross-references to the Energy Bill in this document refer to the latest amended version of the Bill at the time of publication (version amended in the Public Bill Committee, dated 11 July 2023 and available at https://bills.parliament.uk/bills/3311)
Financial Year	Is defined in the CUSC to mean “the period of 12 months ending on 31st March in each calendar year”
FSO	Future System Operator. This is the name currently given to the body that will be designated as the ISOP under the Energy Bill. References to the FSO in this document should be read as referring to that body. The Energy Bill provides for the ISOP to have statutory functions and duties. After the Energy Bill receives Royal Assent and the ISOP is designated, the ISOP will take on some functions that already exist (e.g., the role of electricity transmission system operator), but many of its responsibilities (including those related to the provision of advice to government and Ofgem) will be completely new
FSO CCP	Future System Operator Codes Change Programme
iGT UNC	Independent Gas Transporters Uniform Network Code
ISOP	Independent System Operator and Planner
NETS	National Electricity Transmission System
NETSO	National Electricity Transmission System Operator
NGESO	National Grid Electricity System Operator Limited
NGET	National Grid Electricity Transmission plc
NGT	National Gas Transmission plc
Ofgem	Office of Gas and Electricity Markets
Project Partners	NGESO, NGT and Elexon
RAV	Regulatory asset value
REC	Retail Energy Code

Relevant Authority	Means the Secretary of State of the Department or the Gas and Electricity Markets Authority (GEMA), per section 166(7) and section 167(9) of the Energy Bill. Additionally, under section 166(5) the Secretary of State may direct GEMA to exercise the section 166(1)(c) modification power
Relevant Document	A Relevant Document is defined by section 166(7) of the Energy Bill to mean a document required to be maintained in accordance with the conditions of a relevant licence, e.g., such as industry codes
SEC	Smart Energy Code
SHET	Scottish Hydro Electric Transmission plc
SP	SP Transmission plc
Transmission	
SQSS	Security and Quality of Supply Standard
STC	System Operator - Transmission Owner Code
The Company	Is defined in the CUSC to mean "National Grid Electricity System Operator Limited (No:11014266) whose registered office is at 1-3 Strand, London, WC2N 5EH as the holder of the Transmission Licence"
The Company Prescribed Level	Is defined in the CUSC to mean "the forecast value of the regulatory asset value of NGET for a Financial Year as set out in the document published from time to time by Ofgem setting this out and currently known as "Ofgem's Transmission Price Control Review of The Company – Transmission Owner Final Proposals" such values to be published on The Company Website by reference to The Company credit arrangements no later than 31 January prior to the beginning of the Financial Year to which such value relates"
TNUoS	Transmission Network Use of System
Transmission Licence	Is defined in the CUSC to mean "the licence granted under section 6(1)(b) of the Act in which the standard conditions in Section C have been given effect"
UNC	Uniform Network Code
User	Is defined in the CUSC to mean "a person who is a party to the CUSC Framework Agreement other than The Company"

Chapter 1: Introduction

The issue

- 1.1 The Energy Bill currently progressing through Parliament proposes to establish a Future System Operator (FSO), an impartial, expert body designed to accelerate the transition towards Net Zero, whilst ensuring energy security, and minimising costs for consumers.
- 1.2 To do this will mean establishing the FSO as a new public corporation rather than the existing arrangements in which the current Electricity System Operator licensed role is fulfilled by National Grid Electricity System Operator Limited (NGESO).
- 1.3 Amendments to industry codes will be required to facilitate this change. Many of these code modifications will be institutional in nature (e.g., updating company details and references), and some will be related to new roles, and statutory functions, duties and powers for the FSO (e.g., the FSO's power to request information).
- 1.4 We expect most amendments will be to industry codes for which NGESO is Code Administrator. We expect modifications to the Balancing and Settlement Code (BSC) if transitional arrangements for Elexon Ownership are required, in addition to modifications to the Uniform Network Code (UNC) to support new FSO gas responsibilities. Only minor updates are expected for other codes. All such modifications are required to maintain functionality of the codes on FSO "Day 1".
- 1.5 We expect the following codes will be subject to modification under the FSO CCP: System Operator – Transmission Owner Code (STC), Connection and Use of System Code (CUSC), Grid Code (GC), Security and Quality of Supply Standard (SQSS), BSC, UNC, Distribution Code (D-Code), and Distribution Connection and Use of System Agreement (DCUSA).

Modifications have not been identified for the following codes: Independent Gas Transporter Uniform Network Code (iGT UNC), Retail Energy Code (REC), and Smart Energy Code (SEC).
- 1.6 The Relevant Authority proposes to use provisions of the Energy Bill (once enacted) to implement modifications to the applicable code, based on the relevant analysis from the CCWG. All code modifications we approve must align with the intention and scope of the relevant powers in the Energy Bill.

Categorisation of proposed code modifications

1.7 Working with Project Partners, we have identified examples of proposed code modifications that we expect to consider, which include “packages” of modifications required for the designation of the FSO. These are generally:

- 1) Those modifications which are required to establish the FSO as a public corporation (“**Institutional**”), including:
 - Definitions of the new Company;
 - References to its two new FSO licence categories (the gas system planner licence and the electricity system operator licence);
 - References to the new licences structure;
 - Consequential references.
 - 2) Modifications associated with the statutory functions and duties and new and enhanced roles to be obligated by licence on Day 1 (“**Enablers of Day 1 roles**”), are expected to be driven by the following policy areas:
 - Advisory, whole systems and planning;
 - Information exchange, including with NGT;
 - New interactions between gas and electricity regulated persons, where not captured above (“**Gas roles**”);
 - Financial arrangements, including charging, funding and other cashflow impacts.
 - 3) Elexon ownership modifications which arise from the creation and public ownership of the FSO, which may include transitional arrangements to avoid impeding the delivery of the FSO (“**Elexon Ownership**”). We note that code modifications to enable the changes to Elexon ownership will not form part of the FSO CCP scope unless transitional arrangements are required.
- 1.8 We have also identified some changes to the codes that may be needed as a result of the FSO being designated, and some that may be optimal to maintain coherence with the new FSO licence conditions, (“**miscellaneous**”) changes. We think it may be appropriate to discuss such code changes at the CCWG in the first instance. However, we reserve the right for potential changes to be run according to a separate timetable. Further, all proposed changes will be subject to an

assessment and decision by the Relevant Authority on the appropriateness of implementing any code modifications using the relevant Energy Bill powers. We point to two example areas in the subsequent paragraphs and the table in Chapter 2 includes representative examples of various proposed miscellaneous changes.

Credit Cover in the CUSC

- 1.9 The CUSC contains a reference to a definition for 'The Company Prescribed Level'. This specifically references the forecast regulatory asset value (RAV) of NGET, as set out in Appendix 1: Credit Arrangements of the CUSC. The Company Prescribed Level sets the level of 'Unsecured Credit Cover' extended to Users in respect of their TNUoS/BSUoS liabilities, which is subtracted from the securities they are required to provide, and equal to a maximum of 2% of The Company Prescribed Level in the relevant Financial Year.
- 1.10 We note the sector has undergone multiple changes since the introduction of this definition and believe it may therefore be prudent to take this opportunity to reconsider the appropriateness of the existing methodology, notwithstanding the primary function of the CCWG and power of the Relevant Authority to approve such changes.

Legacy conditions

- 1.11 The removal of BETTA transitional arrangements.

Chapter 2: Institutional Package and miscellaneous changes

1.12 The table below introduces a rationalised summary of the proposed institutional and miscellaneous code modifications. It includes representative examples to help shape the product industry needs to make the change. The CCWG launch will include a full set of proposals for each code to aid discussion.

Change Category	Type of change	Example (representative examples to help shape product industry needs to make the change)	Impacted Codes
Housekeeping / mapping	'The Company' definition	"The Company" National Grid Electricity System Operator Limited (No. 11014226) [XXX – company name] whose registered office is 1-3 Strand, London WC2N 5EH [address] as the holder of the transmission licence [ISOP ESO licence] granted, or treated as granted, pursuant to section 6(1)(b) of the Act and as amended by the [Energy Act 2023] and in which section C [ref] of the ISOP standard transmission licence conditions applies.	STC, CUSC, Grid Code, SQSS, D-Code
Bill language	Type of ISOP licence	Holder of the "ISOP ESO licence" - section 6(1)(da) of the Electricity Act 1989, inserted by clause [117(4)] of the [Energy Bill/Energy Act 2023]	STC, CUSC, Grid Code, SQSS, D-Code
Bill language	Definition of "the Act"	"Act" the Electricity Act 1989 as amended by the Utilities Act 2000, the Energy Act 2004 and the [Energy Act 2023];	CUSC, SQSS, Grid Code, D-Code
Housekeeping / mapping	Licence references	<ul style="list-style-type: none"> * Sections, e.g., 'Section C' * Condition #'s, e.g., 'Standard Condition [B12, C1, C26, C17, etc.]' * Paragraphs, e.g., 'under paragraph 15 of Standard Condition B12 of its Transmission Licence or under paragraph 4 of Standard Condition E13' * Schedules, e.g., 'Schedule 1' 	STC, CUSC, Grid Code, SQSS
New / revised definitions	Adding the 'ISOP ESO Licence' and its derivatives into applicable uses of 'Transmission Licence' and its derivatives	New definitions for "ESO Licence" , "ESO Licence Conditions" , "ESO Licensee" to mirror "Transmission Licence" a transmission licence granted or treated as granted under section 6(1)(b) of the Act; "Transmission Licence Conditions" the conditions contained in and amended from time to time in accordance with a Transmission Licence, and "Transmission Licensee" the holder for the time being of a Transmission Licence - and appending new ESO definitions as appropriate. The alternative of expanding Transmission Licence to include the ISOP 'for the purposes of this code' discounted.	STC, CUSC, Grid Code, SQSS, D-Code, DCUSA

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Change Category	Type of change	Example (representative examples to help shape product industry needs to make the change)	Impacted Codes
New / revised definitions	Defining the business of the ISOP	"Main Business" any business of The Company which it must carry out under its licence Transmission Licence ;	STC, CUSC, SQSS
Transitional definition	References to NG ESO Ltd	Section 10: Transition Issues. e.g., "Transfer of the System Operator Role" means the transfer, by means of the transfer in part of the Transmission Licence granted to National Grid Electricity Transmission plc, of the system operator role to National Grid Electricity System Operator Limited The Company."	CUSC
New / revised definitions	Other definitions in ESO Licence	E.g., the definition of "Agency" is in Section A of the Transmission Licence, provide for retention in the ESO Licence. E.g., Definition of "Core Industry Document", "Electricity Regulation".	Grid Code
Transitional definition?	Definition of the NETSO Licence (ISOP ESO Licence)	National Electricity Transmission System Operator Licence means the a transmission licence granted, or treated as granted, pursuant to section 6(1)(da) of the Act for the purposes of electricity system operation and which may also be referred to as the Electricity System Operation or ESO licence and in which section C of the standard transmission licence conditions applies.	DCUSA
Miscellaneous / Other	Type of change	Example (representative examples to help shape product industry needs to make the change)	Impacted Codes
Revision of methodology	Revision of NGET RAV and associated 2%	Appendix 1: Credit Arrangements e.g.The Company Prescribed Level" the forecast value of the regulatory asset value of NGET Onshore Transmission Licensees	CUSC
Removal of redundant references / deprecated language	Remove references to British Electricity Trading and Transmission Arrangements (BETTA)	STC (Core Document), Section I, PART 1: BETTA TRANSITION	STC, CUSC
	Remove Seven Year Statement References	"Seven Year Statement Works" "Seven Year Statement" "Interim SYS"	STC, CUSC, Grid Code, DCUSA

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Change Category	Type of change	Example (representative examples to help shape product industry needs to make the change)	Impacted Codes
Removal of redundant references / deprecated language	Removal/correction of references to NG	National Grid Peak Annual Average Cold Spell (ACS) Demand for year Offshore Transmission Licensee The holder of a transmission licence granted under Section 6 (1)(b) of the Act excluding NGET, NGESO , SP Transmission and SHET.	CUSC, D.Code
	Remove redundant appendices to General Conditions	Appendix to General Conditions (Part A: BETTA and Part B: NGET/NGESO legal separation)	Grid Code
Correction	Correction of reference to NETS	when the issue on the National Grid Electricity Transmission System giving rise to the User Emergency Denergisatation is resolved, which shall be measured in:	CUSC
Typographical error	Typographical error	showing for the current year each of the seven nine succeeding Financial Years	Grid Code
	Typographical error	“Eligible Small Generator” defined as an eligible generator in Standard Condition C13 [update reference] of the ESO Transmission -Licence	CUSC
	Typographical error	when the issue on the National Grid Electricity Transmission System giving rise to the User Emergency Denergisatation - Deenergisatation resolved, which shall be measured in:	CUSC
	Typographical error	“Eligible Small Generator” defined as an eligible generator in Standard Condition C13 [update reference] of the ESO Transmission -Licence	CUSC

Chapter 3: Code Modifications Summary

**Tables as below will be provided for the other six codes*

STC

Section	Title	Pkg Housekeeping: CM090 and PM0130	Pkg A: Institutional Package	Pkg B: New Roles	Gas	Pkg E: Elexon Ownership
A	APPLICABILITY OF SECTIONS AND CODE STRUCTURE	No				
B	GOVERNANCE	Yes	Update licence references			
C	TRANSMISSION SERVICES AND OPERATIONS	Yes	Update licence references			
D	PLANNING CO-ORDINATION	Yes	Update licence references			
E	BILLING AND PAYMENT	Yes				
F	COMMUNICATIONS AND DATA	Yes				
G	GENERAL PROVISIONS	Yes	Update licence references			
H	DISPUTES	Yes				
I	TRANSITION	No	Depends on licence treatment; probably update to refer to FSO			
J	INTERPRETATION AND DEFINITIONS	Yes	Update licence references, amend definition of 'The Company' to refer to the FSO			
K	TECHNICAL, DESIGN AND OPERATIONAL CRITERIA AND PERFORMANCE REQUIREMENTS FOR OFFSHORE TRANSMISSION SYSTEMS	Yes				
Schedule	Title	Pkg Housekeeping: CM090 and PM0130	Pkg A: Institutional Package	Pkg B: New Roles	Gas	Pkg E: Elexon Ownership
1	THE SYSTEM OPERATOR - TRANSMISSION OWNER CODE ACCESSION AGREEMENT	Yes	Update titles and signature line in proforma			
2	LIST OF CODE PROCEDURES	No				
3	INFORMATION AND DATA EXCHANGE SPECIFICATION	Yes				
4	Criteria for Assessing Those Transmission Systems Affected by a Construction Project (boundaries of influence)	No				
5	NGESO THE COMPANY CONNECTION APPLICATIONS	Yes				
6	NGESO THE COMPANY MODIFICATION APPLICATIONS	Yes				
7	SYSTEM CONSTRUCTION APPLICATIONS	Yes				
8	TO CONSTRUCTION OFFER	Yes				
9	TO CONSTRUCTION TERMS	Yes	Update titles and signature line in proforma			
10	CHARGES	Yes				
11	NGESO THE COMPANY TEC EXCHANGE RATE APPLICATIONS	Yes				
12	Transmission Owner TEC EXCHANGE RATES	Yes				
13	NGESO THE COMPANY REQUESTS FOR STATEMENTS OF WORKS	Yes				
14	-	-				
15	TRANSMISSION INTERFACE AGREEMENT	No				
A	List of parties	No				

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CUSC

Section	Title	Pkg A: Institutional Package	Pkg B: New Roles	Gas	Pkg E: Elexon Ownership
1	APPLICABILITY OF SECTIONS AND RELATED AGREEMENTS STRUCTURE	Update licence references			
2	CONNECTION	Update licence references			
3	USE OF SYSTEM	Update licence references, amend references to RAV (?)			
4	BALANCING SERVICES	Update licence references, insert new Company name			
5	EVENTS OF DEFAULT, DEENERGISATION AND DISCONNECTION	Update licence references			
6	GENERAL PROVISIONS	Update licence references			
7	DISPUTE RESOLUTION	Update licence references			
8	CUSC MODIFICATION	Update licence references			
9	INTERCONNECTORS	Update licence references			
10	TRANSITIONAL ISSUES	Update licence references, designation of the Company as ISOP, amend/clarify definition of 'The Company' to refer to the FSO assuming same legal entity as NG ESO			
11	INTERPRETATIONS AND DEFINITIONS	Update licence references, amend definition of 'The Company' to refer to the FSO, insert new Company name, definition of "the Act"			
12	BETTA TRANSITION RULES	Update licence references, remove SYS references, correct references to NG, correct reference to 'The Company', correct reference to the NETS			
13	ENABLING WORKS				
14	CHARGING METHODOLOGIES				
15	USER COMMITMENT METHODOLOGY	Update licence references			
Schedule	Title	Pkg A: Institutional Package	Pkg B: New Roles	Gas	Pkg E: Elexon Ownership
1	LIST OF USERS				
2	AGREEMENTS	Update licence references, update company name, remove SYS references, clarify payment arrangement			
3	BALANCING SERVICES MARKET MECHANISMS - REACTIVE POWER				
Exhibits	Title	Pkg A: Institutional Package	Pkg B: New Roles	Gas	Pkg E: Elexon Ownership
A	CUSC ACCESSION AGREEMENT	Update company name			
B	CONNECTION APPLICATION (EXHIBITS 1-6)	Update licence references, update company name			
C	CONNECTION OFFER	Update licence references			
D	GENERATORS ETC. USE OF SYSTEM APPLICATION	Update licence references			
E	GENERATORS ETC. USE OF SYSTEM OFFER	Update licence references			
F	SUPPLIERS ETC. USE OF SYSTEM APPLICATION	Update licence references, update company name			
G	USE OF SYSTEM SUPPLY OFFER AND CONFIRMATION NOTICE	Update licence references			
H	USE OF SYSTEM INTERCONNECTOR OFFER AND CONFIRMATION NOTICE	Update licence references			
I	MODIFICATION APPLICATION	Update licence references			
J	MODIFICATION OFFER	Update licence references			
K	MODIFICATION NOTIFICATION	Update licence references			
L	BI-ANNUAL ESTIMATE FOR BILATERAL AGREEMENT				
M	SECURED AMOUNT STATEMENT				
N	NOTICE OF DRAWING				
O	INTERFACE AGREEMENTS	Update licence references, update company name, insert reference to "the Act"			
P	STTEC REQUEST FORM				
Q	BELLA APPLICATION				
R	BELLA OFFER				
S	THE CONNECTION AND USE OF SYSTEM CODE - LDTEC REQUEST FORM				
T	LDTEC AVAILABILITY NOTIFICATION				
U	REQUEST FOR A STATEMENT OF WORKS USER THAT OWNS OR OPERATES A DISTRIBUTION SYSTEM	Update licence references			
W	TEMPORARY TEC EXCHANGE RATE REQUEST FORM				
X	TEMPORARY TEC EXCHANGE NOTIFICATION OF INTEREST FORM				