

STC Panel

Wednesday 14 December 2022
Microsoft Teams Meeting

WELCOME



nationalgridESO

Introductions & Apologies for absence

- **Apologies**

- None

- **Alternates**

- Terry Baldwin

- **Presenters**

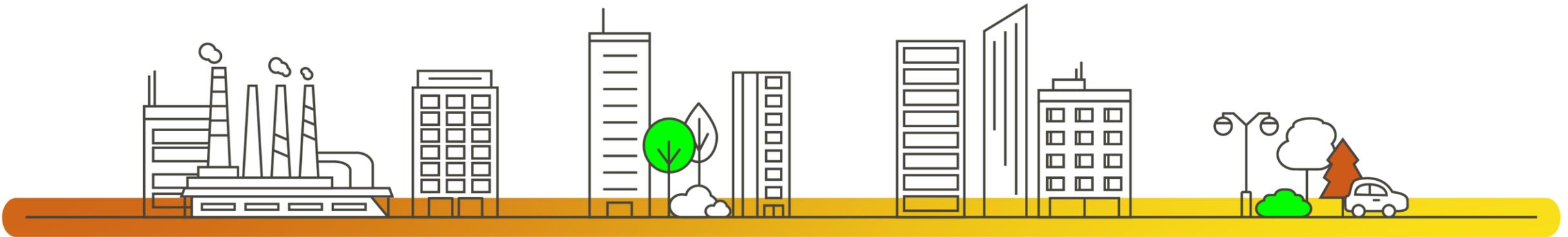
- Steve Baker
- Gareth Stanley
- Alastair Grey
- Deborah Spencer

- **Observers**

- Ruth Roberts
- Martin Cammidge (Milorad Dobrijevic's replacement)
- Catia Carvalho Gomes

Approval of Panel Minutes

Approval of Panel Minutes from the Meeting held
30 November 2022



Actions Log

Review of the actions log



Authority Decisions

Decisions Received since last Panel meeting

None

Decisions Pending

None

New modification submitted



- ***CM086 – “Introducing Competitively Appointed Transmission Owners & Transmission Service Providers”***
- ***CM087 – “Introducing Connections Process to facilitate Competitively Appointed Transmission Owners”***

CM086 - Introducing Competitively Appointed Transmission Owners

CM087 – Introducing Connections Process to facilitate Competitively Appointed Transmission Owners

STC Panel 14th December 2022

Alastair Grey, Gareth Stanley, Steve Baker & Deborah Spencer

Critical Friend Feedback: CM086 & CM087

Code Administrator comments	Amendments made by the Proposer
<ul style="list-style-type: none">- A few minor amends on wording- Requirement of implementation approach to be updated- Proposers justification section needing rewording - What does the panel recommend on how these mods are run? Currently time lined the same.	<ul style="list-style-type: none">- Updated to advise no process or system changes- The wording of the proposers justification updated

Background

- The **Energy Security Bill** was introduced to Parliament on 6 July, which makes provisions to enable competitive tenders in onshore electricity networks.
- BEIS indicate that, through the introduction of competition, consumers could see savings of up to £1 billion on projects tendered over the next ten years
- This modification aims to introduce the concept of **Competitively Appointed Transmission Owners (CATO's)** for the purposes of introducing Onshore Network Competition for the design, build and ownership of Onshore Transmission assets.
- BEIS have indicated a preference for the FSO to run tenders to appoint a preferred bidder.
- CATOs will be appointed following a tender process and will be financed through a long Tender Revenue Stream.
- To allow **Onshore Network Competition** to be implemented effectively the competition processes, obligations, technical requirements, charges, and remuneration principles need to be embedded within the relevant codes.
- The proposed modifications will enable both early and late competition and are based upon the assumption that CATOs will be granted a Transmission Licence and will be categorised as Onshore Transmission Licensees.

CM086 'Introducing CATO' Mod & CM087 'CATO – TO Connections Process' Mod

- The ESO is raising two new mods:
 - the first to introduce Competitively Appointed Transmission Owners (CATOs) to the STC and
 - the second to facilitate the creation of a TO-(CA)TO Connections process
- The legal text changes are to be made in association with changes to other Codes and Standards, including SQSS, CUSC, Grid Code and BSC
- Clerical changes to the suite of STCPs to make reference to CATO are also being made as part of the work to introduce the concept of CATO
- The proposed code changes form part of the package of work to establish the frameworks for competition in onshore electricity networks. This 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

CM086 – Asks of the Panel

- **AGREE** that these modification meets Standard Governance Criteria (Ofgem decision)
- **AGREE** that these Modifications should proceed to Standard Governance with a Workgroup.
Can CM086 and CM087 mods run concurrently?
- **AGREE** Terms of Reference
- **NOTE** the proposed timeline

CM087 – Asks of the Panel

- **AGREE** that these modification meets Standard Governance Criteria (Ofgem decision)
- **AGREE** that these Modifications should proceed to Standard Governance with a Workgroup
- **AGREE** Terms of Reference
- **NOTE** the proposed timeline

CM086 Legal Text Changes

Please note the following points of guidance regarding the legal text changes. **This is not an exhaustive list of the changes** so please review the legal text for full details. Note that the objective of this modification is to implement minimum changes to the STC to facilitate the introduction of CATOs to ensure continued operability of the Grid Code arrangements.

The changes listed below are made on the assumption that CATO will be introduced as a sub-category of Onshore Transmission Licensee.

Section(s)	Title
Section B3.2	Admission of new parties
Section B.6 (see also annex B1)	STC Modification Panel
Section B.7	Modifications of the Code and Code Procedures
Annex B1	Election of Offshore Transmission Owner Party Representatives
Section C3 (Part 1)	Services Capability Specification
Section C4 (Part 1)	Transmission Services Limits
Section D2.1	Transmission Investment Plans
Section D2.2.6 (Part 1)	Transmission System Technical Criteria and Planning Assumptions
Section D3.1 (Part 1)	Default Planning Boundary
Section E2	TO Charges
Section E3	NGESO Charges
Section E7	Date provided by Offshore Transmission Owners for User Charge setting by NGESO
Section F (see also Schedule 3)	Communications and Data
Section G3	Nuclear Installations
Section J	Interpretation and Definitions
Section K- Add new Section L	Technical, Design and Operational Criteria and Performance requirements for Offshore Transmission Systems
Schedule 4	Criteria for Assessing Those Transmission Systems Affected by a Construction Project
Schedule 10	Charges

CM087 Legal Text Changes

Please note the following points of guidance regarding the legal text changes. **This is not an exhaustive list of the changes** so please review the legal text for full details. Note that the objective of this modification is to implement minimum changes to the STC to facilitate the introduction of CATOs to ensure continued operability of the Grid Code arrangements.

The changes listed below are made on the assumption that CATO will be introduced as a sub-category of Onshore Transmission Licensee.

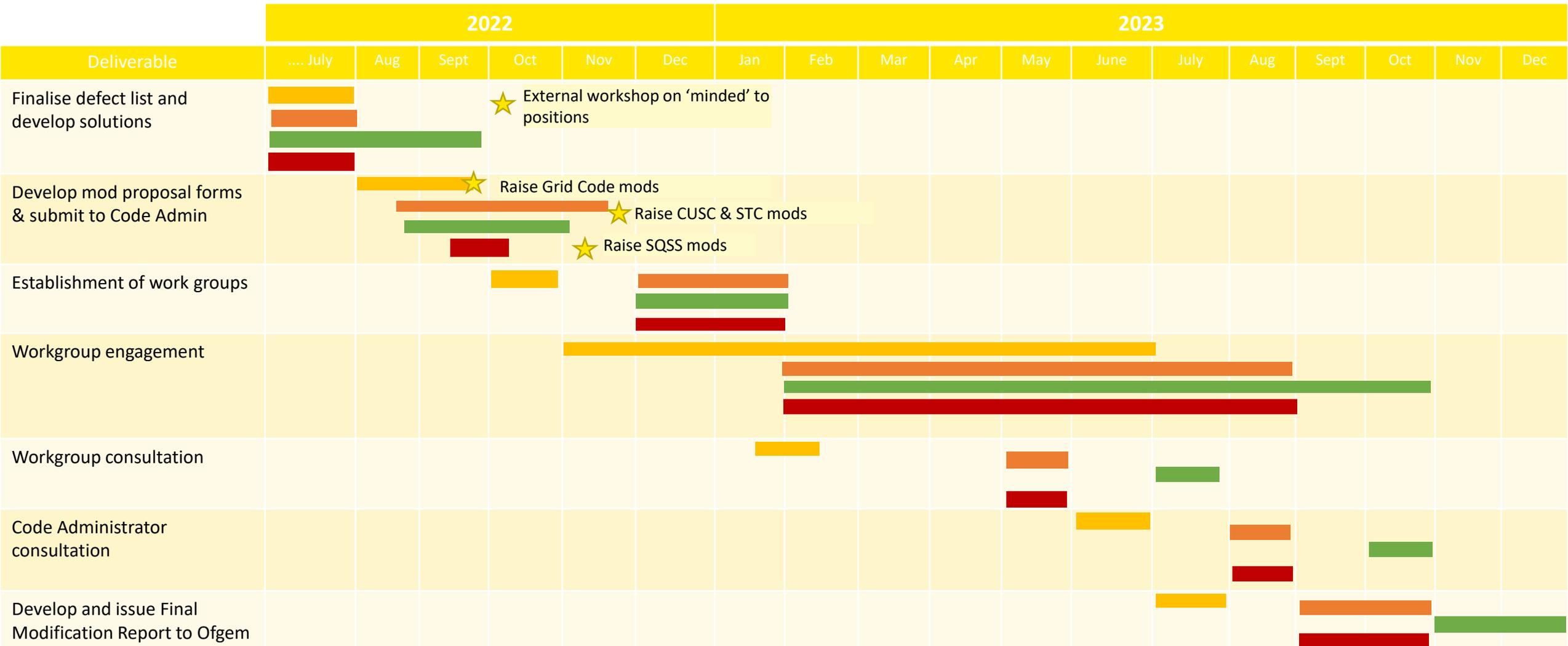
Section(s)	Title
Section C2.2 (Part 3)	Commissioning and on-load testing of User Equipment
Section C3.3 (Part 3)	Requirement to enter into interface agreement
Schedule 15	Transmission Interface Agreement
Section D Part 2 Construction	Construction
Section D2.2 (Part 2)	NGESO Construction Application
Section D2.7 (Part 2)	NGESO Construction Application
Section D7.1	General Provisions Concerning New Connections and Modifications
Section D8 (Part 2)	Offshore Transmission Construction Securities
Schedule 5	NGESO Connection Application
Schedule 8	Transfer and Sub-contracting
Schedule 5	ESO Connection Applications
Schedule 7	System Construction Applications

Timeline for CM086 & CM087 – Standard Governance - Workgroups

Milestone	Date	Milestone	Date
Proposal Presented to Panel	14 December 2022	Workgroup Report issued to Panel	19 September 2023
Workgroup 1 – Understand / discuss proposal and solution, note the scope and identify any possible alternative solutions, agree timeline and review terms of reference, agree next steps.	24 January 2023	Panel sign off that Workgroup Report has met its Terms of Reference	27 September 2023
Workgroup 2 – Refresher: review and agree timeline and Terms of Reference, Review/Develop solution(s) and legal text, identify/assess possible alternatives.	1 March 2023	Code Administrator Consultation	09 October 2023 – 30 October 2023
Workgroup 3 – Develop Solution(s), review of legal text and alternatives	28 March 2023	Draft Final Modification Report (DFMR) issued to Panel	21 November 2023
Workgroup 4 – Finalise solution, consider / finalise alternatives, draft consultations questions	25 April 2023	Panel undertake DFMR recommendation vote	25 November 2023
Workgroup 5 – Finalise consultation questions, review consultation report	24 May 2023	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	29 November - 06 December 2023
Workgroup Consultation	05 June 2023 – 05 July 2023	Final Modification Report issued to Ofgem	11 December 2023
Workgroup 6 - (Post Workgroup Consultation) – Review / assess Workgroup consultation responses and Workgroup Report.	18 July 2023	Ofgem decision	TBC – Required by Q4 2023
Workgroup 7 – Discuss and finalise solution and consider any alternatives	15 August 2023	Implementation Date	10 working days after Ofgem decision
Workgroup 8 – Finalise solution(s) and legal text, agree that Terms of Reference have been met, Review Workgroup Report and hold Workgroup Vote	12 September 2023		

POAP for all CATO mods

Grid code ■ CUSC ■ STC ■ SQSS ■



★ External workshop on 'minded' to positions

★ Raise Grid Code mods

★ Raise CUSC & STC mods

★ Raise SQSS mods

An aerial photograph of rolling green hills, likely a vineyard, with several bright yellow light streaks cutting across the landscape from the bottom left towards the top right. The hills are covered in dense green vegetation, and the light streaks create a sense of movement and energy.

Electricity System Restoration Standard

STC Panel Presentation

December 2022

Summary

- Background
- The Defect
- Facilitation of the Electricity System Restoration Standard
- Tools available to support System Restoration
- How have the current defects been identified
- Key features of the GC0156 drafting
- Distributed Re-Start
- Transmission Demand
- Other Factors
- Proposed High Level Grid Code Changes
- Other Documents Affected
- Proposed STC and STCP Changes
- Summary

Total and Partial System Shutdown - Causes

Potential causes include:

- Physical damage to network at multiple points e.g. extreme weather event
- Inadvertent configuration of system (e.g. system malfunction, human error)
- Malicious attack (e.g. insider threat, cyber attack, terrorist attack)



Key Features of the GC0156 Grid Code Drafting

- Introduction of Distributed Re-Start – See next Slide (initially developed as an NIC Project)
- Introduction of enhanced Critical Tools and Facilities – ie the ability to operate critical systems and assets during a System Shutdown or Partial Shutdown including data and communications systems
- Introduction of an Assurance process including regular testing, desk top exercises and reporting including confirmation of successful plant running when site supplies are restored.
- Improved testing processes and procedures
- Updates to the Grid Code to permit restoration of from Offshore Systems (currently excluded – see STCP 06-1)
- Amendments to the Local Joint Restoration Plan to enable the use of Anchor Generators (formerly called Black Start Generators) and Top Up Restoration Service Providers to ensure equitable treatment between Local Joint Restoration Zone Plans (LJRPs) and Distribution Restoration Zone Plans (DRZPs).
- Enhanced Assurance data reporting and submission, especially for Restoration Service Providers and those parties involved in Restoration as part of a LJP or DRZP
- Updates to Relevant Electrical Standards – Control Telephony Standard, Communications Standard and the introduction of a Distribution Restoration Zone Control System Standard
- Updates to definitions and explicit reference to Demand for the purposes of ESRS in Operating Code 9
- Work with the DNO's to facilitate Distribution Restoration and changes to the Distribution Code
- Definition of Black Start changed to System Restoration

Proposed STC Changes

- As part of this process some changes will be required to the STC and STCP's most of which are consequential
- These are minor as most of the changes apply to "Users" through the Grid Code and Distribution Code
- STC Changes
 - Section C (Transmission Services and Operations) – Section C Part Three, Item 5, Item 6
 - Section J (Interpretation and Definitions) – Change definitions in particular Black Start
 - Schedule 2 (List of Code Procedures) – Change name of STCP 06-1 to "System Restoration"
 - Schedule 3 (Information and Data Exchange Specification) - Introduction of Distribution Restoration Zone Plans

Expected STCP Changes (1)

- STCP 04-5 (Operational Telephony)
- STCP 04-6 (Offshore Datalink Functional Specification for Telecontrol Communications Interface)
- STCP 06-1 (Black Start)
- STCP 06-2 (De-Synchronised Island Management)
- STCP 06-3 (System Incident Management)
- STCP 06-4 (Contingency Arrangements)
- STCP08-1 (Protection Testing)
- STCP08-3 (Operational Tests and System Tests)
- STCP08-4 (User Tests)
- STCP 08-3 (Operational Tests and System Tests)
- STCP 11-1 (Outage Planning)
- STCP 11-2 (Outage Data Exchange)

Expected STCP Changes (2)

- STCP16-1 (Investment Planning)
- STCP 18-1 (Connection and Modification Application)
- STCP 19-3 (Operational Notification and Compliance Testing)
- Others?

Main Changes Expected

- These follow from those developed in the Grid Code both for GC0148 (Implementation of Emergency and Restoration Code Phase II) and GC0156
- Main features
 - Introduction of Distributed Re-Start and Distributed Restoration Zones
 - Changes to permit Restoration from Offshore Transmission Systems
 - Introduction of enhanced Critical Tools and Facilities – ie the ability to operate critical systems and assets during a System Shutdown or Partial Shutdown including data and communications systems
 - Introduction of an Assurance process including regular testing, desk top exercises and reporting including confirmation of successful plant running when site supplies are restored.
 - Greater consistency between Local Joint Restoration Zone Plans and Distribution Restoration Zone Plans
 - Cyber Security requirements to Security of Network and Information System (NIS) Regulations
 - Changes to protection and control settings to permit Restoration
 - Changes to Grid Code OC9
 - Definition of Black Start changed to System Restoration

Summary

- The GC0156 Consultation runs from 21 November 2022 – 30 December 2022
- The ESRS aims to ensure there is a good level of confidence that the Industry has sufficient tools in place to restore the System as quickly as possible should a Partial or Total System Shut down occur whilst acknowledging this is against intact and operable System Conditions
- The proposed STC changes will be consistent with those drafted for the Grid Code
- The Proposed STC and STCP changes will be raised at February 2023 Panel

Draft modifications to be discussed

DRAFT

- *None*

Draft Final Modification Reports

None

Potential Future Modifications and impacts of other modifications

Modifications Tracker – Sally Musaka

Authority Update (SCRs/Energy Code Review) – Nadir Hafeez

Reports from Sub-Committees

Joint Planning Committee (JPC)

- **Next meeting: TBC**

Network Access Policy Workgroup (NAP)

- **Next meeting: TBC**



Code Administrator Update

None

AOB

- **None**

Date of next meeting

Wednesday 25 January 2023

Panel Papers Day – 17 January 2023

Modification Submission date – 10 January 2023

Close

