

Agenda

1	Introduction, meeting objectives Jon Wisdom - NGESO	10:30 - 10:35
2	Code administrator update Paul Mullen - NGESO	10:35 - 10:45
3	Brexit update Katharina Birkner - NGESO	10:45 - 10:55
4	Improvements to Grid Code governance arrangements (GC0131) Rob Wilson - NGESO	10:55 - 11:05
5	BSUoS Update Katharina Birkner, James Stone- NGESO	11:05 - 11:20
6	CMP317 / 327 Update James Stone - NGESO	11:20 - 11:50
7	Break	11:50 - 12:00
8	Private Wires & Complex Sites Grahame Neale - NGESO	12:00 - 12:20
9	Expansion Constant Update Grahame Neale - NGESO	12:20 - 12:40
10	NGESO 2021 Work Plan Jenny Doherty - NGESO	12:40 - 13:20
11	AOB Jon Wisdom - NGESO	13:20 - 13:30



Code Administrator Update

Paul Mullen, NGESO



Authority Decisions Summary (as at 7 January 2021)

Authority Decisions during December

- CMP355/CMP356 and CMP357 Ofgem decided that these should be progressed on an urgent basis
- Approval of the Original Proposal for the TCR Transmission Generation Residual Modifications (CMP317/327 and CMP339)
- Approval of the Original Proposal for the TCR BSUoS Modifications (CMP333)
- Approval of the recommendations of the 2nd BSUoS Taskforce
- Approval of WACM1 for the TCR Transmission Demand Residual Modifications (CMP334)

Awaiting Authority Decision

- The remainder of the TCR Transmission Demand Residual Modifications (CMP335/336 and CMP343/340)
 an impact assessment will be carried out and a consultation on this will be run by Ofgem in January 2021 ahead of decision (expected in the spring of 2021).
- Update on **CMP280** was provided on 2 October 2020. Ofgem will consider whether or not CMP280 is needed after they have decided on the other Transmission Demand Residual Modifications but do not expect to make a decision on CMP280 in the near future.
- CMP292 decision was expected 20 September 2019; however this remains de-prioritised due to Ofgem's focus on the TCR modifications.
- CMP351 was issued to Ofgem for decision on 9 December 2020 with the Proposer seeking implementation by 15 February 2021.



Implementations Summary (as at 7 January 2021)

Implementations

- CMP334 WACM1 Implemented 14 December 2020 CMP334 was implemented 14 December 2020 but will not become effective without the other Transmission Demand Residual Modifications (CMP335/336 and CMP343/340), which have a 1 April 2022 implementation date and are still being considered by Ofgem.
- CMP348 Implemented 17 December 2020
- CMP342 Implemented 23 December 2020 (after Ofgem rejected the selfgovernance appeal on 16 December 2020)



Next Panels (as at 7 January 2021)

8 January 2021

- Panel recommendation vote to be carried out for CMP344 and CMP300
- Seeking Panel approval to withdraw CMP307

13 January 2021

- Panel recommendation vote to be carried out for CMP355 and CMP356
- Panel to determine whether or not the CMP357 Workgroup has met its Terms of Reference



Next Panels (as at 7 January 2021)

21 January 2021

Panel recommendation vote to be carried out for CMP357

29 January 2021

- Panel determination vote to be carried out for CMP354
- Seeking Panel approval to withdraw CMP309 and CMP310
- Quarterly review of prioritisation stack



In Flight Modification Updates



In flight Modifications (as at 7 January 2021)

1 open Workgroup Consultation with 2 more to be launched soon

- CMP357 closes 5pm on 8 January 2021
- CMP330 and CMP326 due to open 25 January 2021

1 open Code Administrator Consultation and 1 more to be launched soon

- CMP355/CMP356 closes 5pm on 7 January 2021
- CMP357 expected to run from 14 January to 5pm on 19 January 2021

2 CUSC Workgroups held in December

- 8 held across CUSC, Grid Code, STC and SQSS
- 13 to be held across CUSC (6 CUSC), Grid Code, SQSS and STC in January

For updates on all "live" Modifications please visit "Modification Tracker" at:

https://www.nationalgrideso.com/industry-information/codes



Prioritisation Stack

5 categories – High, Medium to High, Medium, Low to Medium and Low

Panel continue to take into account Proposer's views and Code Admin formally ask for such views on a quarterly basis

Last deep-dive was October 2020 – we currently look 3 months ahead, we are seeking to look even further ahead and have a clear view on numbers of Workgroups needed (and what they are seeking to achieve) for each Modification – we will need Proposers help

Prioritisation will continue to be reviewed at Panel on a monthly basis with deep dive on a quarterly basis (next deep dive January 2021)



2021 Dates national**gridESO**

CUSC 2021 - Panel dates

CUSC	(TCMF) CUSC Development Forum	Modification Submission Date	Papers Day	Panel Dates
January	7	14	21	29
February	4	11	18	26
March	4	11	18	26
April	8	15	22	30
May	6	13	20	28
June	3	10	17	25
July	8	15	22	30
August	5	12	19	27
September	2	9	16	24
October	7	14	21	29
November	4	11	18	26
December	25/11	2	9	17





GC0131
'Quick Win'
Improvements to
Grid Code
Governance
Arrangements

Update to TCMF Jan 2021

Rob Wilson



Introduction

- Open Governance arrangements in the Grid Code were approved by Ofgem in Feb 2017 in modification <u>GC0086 'Open Governance'</u>
- Working with the new governance processes helped to identify a number of areas in which further improvements could be made
- The GC0131 Grid Code modification proposed a number of 'quick wins' to improve the speed and efficiency of the process and improve clarity
- Given the upcoming Ofgem <u>Energy Codes Review</u> it was agreed that changes were only achievable if uncontentious 'quick wins' that could be progressed ahead of this

Summary & Timeline

- Presented to July 2019 Grid Code Development Forum & raised at Sept 2019 Grid Code Panel
- Developed with a workgroup one alternative raised
- Ofgem decision approving the original proposal made 11 Nov 2020
- As CUSC and Grid Code governance arrangements are similar, presented to TCMF in Sept 2019 and CUSC panel kept informed

Given that CUSC and Grid Code Governance Rules are very similar:

- A proposal will be raised to make the same changes to CUSC
- NGESO will recommend that this goes straight to Code Admin Consultation

Change Areas in GC0131

- Initial assessment of proposals gives panel more ability to seek further clarification of a proposal
- Quoracy frequent barrier to progress, reduced to 3 members minimum with some additional checks where below the current minimum of 5 members (eg mandatory workgroup consultation)
- Assessment of alternatives to allow more workgroup discretion in deciding which alternatives to develop but also to match with licence conditions [see next slide]
- Titles and summaries of proposals requirement for Code Admin and proposer to work together to clarify
- Role of the Code Administrator Consultation clarifications added to governance route for changes post CAC and ability for panel to set-up a workgroup where one didn't exist previously
- Production of draft legal text lined up with guidance note; ultimately ESO responsibility as licensee

Treatment of alternatives

- The Grid Code previously required a workgroup to assess an alternative proposal against the baseline. Where it will be better it was accepted by the workgroup and developed.
- Proposal was for workgroup to instead assess an alternative against the original proposal. Where it may be better it is developed.
- This mirrors the licence condition text and gives the workgroup a little more discretion to choose which alternatives to develop
- They don't have to use this discretion...if any doubt remains the workgroup should develop the alternative; and the workgroup chair can also 'save' an alternative
- Alternative to GC0131 raised to continue with current practice
- GC0131 text as below, change marked from the baseline which is also the alternative:

GR20.18 If a majority of the members of the **Workgroup** or the chairman of the **Workgroup** believe that the **Workgroup Consultation Alternative Request maywill** better facilitate the **Grid Code Objectives** than the current version of the **Grid Code Modification Proposal**, the **Workgroup** shall develop it...

Ofgem Decision

- A majority of the workgroup and Panel voted for the alternative
- Ofgem however approved the original as:

'[We] do not consider that this change should negatively impact the ability of a Workgroup to raise WAGCM proposals and may instead encourage additional assessment and consideration of WAGCMs before they enter the change process thereby better facilitating this objective by promoting efficiency. Our preference for the Original proposal is in line with our thinking that the codes should follow the licence provisions where possible. We do not consider the Original proposal to narrow the potential for alternative modifications. The test under GC0131 is that an alternative proposal may better facilitate the Grid Code objectives than the original solution proposed. This test should not act as a barrier for potentially beneficial alternatives. In this respect we consider the Original proposal is in keeping with the intent and spirit of open governance.'

Use in practice so far seems to confirm that the test of where an alternative 'may' be better than the original is
 quite broad and inclusive and encourages engagement and workgroup assessment

BSUoS Update

Katharina Birkner & James Stone, NGESO





BSUoS Task Force Outcomes

The Task Force recommendations to the two questions they were asked to respond to was:

- Who should be liable for Balancing Services Charges: "Final Demand" should pay all Balancing Services charges, subject to sufficient notice to industry prior to implementation
- How these charges should be recovered: a volumetric fixed BSUoS charge would deliver overall industry benefit, and that the total length of the fix and notice period should be around 14/15 months in length

Ofgem broadly agree with the recommendations of the Task Force. Ofgem will commission quantitative analysis to assess the overall net benefits of these reforms.

ESO Principles and Processes

Our implementation principles include:

- Remove the distortion between Transmission Connected Generators and Distribution Connected Generators
- Remove the distortion between Transmission Connected Generators and Interconnector imports
- Remove the incentive to adjust demand at specific times of day
- Provide a fixed price to suppliers (reducing cost to consumers)
- Maintain the financeability of the ESO

To achieve this the ESO will:

- Create modification proposals that meets requirements of the BSUoS Task Force and Ofgem and can work with CMP308 to deliver a comprehensive solution.
- Conduct further analysis on ESO cashflow exposure under a range of charging options to support a fixed tariff whilst maintaining financability of the ESO to share with Ofgem and industry

CUSC Mods to implement BSUoS Task Force Outcomes

Deliverable 1: BSUoS Payable by Final Demand only

CMP308 Removal of BSUoS Charges from Generation: the scope of this mod includes the majority of the Task Force Recommendations for deliverable 1 and will be utilized to implement this outcome of the BSUoS Task Force. CMP308 was prioritized at December CUSC panel to allow workgroup meetings to restart in late January 21

Deliverable 2: Fixed BSUoS Tariff

New mod to be raised by ESO to introduce the Fixed BSUoS concept and processes. This mod will have joint workgroups and run alongside CMP308 due to the close interrelationship of required legal text changes (CUSC BSUoS Charging methodology section 14.29 & 14.30) Scope includes introduction of fixed BSUoS concept, processes required, reconciliation process, review process

New mod to be raised by ESO to introduce any new required definitions into CUSC Section 11. This mod will run alongside CMP308 & the new Fixed BSUoS mod

New mod to be raised by ESO to review billing frequency and security requirements due to the implementation of fixed BSUoS. This mod will run independently (non-section 14 mod)

BSUoS Indexation

- Currently, the CUSC uses reference to the Retail Price Index (RPI) for various rates and/or prices to be indexed when calculating payments to Users in respect of the provision of System to Generator Operational Intertripping - specifically the Capability Payment and the Intertrip Payment
- The Office for National Statistics (ONS) has now adopted Consumer Prices Index (CPIH) as the lead measure of inflation for household costs with this measure also replacing RPI as the indexation method as listed in the Electricity System Operator (ESO) licence for the new RIIO-2 Price Control
- Currently, section 4.5.2.6 of the CUSC states; "In the event that RPI ceases to be published or is not published in respect of any relevant month or it is not practicable to use RPI because of a change in the method of compilation or some other reason, indexation for the purposes of this Paragraph 4.5 shall be calculated by The Company using an index agreed between The Company and the relevant User with a view to determining the relevant price after indexation that would be closest to the relevant price after indexation if RPI had continued to be available"
- As RPI indices are still available but are no longer an ONS lead measure of inflation nor are they used
 within the new licence we are seeking stakeholder views on whether or not a modification
 should be raised to align the indexation method used in Section 4 of the CUSC with that used
 in the new RIIO-2 licence conditions.

CMP317 / 327 Update

James Stone, NGESO





Background

- In May 2019, NGESO raised CMP317 which looked to define the 'connection exclusion' i.e. which connection assets should be included/excluded when setting Generator TNUoS charges to ensure compliance with EU Reg 838/2010 so average annual TNUoS charges for Generators in GB are within a range of €0-2.50/MWh (the Limiting Regulation)
- Following this, in November 2019, Ofgem published their decision on the Targeted
 Charging Review ('TCR') and Directed NGESO to bring forward proposals to
 implement the TCR conclusions CMP327 was raised to set the TNUoS Generation
 Residual (TGR) to £0 (subject to compliance with the Limiting Regulation)
- Due to the overlap of these modifications Ofgem granted consent to the amalgamation of CMP317 & CMP327 in January 2020

Ofgem's CMP317 / 327 Decision

- On 17 December 2020 Ofgem approved the Original Proposal for April 2021 implementation. However, this was approved as a 'stop-gap' measure and as part of the decision they expected NGESO to bring forward further modifications (effective from April 2022) to update the CUSC charging methodology to apply the calculation as provided for in the decision to:
 - Include, when assessing compliance with the range, those Local Circuit and Local Substation charges for assets that were 'pre-existing' at the point when the Generator paying those charges wished to connect and;
 - Remove from the calculation determining compliance with the range TNUoS charges paid by 'Large Distributed Generators' and their associated export volumes
- In addition, Ofgem also expected NGESO to examine whether there has been historic non-compliance with the Limiting Regulation as their decision includes all Local Charges within the Connection Exclusion.

Limiting Regulation Assessment

- NGESO have evaluated whether previous years have fallen within/without the range in the Limiting Regulation taking into account;
 - The inclusion in the CUSC calculation of Distributed Generator charges and volumes and/or;
 - The application of the 'Connection Exclusion' interpretation in the Ofgem decision (All Local Charges excluded)
- Previous charging years (up to 2019/20) have not fallen outside of the range based on the interpretation given in the CMP317/327 decision.
- However, using latest available data we believe it is likely charges have fallen outside
 of the range by circa -£5m to -£20m* for 2020/21 once the CMP317/327 decision has
 been applied

^{*}Indicative values subject to remaining generation connections (project delays/progress) and generation reconciliation outcome

Ensuring compliance with the Limiting Regulation

- In the event historic Generator charges are not within the Limiting Regulation range in 2020/21 the issue will need to be addressed
- It was recognised as part of CMP317/327 that an 'Ex Post Reconciliation' process was required to maintain compliance with the Limiting Regulation which has now been approved as part of the decision
- Although this adjustment methodology has been approved for implementation the concept of using this for years prior to implementation (i.e. prior to April 2021) was not expressly considered as part of the modification process.
- We believe it may be more appropriate for a modification proposal to be raised to clarify that this can be applied for the 2020 charging year to ensure compliance and meet the expectations of the CMA/Ofgem following the CMP261 appeal. This would be raised with urgency and with the intention of progressing straight to code admin consultation.
- We are seeking industry feedback on this approach before developing further.
 Should we utilise the CMP317/327 approved text or raise a clarification





Ofgem's CMP334 Decision

- Following Ofgem's TCR decision (<u>link</u>), NGESO raised CMP334 to define what a 'Final Demand Site' is. These Sites would be liable for TNUoS Demand Residual charges whilst 'Non-Final Demand Sites' wouldn't.
- Ofgem approved CMP334 (<u>link</u>) on 30th November 2020 however as part of their decision, expected NGESO to undertake further work on Private Wires & Complex Sites with a further modification to be raised & implemented by April 2022
- Private Wires and Complex Sites are terms used at Distribution and no equivalents exist in the CUSC
- DCUSA modification DCP328 underway to implement arrangements for distribution connected Private Wires and Complex Sites
- This update is to get feedback on our latest thinking.



Mixed/Complex Sites

Under CMP334, sites with any 'Final Demand*' would be classed as a 'Final Demand Site' and so sites that have a mixture of 'Final Demand' and 'Non-Final Demand' would pick up residual charges. We believe it would be beneficial to;

- Formally define a 'Mixed Site' (a site with 'Mixed Demand') and 'Mixed Demand' (combination of Final and Non-Final Demand)
- Confirm 'Mixed Sites' will be treated as Final Demand Sites and allocated to a Charging Band based on their combined Final and Mixed Demand (i.e. exclude only 'pure' Non-Final Demand).
- Create additional rules/methods to allow a 'Mixed Site' to split out Final and Non-Final Demand (see next slide).

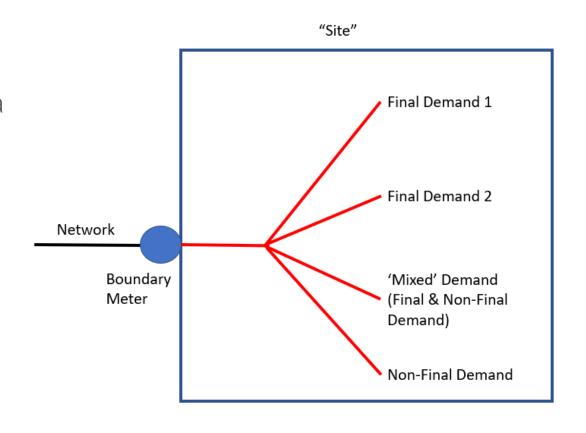


^{* &#}x27;Final Demand' = electricity which is consumed other than for the purposes of generation or export onto the electricity network

Separating Final & Non-Final Demand

Various options under consideration;

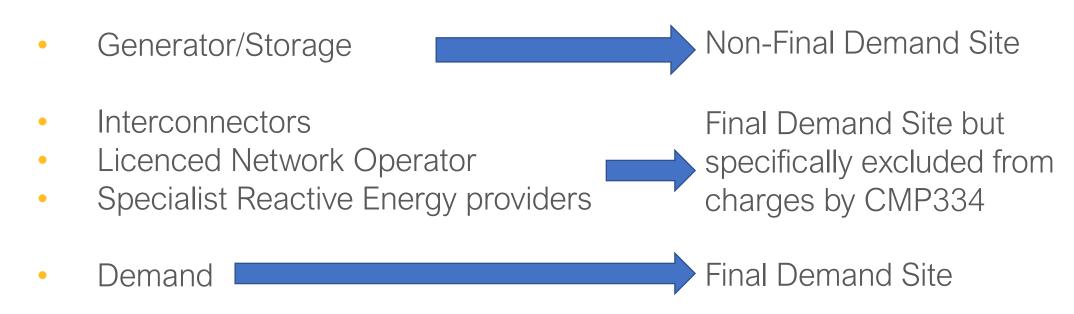
- 1. Formalise CMP334 outcome
 - Requires putting non-final demand in to a separate site
- 2. Fixed or percentage apportionment between Final & Non-Final Demand
 - Discussed at CMP334 and not progressed
 - Site specific and open to gaming
 - Need to be maintained and monitored
- 3. Asset Metering
 - Requires P375 approval and implementation (planned July 2022)
 - Possible impacts upon BMU registration





Private Wires

Following are transmission connection types recognised by CUSC;



- Don't believe adding a new 'Private Wire' category would be beneficial
- Treat as Demand and use provisions created under previous slides



Next Steps

- Will continue to develop based on feedback today
- Discussions with Electralink planned to see linkages to DCP328
- Happy to discuss bilaterally after TCMF (<u>Grahame.Neale@nationalgrideso.com</u>)
- Plan to;
 - 1. Engage further and refine
 - 2. Raise urgent modification in February 21.
 - 3. Workgroup development between March & August 21.
 - 4. Ofgem decision in September 2021
 - 5. Process development between October 21 and March 22
 - 6. April 2022 implementation



[^] believe it needs to be urgent as it's a licence obligation to implement by April 2022 and will have significant commercial impact on parties.



Expansion Constant and CMP353

- Following analysis of the RIIO2 Expansion Constant and Expansion Factors, NGESO urgently raised CMP353 to stabilise these until further work could be progressed. Ofgem approved CMP353 (<u>link</u>) on 2nd December.
- As part of CMP353, NGESO have committed to undertaking more analysis on the Expansion Constant to develop and implement a more enduring solution.
- Seeking industry feedback on the principles of the Expansion Constant before developing further
- Will be raising STC modifications to revise data provision processes when CUSC solution more developed



Changing network reinforcements

- The Expansion Constant is based on the cost of 400kV Overhead Line reinforcement as it is the most efficient (lowest) £/MWkm.
- The Expansion Factors used for other types/voltages of reinforcement are then a multiple of the Expansion Constant as they're higher £/MWkm.
- Traditionally if the network needed reinforcement, assets were built and the costs of these fed in to the Expansion Constant/Factor for the next price control.
- Through RIIO, networks & NGESO pressed to create capacity without building new assets (e.g. 'non-firm connections', refurbishing old assets etc).
- Means data sample size for the calculation is getting too small to be a reliable indicator.



Expansion Constant Principles

- Believe that the Expansion Constant and Expansion Factors are a fundamental part of the locational methodology and are still needed – will need fundamental TNUoS reform to replace them.
- Expansion Constant (and so Expansion Factors) should reflect the following principles;
 - 1. Reflective of growth in network capacity (i.e. being able to transport more energy), not just asset growth. Therefore should include refurbishment of assets that would other be removed.
 - 2. Should be prospective, not retrospective.

Any comments on those Expansion Constant principles?



Expansion Constant Questions & Options

Specific Points we'd like industry input on are;

- a) Should the calculation include actual costs or include expected/tendered costs?
- b) Should the remit of the Expansion Constant be expanded to include some works currently captured under the Expansion Factors (e.g. all OHL works regardless of voltage, or all 400kV works)?

An example of the options under consideration (i.e. not final!) are;

- 1. Leave as is (i.e. Retrospective and only reflects 400kV OHL reinforcement)
- 2. 400kV reinforcement that increases NOA boundary capability (e.g. some forecast 400kV works)
- 3. All 400kV reinforcement works that increase capability (e.g. all forecast 400kV works excluding like-for-like replacements or 'downgrades')

Looking to exclude works that increase network utilisation but not capacity (i.e. increases MWh but not MW - e.g. ANM schemes) as too difficult at this stage.



Next Steps

- Will continue to develop options based on feedback today and discussions with Transmission Owners
- Happy to discuss bilaterally after TCMF (<u>Grahame.Neale@nationalgrideso.com</u> or <u>Matt.Wootton@nationalgrideso.com</u>)
- Plan to;
 - 1. Engage further and refine
 - 2. Raise modification in spring 21 for a decision in September 2022
 - 3. April 2023 implementation

NGESO 2021 Work Plan

Jenny Doherty, NGESO





TNUoS new charging modifications

Modification	Rationale	Route	Submit Mod by	Approval needed by	Required Implementation
If required: Clarify that the CMP317/327 Ex-Post Reconciliation adjustment is applicable from 2020-21	Compliance: ensures limits to Generator charges in the Limiting Regulation are not exceeded	Urgent: Proposed straight to Code Admin Consultation	End Jan 21 (following TCMF feedback on route to take)	End Mar 21	Pre Apr-21 (clarifies ability to reconcile 2020-21)
Transmission Demand Residual and treatment of Complex Sites/Private Wire connections	Compliance: CMP334 Decision related and fulfilling the terms of the Direction.	Urgent: Assessment by WG (system and process changes required)	Feb 21	Sept 21	Apr-22
Subject to outcome of CMP357: Security Factor	Aligned with ESO decision letter	Standard: Assessment by WG	Feb 21	Sept 21	Apr-22
Include, Local Circuit & Local Substation charges for 'pre-existing' assets in Gen Cap range	Compliance: Align connection exclusion with Ofgem interpretation for Apr-22	Standard: Assessment by WG	Feb 21	Dec 21	Apr-22 (as per Ofgem expectation and subject to mod progression / complexity of solution)
Remove Large Distributed Gen TNUoS (inc Vols) from Gen Cap Calc	Compliance: Align connection exclusion with Ofgem interpretation for Apr-22	Standard: Proposed straight to Code Admin Consultation	March 21	June 21	Apr-22 (as per Ofgem expectation following CMP317/327 decision)

TNUoS new charging modifications

Modification	Rationale	Route	Submit Mod by	Approval needed by	Required Implementation
Expansion Constant	Ofgem: CMP353 Decision related – subject to CMP315 Work Group scope	Standard: Assessment by WG	Spring 21	Sept 22	Apr-23
Rezoning	Ofgem: CMP324/5 Decision related	Standard: Assessment by WG	Need output of EC to progress	TBC	TBC
Tertiary Charging	Ofgem: expectation of Tertiary review via open letter response	Standard: Assessment by WG	TBC – deprioritised currently although welcome feedback	TBC	TBC



BSUoS new charging modifications

Modification	Rationale	Route	Submit Mod by	Approval needed by	Required Implementation
BSUoS Indexation (subject to TCMF feedback)	RIIO2 alignment: ensures balancing services payments (Section 4) use relevant indexation uplifts	Self governance i.e. remove outdated or redundant info	End Jan 21	End Mar 21	Apr-21 (align with RIIO2)
BSUoS Licence changes	RIIO2 alignment: changes required to Section 14 BSUoS calculations to reflect updated special licence conditions	Self governance i.e. remove outdated or redundant info	End Jan 21	End Mar 21	Apr-21 (align with RIIO2)
Fixed BSUoS (alongside CMP308) - 2 new modifications section 11 and section 14	introduce the concept of fixed BSUoS, the fix & forecast timescales, what's included in the fixed price & a reconciliation process for over or under recovery	Standard: Run alongside CMP308	End Feb 21	Dec 21	Apr-23
Billing timescales / credit cover	BSUoS Task Force : to review the billing timescales/cycle and credit cover	Standard: Assessment by work group	End Feb 21	Dec 21	Apr-23

Discussion points

- There is a significant volume of change and new modifications for charging alone required in 2021.
- Does this plan feel feasible?
- Are there any elements that could be de-prioritised / should be the priority?
- Are there any new charging modifications that we have not included?



AOB & Close

