

Meeting 115
3 June 2021

**Transmission Charging
Methodologies Forum and
CUSC Issues Steering Group**

nationalgridESO

Agenda

1	Introduction, meeting objectives Jon Wisdom - NGESO	09:30 - 09:35
2	Code administrator update Paul Mullen - Code Administrator NGESO	09:35 - 09:45
3	BSUoS Clarification Mod Sean Donner - NGESO	09:45 - 09:55
4	User Commitment - ENA working group product Neil Bennett – SSEN Transmission	09:55 - 10:15
5	Offshore Coordination Update Mike Oxenham / Luke Wainwright, NGESO	10:15 - 10:35
6	AOB and Meeting Close Jon Wisdom - NGESO	10:35 - 10:50

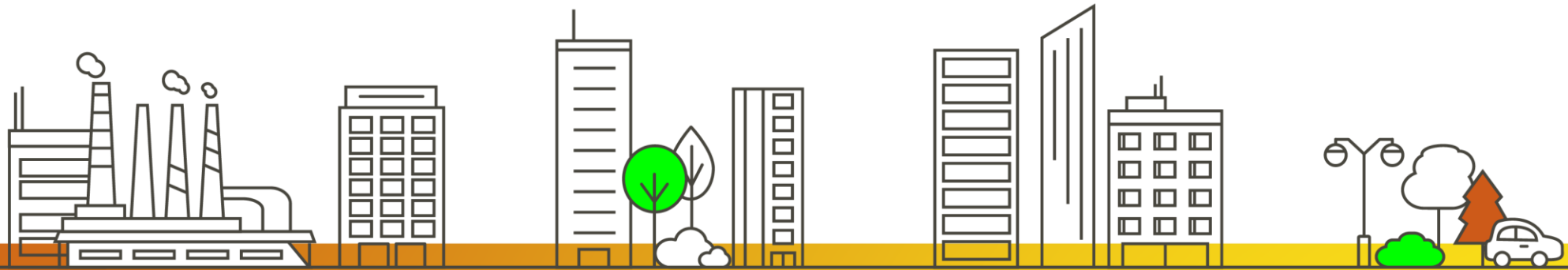
Code Administrator Update

Paul Mullen, Code Administrator NGENSO



Code Administrator Update

Paul Mullen - Code Administrator



Authority Decisions Summary (as at 3 June 2021)

Authority decisions since last TCMF

Modification	Decision Date
CMP373	Decision received 24 May 2021 approving the Original. To be implemented 1 October 2021.

Authority Decisions Summary (as at 3 June 2021)

On 4 May 2021 (updated 25 May 2021), Ofgem published a table that provides the expected decision date, or date they intend to publish an impact assessment or consultation, for code modifications/proposals that are with them for decision [here](#)

Modification	Decision Date / Anticipated Decision Date
CMP335/336 and CMP343/340	Consultation on CMP343 to be published 10 May 2021. Expected decision dates for all these Modifications is 27 August 2021.
CMP300	4 June 2021
CMP280	8 June 2021
CMP292	30 June 2021

Implementations Summary (as at 3 June 2021)

Implementations

- None since last TCMF

Withdrawals

- None since last TCMF

Panels since last TCMF

10 May 2021

- **CMP373** – Panel unanimously agreed that the Workgroup has met its Terms of Reference and could proceed to Code Administrator Consultation.

14 May 2021

- **CMP373** - Panel agreed by majority that the CMP373 Original better facilitated the CUSC objectives than the current CUSC arrangements.

Panels since last TCMF

28 May 2021

- 1 New Modification
 - **CMP374** seeks to allow new connectees to construct transmission assets to facilitate their connection to the wider transmission network. Panel agreed to amalgamate with **CMP330**.
- No Workgroup Reports
- 2 x Draft Final Modification Reports
 - Panel unanimously recommended that both **CMP326** and **CMP365** should be implemented
- **CMP344** was sent back by Ofgem on 5 May 2021. Panel agreed for the Workgroup to be re-formed to address each of Ofgem's concerns and agreed in principle (following the assessment by the Workgroup) that a Code Administrator Consultation is needed to be run before it is re-presented to Panel for Recommendation Vote
- Presented enhanced forward look out on CUSC, Grid Code and STC Modifications for next 12 months – really helps see where the gaps and constraints are and enables the right conversations about prioritisation
- Ofgem update on Market Wide Half Hourly Settlement Reform

Next Panel

25 June 2021

- Possible New Modifications:
 - ESO's wider review of the Expansion Constant; and
 - Queue Management
- Panel to determine **CMP363/CMP364** Workgroup has met its Terms of Reference and this can proceed to Code Administrator Consultation
- Panel votes on whether or not to recommend implementation of **CMP370, CMP371** and **CMP372**
- Forward look out on Modifications for next 12 months
- Code Admin to present an update on the work we have been doing to enhance the quality of legal text

In Flight Modification Updates



In flight Modifications (as at 3 June 2021)

0 open Workgroup Consultations

2 open Code Administrator Consultations

- **CMP370** closes 7 June and **CMP372** closes 11 June

8 CUSC Workgroups held in May 2021

- 11 held across CUSC, Grid Code, STC and SQSS
- 13 to be held across CUSC (11 CUSC), Grid Code, SQSS and STC in June 2021

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

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

2021 Dates

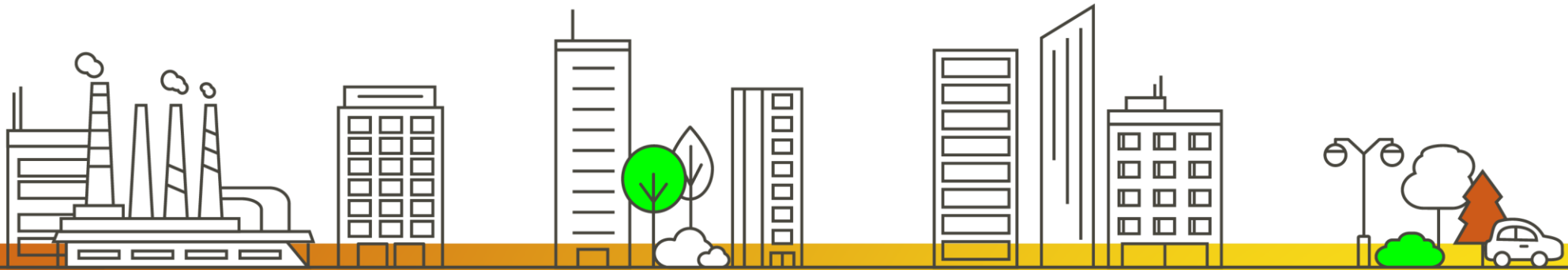


CUSC 2021 - Panel dates

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

BSUoS Clarification Mod

Sean Donner NGENSO



Background

- Proposing a Modification to address a few minor issues in Section 14 of the CUSC
- There are four areas which this Modification would seek to bring clarity to:
 - 1) Updating Covid-19 calculations
 - 2) Updating Covid-19 terminology
 - 3) Housekeeping changes following CMP373 decision
 - 4) Storage imports being excluded from BSUoS costs

None of these changes would affect the process of charging BSUoS, only clarifying what already exists in the CUSC.

Updating Covid-19 calculations

Background and defect

- CUSC Modifications CMP345 'Defer the additional Covid-19 BSUoS costs' and CMP350 'Changes to the BSUoS Covid Support Scheme' added a Covid-19 term to the BSUoS charging methodology in Section 14 of the CUSC.

- The Licence was updated to add in BSUoS Covid (t) as part of external costs:

$$BXext_t = CSOBM_t + BSCC_t + TotAdj_t - OM_t + SOTOC_t + LOCTRU_t + BSUoS\text{COVID}_t$$

- CMP360 "Aligning Section 14 of the CUSC 'Balancing Services Use of System Charging Methodology' to the licence changes introduced by RIIO-2 in respect of the 'System Operator Revenue Restriction'" introduced the term BSUoS\text{COVID} into Paragraph 14.30.10 of the CUSC.
- It was agreed that BSUoS costs associated with Covid-19 should be recovered in such a way that the amount recovered is the same for each Settlement Period during Charging Year 2021/22.
- While the intent of how Covid-19 associated BSUoS costs will be recovered is clear following the two mods, the wording in Paragraph 14.30.10 of the CUSC is less clear and so should be amended.

Proposed approach

- Remove the reference to Covid-19 in 14.30.10, to clarify that BSUoS Covid recovery is managed with a fixed amount per Settlement Period during Charging Year 2021/22.
- This would be consistent with the methodology as laid out in the Transmission Licence.

Updating Covid-19 Terminology

Background and defect

- Following CMP345 '**Defer the additional Covid-19 BSUoS costs**' and CMP350 '**Changes to the BSUoS Covid Support Scheme**' the term QMBSUoS is included in formulae in Paragraph 14.30.14
- However, CMP333 '**BSUoS – charging Supplier Users on gross demand (TCR)**' removed the definition for QMBSUoS from Section 14 of the CUSC
- This means that currently QMBSUoS is referenced in an equation without a definition
- The definitions of TQM and SGQM supersede that of QMBSUoS so QMBSUoS can be removed
- The TQM and SGQM definitions also mean that TLM doesn't need to be included in the formulae in Paragraph 14.30.14, as both these definitions reference multiplication by TLM

Proposed approach

- Amend the legal text in Paragraph 14.30.14 of the CUSC to replace QMBSUoS and TLM with TQM and SGQM

Housekeeping changes following CMP373 decision

Background and defect

- Following CMP373 '**Deferral of BSUoS billing error adjustment**' the ESO received feedback that the legal text contained housekeeping errors
- These were that some instances of 'Financial Year' need to be consistently capitalised in Paragraphs 14.30.19 and 14.31.8 and that 'Settlement Day' needs to be consistently capitalised in Paragraph 14.31.8
- There is also one instance where 'due' is used for the definition of 'BSUoS 2020/21 Under Recovered Costs' Paragraph 14.31.8 when a more precise word would be 'incurred'
- These are minor errors and so are fine to pick up as part of this mod as they create no substantive change to the intent or meaning of Section 14 of the CUSC

Proposed approach

- Update the Paragraphs referenced above so that 'Financial Year' is capitalised, capitalise the defined term 'Settlement Day' and replace an instance of the word 'due' with 'incurred'

Storage imports being excluded from BSUoS costs

Background and defect

- CUSC Modification CMP281 '**Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities**' led to the costs of imports from storage being removed from BSUoS charges
- The ESO uses data which holds storage imports as positive values and so their subtraction excludes them from BSUoS charges as intended by CMP281
- We have received feedback that the wording in the CUSC, "minus storage imports", could be misunderstood by a party who uses data which holds storage imports as negative values

Proposed approach

- Make clear the value being subtracted from costs related to imports is based on the absolute value of the number given in a data source, so it doesn't matter if a data source gives imports as positive or negative. This could be done by redefining SGQM and TQM in Paragraph 14.31.8.
- This would only clarify the wording in the CUSC – the ESO has been correctly subtracting storage imports since the implementation of CMP281
- Note that this has an overlap with CMP308 '**Removal of BSUoS charges from Generation**' legal text as it is changing the baseline definition of SGQM and TQM

Overall Proposed approach

- Raise a CUSC modification to provide clarity around these four potentially unclear aspects of the charging methodology in Section 14
- This can be wrapped up in one modification, as all four are clarifications being made to the BSUoS charging methodology in Section 14
- Propose to raise this as standard governance but have it go straight to CAC, as it has no material impact on what is outlined in the CUSC – it's only clarifying previously agreed changes to the CUSC (from Modifications which went through Standard Governance already)
- Propose to have these legal text changes implemented ASAP as they don't cause any substantive change to the CUSC

Summary:

- **Covid-19 Calculations:** Remove the reference to Covid-19 in 14.30.10 to clarify that BSUoS Covid recovery is managed with a fixed amount per Settlement Period during Financial Year 2021/22
- **Covid-19 Terminology:** Amend the legal text in Paragraph 14.30.14 of the CUSC to replace QMBSUoS and TLM with TQM and SGQM
- **Housekeeping changes following CMP373 decision:** Update Paragraphs 14.30.19 and 14.31.8 so that 'Financial Year' is capitalised, capitalise the defined term 'Settlement Day' and replace an instance of the word 'due' with 'incurred'
- **Storage Imports:** Make clear the value being subtracted from costs related to imports is based on the absolute value of the number given in a data source, so it doesn't matter if a data source gives imports as positive or negative. This could be done by redefining SGQM and TQM in Paragraph 14.31.8.

Draft Legal Text – Covid-19 calculations

External BSUoS Charge for each Settlement Period ($BSUoS_{EXT_{jd}}$)

14.30.10 The External BSUoS Charges for each Settlement Period ($BSUoS_{EXT_{jd}}$) are calculated by taking each Settlement Period System Operator BM Cash Flow ($CSOBM_j$) and Balancing Service Variable Contract Cost ($BSCCV_j$) and allocating the daily elements on a MWh basis across each Settlement Period in a day.

$$\begin{aligned} &BSUoS_{EXT_{jd}} \\ &= CSOBM_{jd} + BSCCV_{jd} + [(BSCCA_d + TotAdj_d - OM_d + BSC_d + SOTOC_d + LOCTRU_d + \cancel{BSUoS_{CGCOVID_d}}) \\ & * (TQM_{ijd} + SGQM_{ijd}) / \sum_{j \in d} (TQM_{ij} + SGQM_{ij})] \end{aligned}$$

Draft Legal Text – Covid-19 terminology

Covid-19 specific changes

14.30.14 Covid Costs shall be calculated as;

If $BSUoSTOT_j \leq COVIDCAPTOT_j$, then $BSUoSCOVID_j = £0$
Or $BSUoSTOT_j > COVIDCAPTOT_j$, then $BSUoSCOVID_j = BSUoSTOT_j - COVIDCAPTOT_j$

Where;

From 25th June 2020 until the Business Day after the Authority's decision on CMP350, $COVIDCAPTOT_j$ is calculated as;

$$£15/MWh * \left\{ \left| \sum_{t \in T}^+ (QMBSUoS_{t,j} * TLM_{t,j}) \right| + \left| \sum_{t \in T}^- (QMBSUoS_{t,j} * TLM_{t,j}) \right| \right\} (TQM+SGQM)$$

And

From the first Settlement Period of the Business Day after the Authority's decision on CMP350 to the Covid Support Scheme End Date, $COVIDCAPTOT_j$ is calculated as;

$$£10/MWh * \left\{ \left| \sum_{t \in T}^+ (QMBSUoS_{t,j} * TLM_{t,j}) \right| + \left| \sum_{t \in T}^- (QMBSUoS_{t,j} * TLM_{t,j}) \right| \right\} (TQM+SGQM)$$

Draft Legal Text – 373 housekeeping

External BSUoS Charge for each Settlement Period ($BSUoS_{EXT_{jd}}$)

14.30.19 Given the circumstances giving rise to the £33,163,790.21 under recovery of external BSUoS costs during ~~Financial Year financial-year~~ 2020/21 (the “2020/21 Under Recovered Costs”, which sum is separate and in addition to the COVID Costs) The Company will make specific and time-limited changes to the BSUoS methodology. This consists of deferring the recovery of the 2020/21 Under Recovered Costs from recovery through the Final Reconciliation Settlement Run (RF) for ~~Financial Year financial-year~~ 2020/21 for Settlement Days 30th September 2020 to 9th March 2021 to a later date as described in 14.30.20

Covid-19 specific changes

14.31.3 Final Reconciliation will result in the calculation of a reconciled charge for each ~~Settlement Day settlement day~~ in the ~~Financial Year scheme-year~~. The Company will calculate Final Reconciliation (RF) BSUoS charges (with the inclusion of interest as defined in the CUSC) in accordance with the methodology set out in section 14.30 above, using the latest available data, including data from the Final Reconciliation Settlement Run and the Final Reconciliation Volume Allocation Run

Draft Legal Text – 373 housekeeping

14.31.8 Balancing Services Use of System Acronym Definitions

For the avoidance of doubt “as defined in the BSC” relates to the Balancing and Settlement Code as published from time to time.

EXPRESSION	ACRONYM	Unit	Definition
Balancing service contract costs – non-Settlement Period specific	BSCCA _d	£	Non Settlement Period specific Balancing Contract Costs for Settlement Day settlement day less any costs incurred within these values relating to Supplementary Balancing Reserve and Demand Side Balancing Reserve
Balancing service contract costs – Settlement Period specific	BSCCV _{jd}	£	Settlement Period j specific Balancing Contract Costs for Settlement Day settlement day
External Balancing Services Use of System charge	BSUoS _{EXTj}	£	External System Operator (SO) Balancing Services Use of System charge applicable to Settlement Period j for Settlement Day settlement day
Internal Balancing Services Use of System charge	BSUoS _{SINTj}	£	Internal System Operator (SO) Balancing Services Use of System charge applicable to Settlement Period j for Settlement Day settlement day
BSUoS 2020/21 Under Recovered Costs	BSUoS _{SUR20}	£	The External System Operator (SO) Balancing Services Use of System charges in the sum of £33,163,790.21 incurred due in Financial Year financial year 2020 / 2021 divided equally over the Settlement Days settlement days between 1st October 2021 to 31st March 2022 inclusive. This is separate, and in addition to, the Covid Support Scheme.
Forecast incentivised Balancing Cost	FBC _d	£	Forecast incentivised Balancing Cost for duration of the incentive scheme Incentive Scheme as at Settlement Day settlement day

Draft Legal Text – Storage imports

14.31.8 Balancing Services Use of System Acronym Definitions

For the avoidance of doubt “as defined in the BSC” relates to the Balancing and Settlement Code as published from time to time.

EXPRESSION	ACRONYM	Unit	Definition
Gross Demand BM Unit Volume	SGQM	MWh	The Import data as at the Transmission System Boundary by Settlement Period for Supplier BM Units and Exempt Export BM Units, minus the absolute value of imports for registered SVA storage facilities where those imports are solely for the purposes of operating that Storage Facility, multiplied by the applicable TLM
Transmission Connected Site BM Unit Metered Volume	TQM	MWh	The BM Unit Metered Volume for BSUoS liable Users with a Bilateral Agreement with The Company, excluding Exempt Export BM Units, minus the absolute value of imports to registered CVA storage facilities where those imports are solely for the purposes of operating that Storage Facility, which is multiplied by the TLM and Trading Unit Delivery Mode Multiplier

User Commitment - ENA working group product

Neil Bennett, SSEN Transmission



User Commitment WS2 Product 5



Introduction

- CUSC 15 has been in effect since 2013 and the energy industry has changed significantly in this period including diversity of plant such as battery storage, and also products and services to facilitate network stability such as Pathfinders.
- Although it is generally agreed that CUSC 15 is an improvement to the previous Final Sums methodology, there are still a number of areas that could be improved or tweaked to ensure there is a reasonable balance between security/liability amounts and barrier to entry.
- In order to facilitate any changes, an ENA working group has been initially set up to explore the key concerns with the view to progressing towards CUSC modifications, guidance note updates and ensure processes within Network Companies are reasonable, open and accessible to Users.

ENA Workstream

- The ENA working group consists of a range of Network companies- DNO, TO and ESO- brought together to discuss their experiences with User Commitment.
- 30 issues have been raised so far and there has been some stakeholder engagement feedback but we are looking to expand this through this forum and other channels. This is to gauge opinion on whether the issues highlighted are
 - Definitive- Are there any other issues needing to be raised?
 - Prioritised- Which ones are the most important to stakeholders so that they may be prioritised where possible?
 - Correct- Are any of these issues not actually an issue and should be removed from the list

ENA Workstream

- Issues range from minor updates to procedures and guidance notes to major updates to CUSC and STC codes.
- Any User who proceeds with a Transmission connection or Distribution connection with a formal Transmission impact assessment, would be impacted by any changes to CUSC 15 and therefore it is vital that we ensure any changes are within the best interest to all concerned
- The table at the bottom of these slides highlight the full list of the issues raised by the working group so far.

User Commitment Shortfall Examples

Issue	Potential impact of change	Updates required
Demand Users are still not subject to CUSC 15 and are still on the old securities system.	Reduction in securities for demand Users.	CUSC 15.
There is a higher security percentage applied to Distribution customers than Transmission customers and should be reviewed.	Reduction in securities for Distribution Users or increase in securities for Transmission Users	CUSC 15
Transmission Impact Assessment (Appendix G)- Considerations required how to implement securities	Enables governance for consistent application.	CUSC 15.
The £/KW rates when a scheme is on a fixed liability prior to the trigger date- Is this a reasonable level?	Improve cost reflectivity.	CUSC 15.
The MITS nodes (substations that Users secure up to) definition means that some Distribution Users secure more than others.	Reduce securities for Distribution Users	CUSC 11
Consented schemes should lower the security percentage at any point in the security process due to the reduction in risk of scheme termination.	Reduction in securities for all Users who consent out-with trigger period.	CUSC15.

User Commitment Next Steps

- It is proposed that an ENA consultation be carried out and concluded by mid July where stakeholders are invited to provide any feedback on the issues raised so far as well as provide any additional ones of concern. This will be collated along with any further feedback from TCMF and direct customer engagement.
- Following this, further ENA working group meetings will be arranged to go through next steps. The likelihood is either a single CUSC mod or multiple ones would be raised, depending on complexity and interdependencies. This will likely be submitted around early August period.
- Although the CUSC mods will be the priority for the group, alongside the CUSC mod will be discussions regarding current processes within Network companies and ways of being able to communicate how CUSC 15 works so that it is more accessible to new entrants.
- If you wish to provide any feedback out with this forum please contact me at neil.bennett@sse.com

Table of Security/Liability issues

The below table highlights the issues/concerns that have been formulated through the ENA Workstream 2 working group with input from some early stakeholder engagement. They represent what we believe is the definitive list of issues, however, if there are any further issues you feel should be added to the list, please contact me at neil.bennett@sse.com.

<u>Affected area</u>	<u>No.</u>	<u>Detail of Issue</u>	<u>What needs revising?</u>	<u>Summary</u>
<u>Trigger Date- The date when security percentages reduce from 100% and when wider works liability is applicable</u>	1	Currently, the trigger date is the 1 st April, 3 financial years prior to the financial year of the connection date. Where Transmission Owners incur significant expenditure prior to the trigger date, Developers would incur a higher security percentage.	CUSC 15	Review trigger period
	2	The trigger date can be delayed where a scheme delays their connection date. If the TO proceeds with the construction, however, expenditure would continue to increase but as the customer has not breached the trigger date, this means security would be 100% of the expenditure. Should this still be 100%?	CUSC 15	Review pre-trigger date percentage
	3	The April 1 st trigger date, doesn't reflect the timing of most connection schemes which occur around Oct-Dec following summer outage periods.	CUSC 15	Review of when pre trigger commences
<u>Security Percentage</u>	4	Consented schemes reduce percentage of security only when they have breached the trigger date. Consented schemes reduce the risk of termination irrespective of when consenting has been achieved.	CUSC 15	Review security percentage reduction for consented scheme

	5	The reduction of security percentage once trigger has been achieved is 45%(non consented) and 26% (consented) for Distribution and 42%(non consented) and 10%(consented) for Transmission. Firstly, the disparity between Distribution and Transmission should be reviewed but also whether these percentages overall reflect a reasonable reduction.	CUSC 15	Review percentage disparity between Distribution and Transmission as well as overall percentages
Wider Cancellation Charge	6	Wider works cancellation charge commences when a scheme reaches the trigger date. Generally, schemes which aren't ready to connect, delay their connection date just prior to this commencing due to the fact that wider works cancellation is a mandatory termination charge. Delaying the commencement of the wider works cancellation charge may have a positive effect of reduced modification applications.	CUSC 15	Review commencement of wider cancellation charge
	7	The wider cancellation charge increases in 25% increments once trigger date has been reached but a review of these should be undertaken to ensure these percentages are relevant. Eg a customer is more likely to proceed to connection within 2 years of connection so perhaps high level of percentage closer to the connection (eg 90% and 100%) but further out from the connection date, lower the percentage (eg 10% and 30%).	CUSC 15	Review wider cancellation charge percentages
	8	A wider cancellation charge is applicable irrespective of its commencement and so a wider fee does not always seem reflective of existing works and therefore is the £/MW level reasonable.	CUSC 15	Review £/Mw level
	9	There is a wider works cancellation charge post connection but clarity is required on whether this is applicable to DNOs as well as Transmission connected schemes. If it isn't applicable to DNOs, what is the cause of this and is this potentially discriminatory?	Guidance note	Clarify requirement for post connection wider cancellation charge
	10	More transparency is required on the calculation of wider works. There has been extreme variations in forecast accuracy in recent years and a review should be held to improve accuracy or improve communication in how its calculated.	NGESO processes and communication	Clarify wider works calculation process

Fixed Liability	11	Once a scheme has chosen a fixed liability, there is no option to become variable again but there are circumstances where the TO drastically change the scope of works.	CUSC 15	Review when a scheme can change from fixed to variable
	12	The £/KW rates when a scheme is on a fixed liability prior to the trigger date- Does the evidence show these are reasonable amounts?	CUSC 15	Review £/kw rates
Transmission Impact Assessment/APP G	13	Considerations required on how to implement securities into TIA for example will there be a cooling off period where, after a customer is allocated onto appendix G, they can terminate without incurring termination fees?	CUSC 15	Assess potential for cooling off period for securities/liabilities in Appendix G
	14	Where there are multiple schemes allocated to Appendix G which has a single reinforcement required for a GSP, how are termination fees determined where schemes have terminated? Should it be a last man standing principle? Affected area for revision.	CUSC 15	Assess termination principles on Appendix G
	15	Forecasts for liabilities for Attributable Works for App G GSPs where there is known works required- Affected area for revision- NGESO process and communication.	NGESO process and communication	Assess viability for attributable works forecasting for Appendix G
Embedded specific	16	Explicit clarification that DNOs are not liable for the balance of cancellation (ie total liabilities less any recovered from security) if they have followed appropriate recovery steps with the developer. – Affected area for revision- NGESO process and communication.	NGESO process and communication.	Investigate DNO recovery rights where liabilities are not fully acquired post-termination
	17	Feedback from Solar Energy UK is that there is a general lack of transparency from the network companies with regards to what the securities/liabilities are made up of. Solar Energy UK Members have suggested that the preferred approach would be based on UKPN's provision of information with the added inclusion of National Grid's 4-year prediction of charges, and for all DNOs to adopt a similar approach and provide the same information.	New guidance note/fact sheet	Review the potential for a new guidance note or fact sheet.

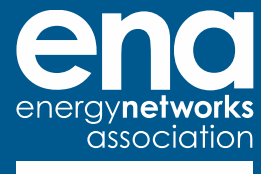
<u>Security provision</u>	18	Security provisions occur bi-annually. Could this be moved to annual to provide more stability for the customer? STC(BI annual estimate)/CUSC 15/TO process improvement Affected area for revision- NGESO and TO process. Also CUSC and STC amendments.	NGESO and TO process. Also various CUSC and STC amendments	Investigate whether amending security provisions to annual would be appropriate
	19	Are there any alternatives for security provision (ie the ways of providing security eg letter of credit) and can the current Triple A rating option be lowered in order to allow more companies to be able to use credit rating as an option.	Guidance note and CUSC 15	Assess whether there are any alternative ways to provide security
	20	At present, securities that are not provided in cash form must be in place 45 days or more in advance but could this be reviewed to see if non cash security provision can be aligned with cash?	CUSC 15	Assess period for security provision
<u>Security calculation</u>	21	Is there a consistent treatment of component capability by the Transmission Owners (TO's) eg where a component does not have an MVA value, are these allocated a value consistently as it will affect the SIF value of the liability. Affected area for revision.	STC and TO processes	Assess component capability treatment by the TO's
	22	MITS node/Attributable- Securities for attributable works are only for works up to and including the MITS node. Where there are GSPs that are only single circuit and Transformer, these will not be classed as MITS nodes and the MITS nodes can be far beyond the GSPs for Developers to securitise.	CUSC 11	Assess definition of MITS node and attributable
<u>Accessibility/Clarifications</u>	23	Is the NGESO guidance note up to date and still relevant?	Guidance note	Assess relevance of NGESO's guidance note
	24	Can the current MM(security/liability) statement layout be improved for increased User-friendliness?	MM statements	Assess relevance of NGESO's guidance note
	25	Where the TO delays reinforcement of the network is it fair to enforce cancellation charges to the developers if that delay makes their project unviable?	CUSC 15 and guidance note	Assess cancellation charge requirements following TO initiated delays

<u>Miscellaneous</u>	26	There are occasions where wider transmission enabling works have completed prior to the connection of the scheme but as they works are attributable the scheme would still incur a liability due to the potential of stranded assets. Many wider assets have multiple customers connecting to them and would therefore not cause stranded assets so can there be a way of reducing/removing liability for these customers?	CUSC 15	Assess liability of schemes that connect after infrastructure is constructed
	27	Demand Users are still not subject to CUSC 15 and are still on the old securities system.	CUSC 15	Assess incorporating Demand Users into CUSC 15

DNO specific concerns

These are separated from the above as they deal with DNO issues that would need to be assessed separately from Code/ESO concerns and would need to be agreed upon by all DNOs in order to be implemented.

	28	Although NGENSO allow security provision in a wide variety of forms (letter of credit, escrow etc) not all DNOs support these and some only allow either cash or triple A security ratings. This can cause cash flow issues for the majority of companies that do not have sufficient rating.	DNOs processes	Review aligning DNO's forms of security provision
	29	There are some inconsistencies with regards to how long it takes for the DNO to pass through securities to the end customer which can cause cash flow issues for the customer.	DNOs processes	Review aligning DNO's forms of security provision
	30	There is a lack of transparency regarding when a customer provides their key consents and how long this takes to pass through to the ESO and when it will amend the security percentage.	DNOs processes/ Fact sheet	Review provision of guidance on key consents



Energy Networks Association

4 More London Riverside

London SE1 2AU

t. +44 (0)20 7706 5100

 @EnergyNetworks

energynetworks.org

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Energy Networks Association Limited is a company registered in England & Wales No. 04832301
Registered office: 4 More London Riverside, London SE1 2AU

The voice of the networks

Offshore Coordination Update

Amy Wong, NGENSO



Offshore Transmission Network Review (OTNR): Offshore Co-ordination



Agenda

- Offshore Coordination Introduction and Update
- CUSC Implications

Offshore Co-ordination Phase 1



Phase 1 Key Findings



£6 billion (18%) potential savings by 2050 if integration starts from 2025



The number of assets could be reduced by 50% creating significant environmental & social benefits



Benefits are reduced the later integration begins – by half if integration starts in 2030.



Flexibility is needed to deliver projects in train without putting their delivery and the 2030 offshore wind target at risk

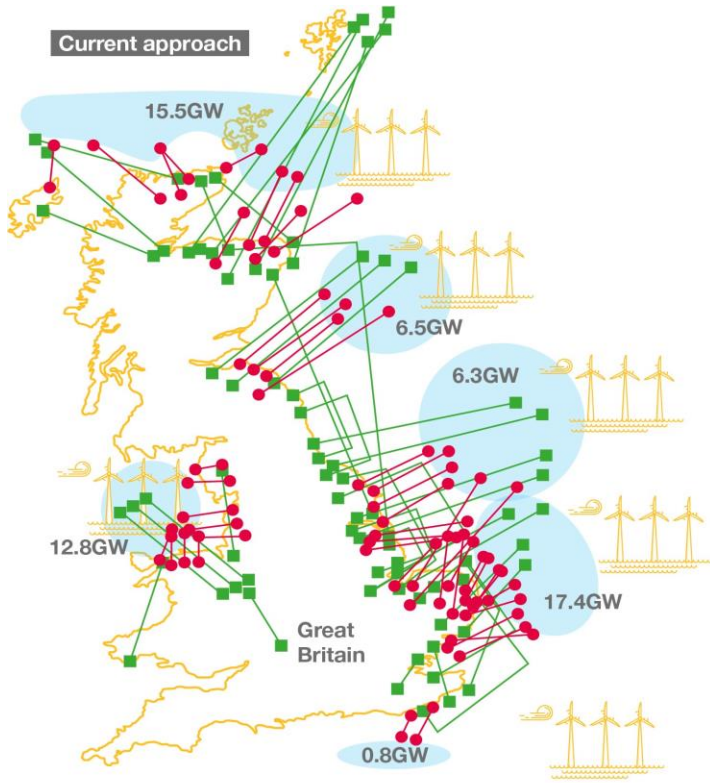


Support for commercial deployment is needed to deliver all of the required technology

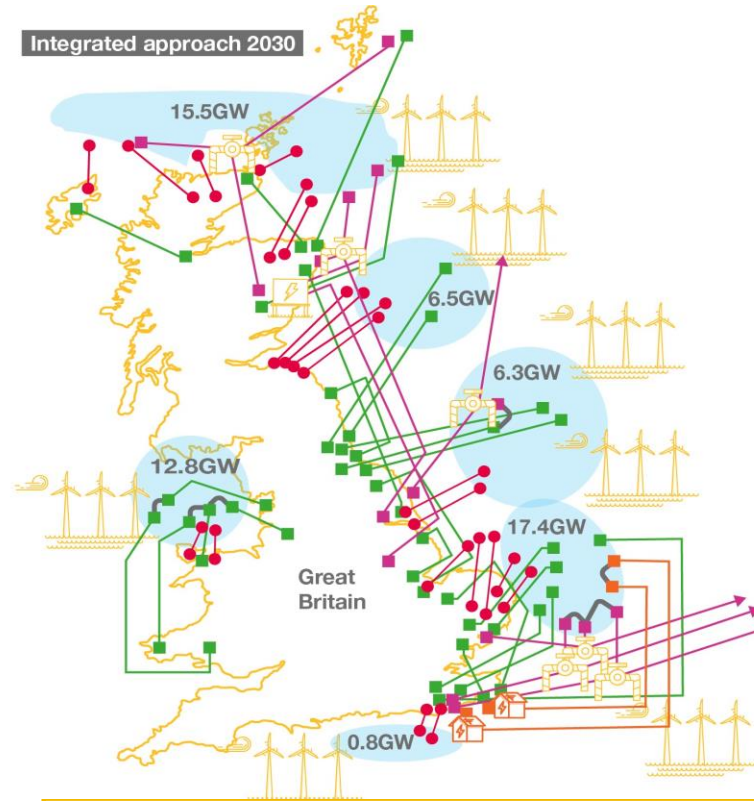


Additional onshore infrastructure is required to connect wind, however integration can minimise the overall increase in infrastructure

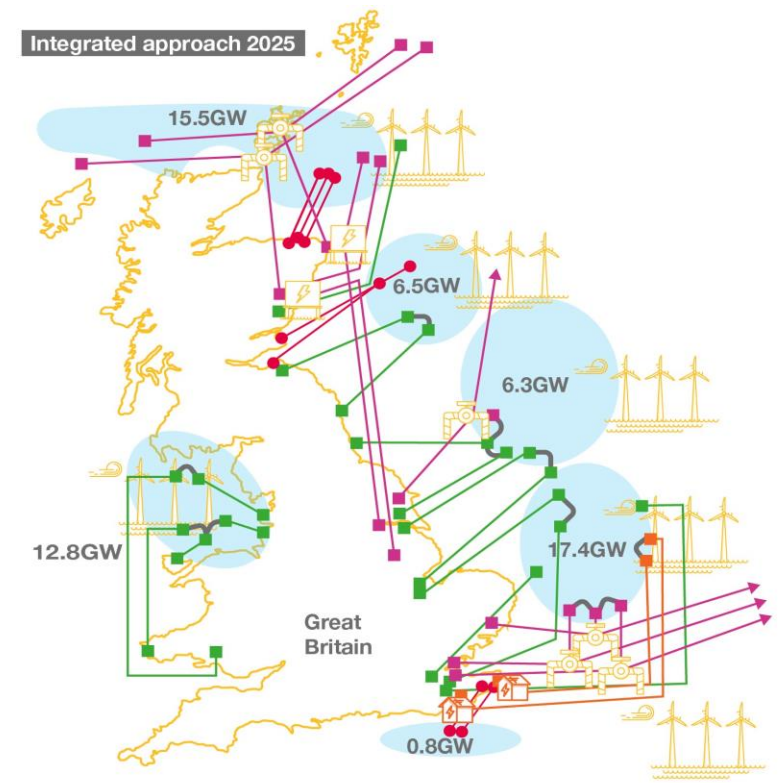
How it could look in 2050



Capex Cost: £29 billion
Total Assets: 330
Total Landing points: 105



Capex Cost: £27 billion (-8%)
Total Assets: 40% reduction
Total Landing points: 60



Capex Cost: £23 billion (-18%)
Total Assets: 70% reduction
Total Landing points: 30

Offshore Co-ordination Phase 2



Phase 2

We are working with stakeholders, including the other project partners, within the BEIS-led Offshore Transmission Network Review.

We have structured Phase 2 of our Offshore Co-ordination Project to align with the Offshore Transmission Network Review structure.

Early Opportunities

We are working with opted-in developers to explore potential opportunities for co-ordination of in-flight projects.

Pathway to 2030

We are starting to explore holistic network design opportunities to help facilitate the achievement of 40GWs of offshore wind by 2030.

Enduring Regime

We are considering our views in relation to what an enduring regime might look like in future.

Group Discussion

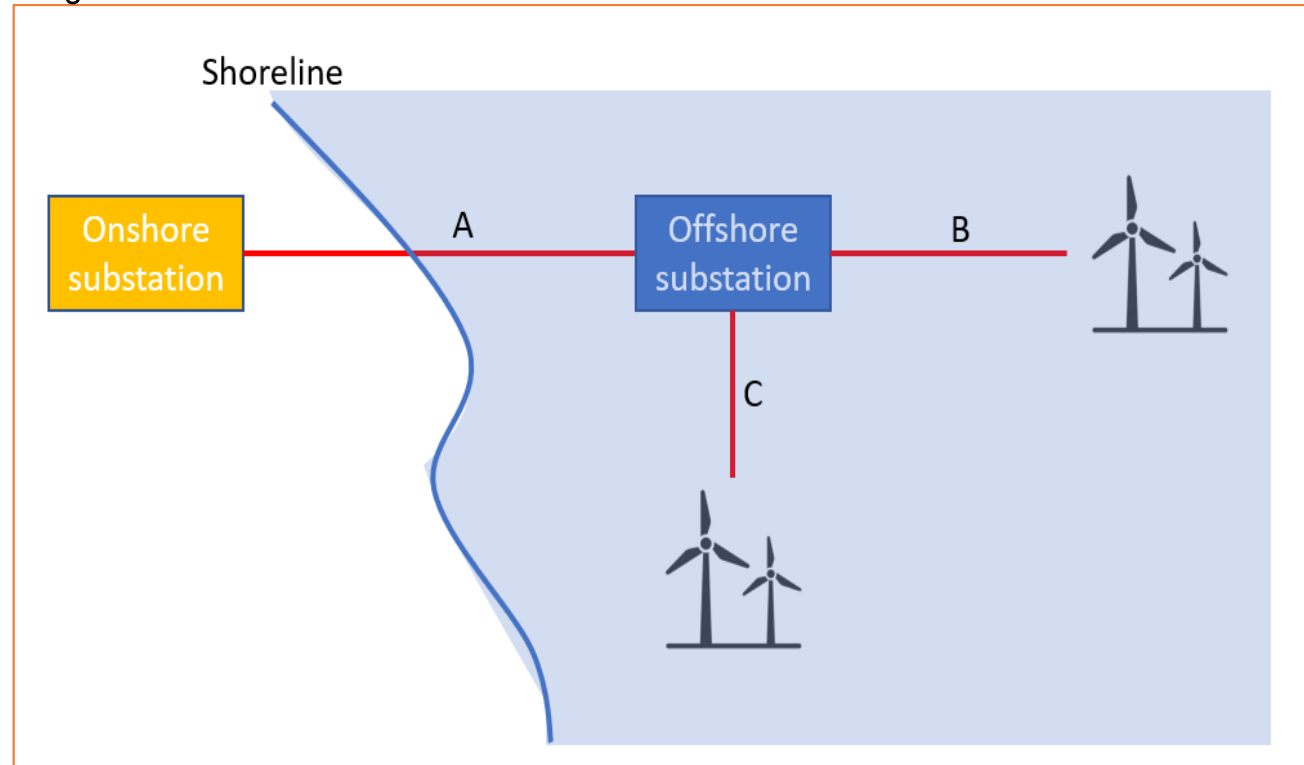
We will briefly provide you with an overview of an illustrative offshore network configuration which depicts a greater level of offshore co-ordination when compared to a radial connection.

We would like your views on the potential code and standard barriers and enablers in respect of such a network configuration.

Illustrative Model 1

Connecting multiple offshore wind farms, owned by separate entities, to the same Offshore Transmission Owner (OFTO) substation and cable.

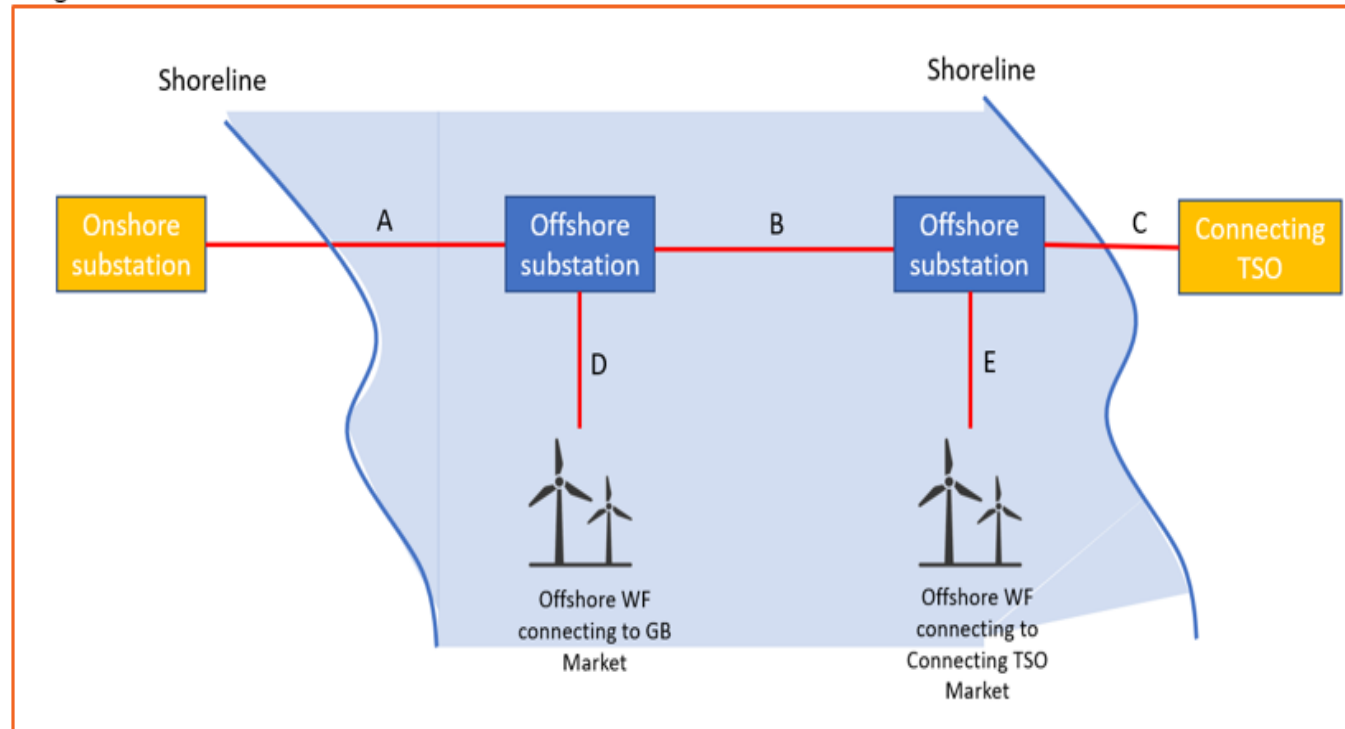
Diagram 1: Shared OFTO



Illustrative Model 2

Connecting offshore wind farms to a HVDC cable connecting between two synchronous areas/markets.

Diagram 2: MPI – two markets



Further information

If you would like to know more about Offshore Transmission Network Review and Offshore Coordination:

<https://www.gov.uk/government/groups/offshore-transmission-network-review>

<https://www.nationalgrideso.com/future-energy/projects/offshore-coordination-project>

Contact us on:

box.OffshoreCoord@nationalgridESO.com

AOB & Close

