Charging Futures

Reforming electricity charging together

TNUoS Task Force

Meeting 9

11th October 2023

Agenda

10:00 – 11:30

- 10:00 Introduction & Welcome
- 10:10 Action Review
- 10:30 Backgrounds sub group
- 11:00 Reference Node sub group
- *11:30 Break*

11:45 – 12:45

- 11.45 Sharing sub group
- 12:15 Data Inputs sub group
- *12:45 Lunch*

13:45 – 15:15

- 13.45 Market-wide HHS
- *15:15 Break*

15:30 – 16:30

- 15.30 Signals sub group
- 16.00 AOB & Close

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Action Review

Jamie Webb

Summary of actions

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
6 15/09	8/9	Check with ESO SQSS experts as to a review of sharing factors to play back to the Task Force	JW		TBC	Open
10 18/08	9	Review the current modification tracker for a version to feature in future Task Force meetings or shared for visibility	CP, DS, EB		Mtg 9	Open
6 18/08	7	Draft modification proposal to be raised.	JT		October	Open
7 18/08	7	BAU update to TCMF with ESO/Propose to agree who will present the Reference Node proposal to relevant TCMF.	JT	Topic to be added to TCMF Oct agenda – 1 pager in development with JT update	October	Open

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Backgrounds sub group: Update & Timeline

John Tindal

The objective of this session is to provide:

- An update on progress so far and next steps.
- Provide a high level timeline for future work.

Backgrounds sub group

Held a discussion with Usman Farooq and Bieshoy Awad at ESO regarding SQSS

Their observations:

- Leave Demand Security alone because it performs a particular security stress test at zero wind
- Economy scaling factors have not been updated regularly and would benefit from an update now

There are two options for timeline

Option 1) Carry out an SQSS review first, then charging will follow

- Usman to check for budget for external work
- Need to go through SQSS Panel process
- SQSS workgroup open to anyone if Task Force members want to participate
- Likely to take at least a year

Option 2) Charging could do own review via CUSC process and accept discrepancy with SQSS

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Backgrounds sub group:

Planned next steps:

- Wait for update from SQSS Panel regarding if and when an SQSS review will take place.
- Task Force decide if it will recommend waiting and participating in SQSS process, or alternatively recommend a separate CUSC process

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Reference Node sub group: Update & Timeline

John Tindal

The objective of this session is to provide:

- Draft modification for review.
- Provide a high level timeline for future work.

Reference Node sub group

- Reference Node modification was spoken about at TCMF on 5th October.
- Current plan is to raise the modification at the next CUSC panel on 27th October.
- All comments on the draft modification proposal are welcome.

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Sharing sub group: Update & Timeline

Simon Lord

The objective of this session is to provide:

- An update on progress so far and next steps.
- Provide a high level timeline for future work.

Background

- Sharing was designed in 2012 as part of transmit for the period 2020+ when there was still an expectation of a significant volume of carbon plant.
- The current TNUoS “refresh” looks at the period 2025 +. In later years it is expected that the volume and load factor of carbon plant will reduce significantly and potentially be replaced by significant volumes of storage.
- Given this is sharing still appropriate and if so, how should storage be included taking account of location and duration ?

Current approach

- Where **only** low carbon is present behind a boundary optimal build is based on assumptions close to sum of TEC x coincidence of low carbon in zone implies charging at ~ TEC.
- For boundaries where mix 50/50 low carbon and carbon/storage boundary build lower than sum of TEC given diversity of output and ability to control excess at low cost so charge differentially with a load factor element.
- Sharing does this automatically and moves charging from TEC to load factor where carbon based/storage plant is present.

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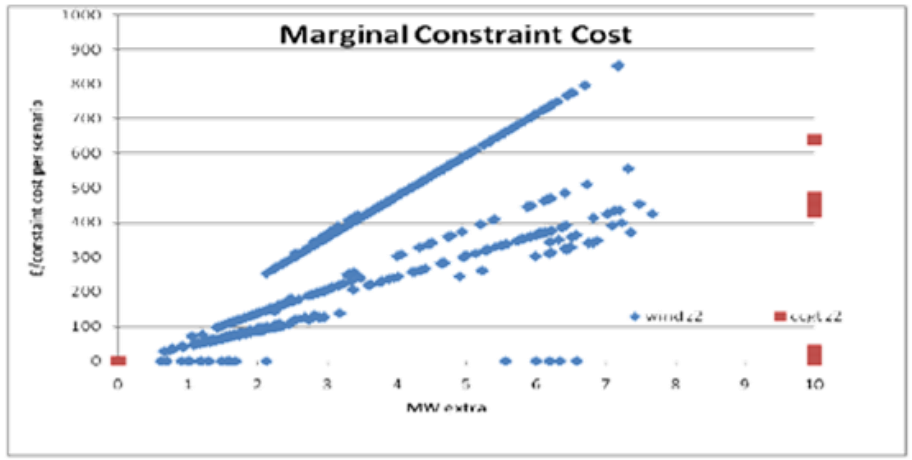
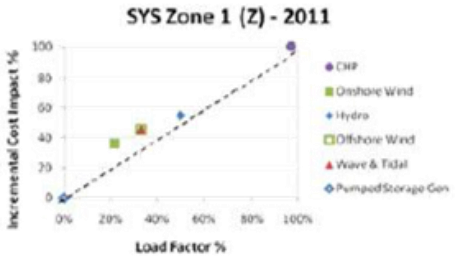
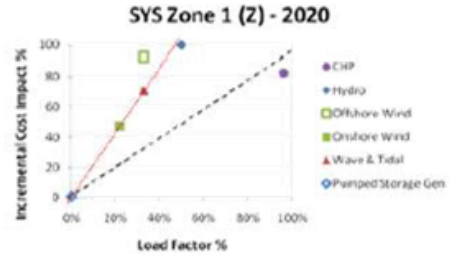
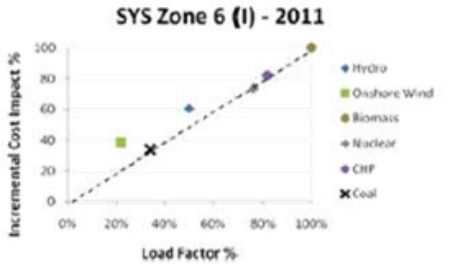
From 2012 Transmit

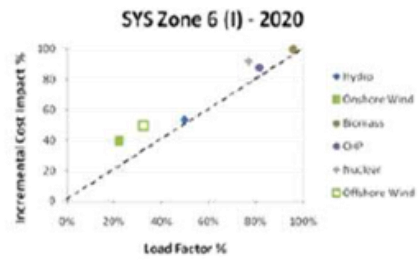
- Closer consideration of the load factor versus incremental constraint cost graphs by the Workgroup showed degradation of relationship in some zones











- Degradation occurs where certain generation plant types dominate in an area of the network
- Constraint cost elements do not broadly counter balance

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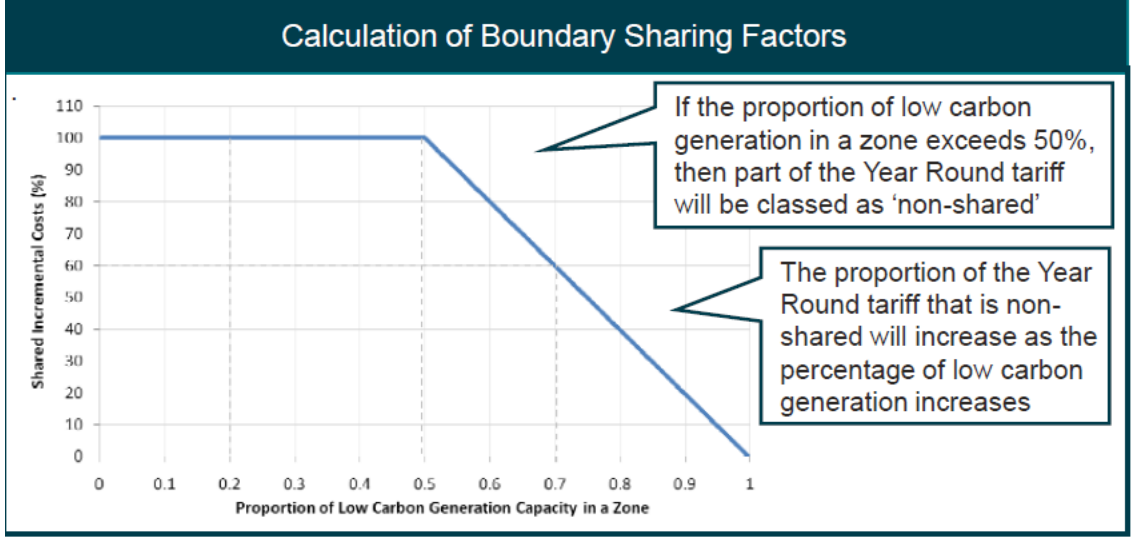
Views around the group



- Similar view to LCP
  - Sharing works roughly as intended
  - Storage demand need to be included
  - Review of sharing gradient may be appropriate to establish co-incidence of sharing between low carbon technologies
  - Other views
  - Transmit assessment was done against ROC's. Current approach of CFD's, market and non-firm access challenge these assumptions.
  - Instead of sharing establish plant specific factors for each plant type. i.e. charge on TEC but a fixed % for different plant types, onshore/offshore wind , BESS gas etc and potentially take account of plant flexibility post REMA in network charging.

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Including storage

1. Adding storage behind a boundary potentially changes the way that sharing could work by adding an additional element. Storage is currently classed as carbon historically its commercial characteristics are similar to those of carbon generators.
2. Storage when operating as a demand sink has the ability to look similar to carbon with a bid prices more attractive than those of low carbon generation ultimately they could approach the level of carbon bid prices in a zone.
3. To incorporate storage in sharing one option that could be used would be to multiply storage TEC by a factor between 1 and 2. For long duration storage (say > 6 hours) a factor of 2 could be used for short duration storage (>3 hours) a factor of 1 would be used. The upper limitation would be based on the MEL/MIL ratio typical storage units have MEL and MIL the same and this drives a factor (MEL+MIL)/MEL of 2.
4. The methodology could be extended to short duration storage where its effectiveness at managing constraints diminishes once fully charged. In these circumstances a generic factor < 1 may be appropriate.

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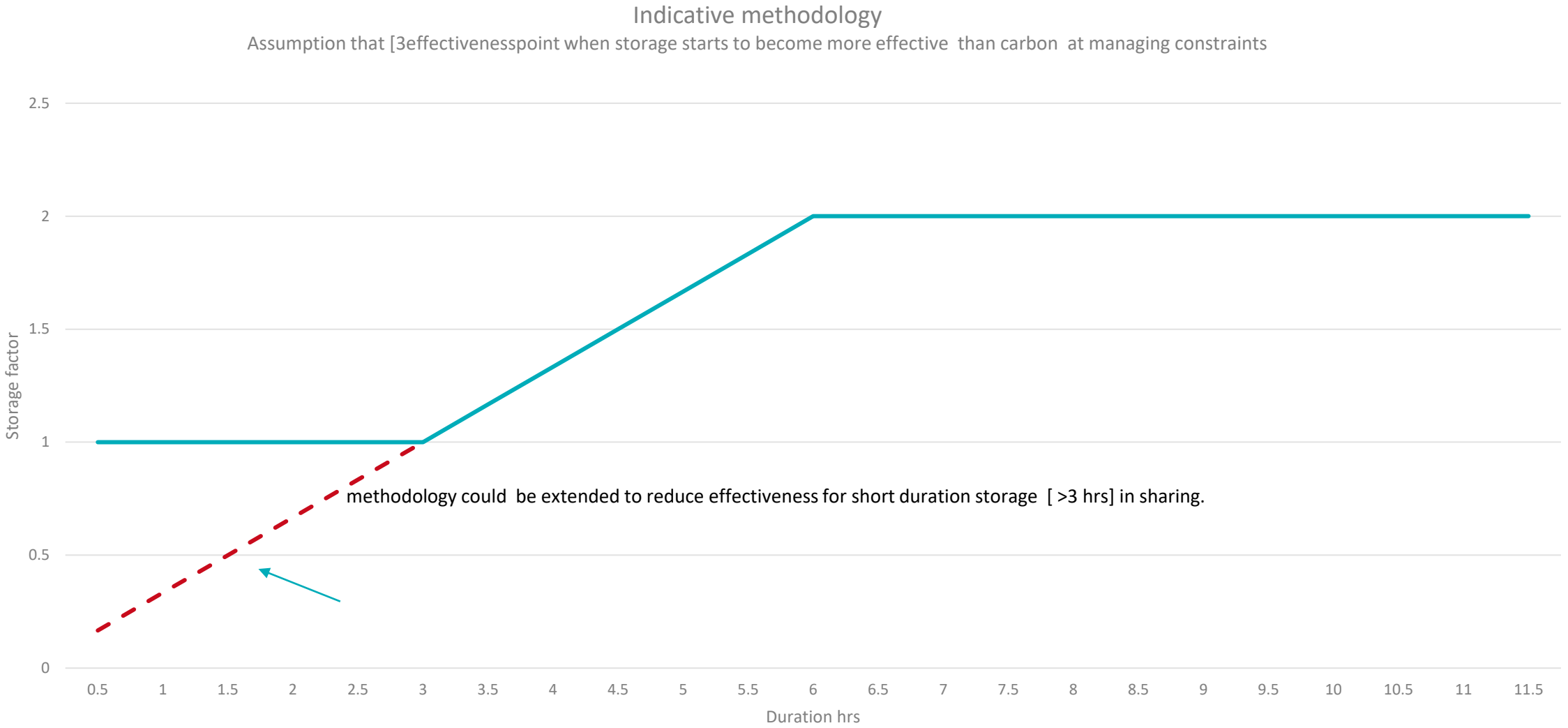

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Taking it forward

- Update transmit model to be based on CFD's and Market prices and BESS costs to establish/validate current approach and confirm this was included in the LCP modelling.
- Look at co-incidence of low carbon output and look to see if there is a minimum level of sharing in a zone [5% say] that recognises implicit sharing withing a zone of low carbon.
- Work through the issue associated with non-firm connection and how they should be categorised in sharing.
- Establish shape of storage multiplier profile. This is complex and will need be done taking account of state of charge of storage in previous periods.
- ESO best placed to dive this forward via technical analysis.

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Break

Next session starts at 11:45

Data input sub group: Update & Timeline

Chris Parsons

The objective of this session is to provide:

- An update on progress so far and next steps.
- Provide a high level timeline for future work.

Data Inputs

Work stream proposal for overall scope and objectives

- Identify the data inputs that drive volatility in the transport model.
- Asses the impact on tariffs of the identified data.
  - ESO have asked Frontier and LCP to run the volatility analysis to identify which data inputs have the biggest impacts on tariffs. We plan to report back to taskforce In January 2024 when we will identify next steps.

- Review ACS, is it fit for purpose, what could replace it.
  - ESO will carry out an internal review of ACS pre December 2023 and feedback finding to the sub group to gather thoughts ahead of bringing finding and next steps to taskforce in January 2024.

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Data Inputs

Work stream proposal for overall scope and Objectives

- Scaling Factors – Mod timeline options:

  We may wish to bring this to TCMF before modification is raised to discuss with a wider audience:

  1. Taskforce 11th October
  2. TCMF 2nd November
  3. Submit for Panel 9th November
  4. Panel 24th November

  TCMF not required first we could submit sooner, but with timescales involved don't believe this is necessary

  1. Taskforce 11th October
  2. Submit for Panel 12th October
  3. Panel 27th October

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Data Inputs

Work stream proposal for overall scope and Objectives

- Security Factors
  - Could/ should Year Round tariff Security Factor be lower?: Year Round tariff reflects SQSS Economy criteria where network is built to economically accommodate bulk energy flows and trade-off against congestion cost, not to provide redundancy to securely serve peak demand.
  - Could Peak Security tariff Security Factor be calculated a different way?: Review the ESO SECULF model and process for calculating Security Factor to ensure the Security Factor for Peak Security tariffs is cost reflective.
  - Review the way security is calculated for local circuits: Local circuit appear to charge for spare capacity as if it were security in a way that is not cost reflective. This could have detrimental interactions, particularly with anticipatory investment and where sharing is present for local circuits.

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Data Inputs

Work stream proposal for overall scope and Objectives

- Data Transparency, is there a need to improve transparency?

- TO data
  - TOs and ESO will walk through the model to gain a view on what data inputs could be more regularly updated (re: locational tariff calculations) with a material impact and which data points could be fixed.

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Signals sub group: Update & Timeline

Lauren Jauss

The objective of this session is to provide:

- An update on progress so far and next steps.
- Provide a high level timeline for future work.

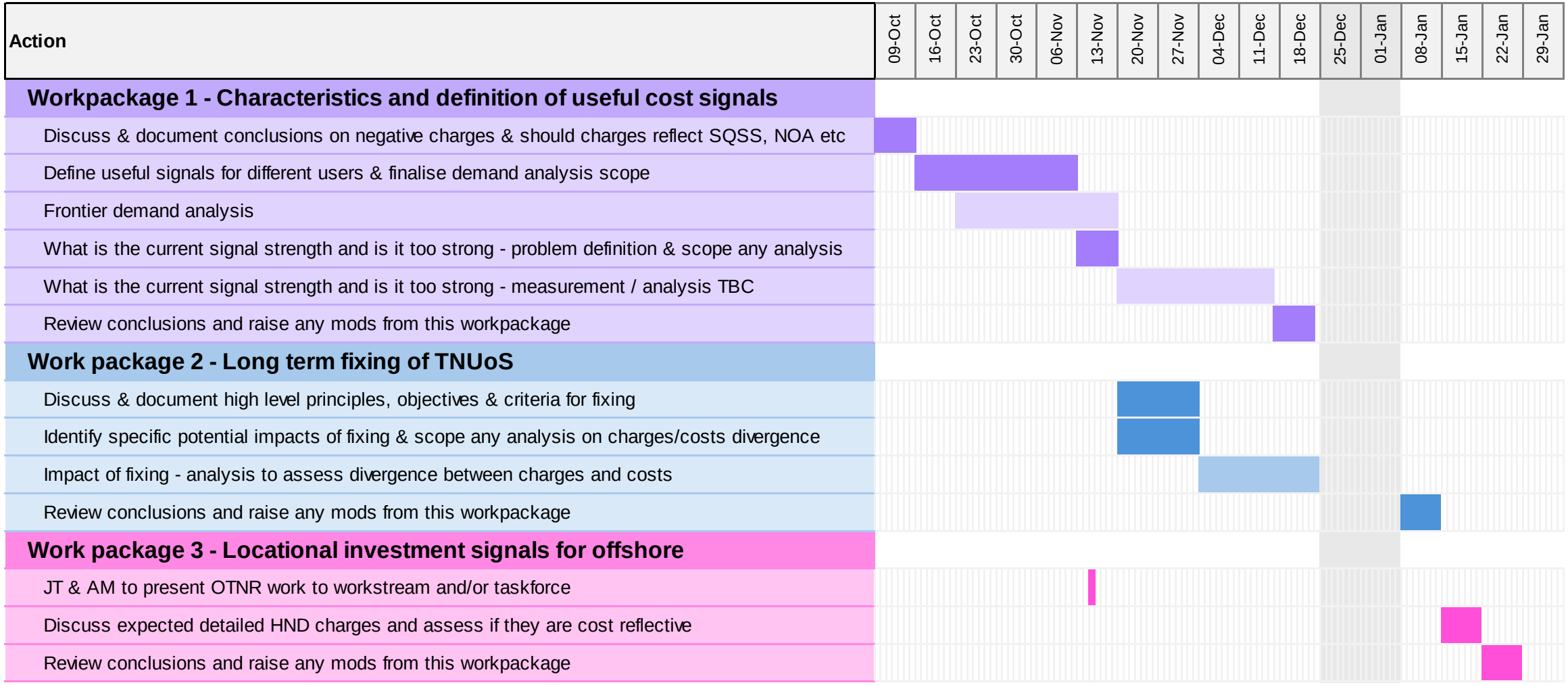
TNUoS Taskforce Signals Workstream

Brendan Clark, Lauren Jauss, Paul Jones, Aled Moses, Simon Lord, Graham Pannell, John Tindal

Objectives Update and Plan

11 October 2023

Overview of Proposed Signals Workstream Plan



Note: - Plan assumes average of approx. 1 hour meeting per week plus prep & output documentation

Work package 1 - Characteristics and definition of timely, useful, cost reflective investment signals for different users

Taskforce Question	Workstream Action
Is it appropriate to have negative locational charges for generation?	Workstream have concluded yes, but **further discussion and documentation required** - when might it not appropriate? e.g. where there are dis-optimal constraints? If/where charges are not an accurate reflection of the cost benefit? etc
Is it appropriate to have negative locational charges for demand? Should the floor at zero be reviewed?	**Complete** – Workstream believe that this is a yes provided no overall negative cost in any period. Will be incorporated into design of recommendations
Should charges reflect SQSS, NOA, optimal transmission investment or something else?	**For discussion & documentation by workstream**
What does a meaningful signal look like for different users?	Tabulate characteristics of users and signals and identify gaps/defects in current arrangements including how use of the system is measured **Workstream to consider Frontier Demand Charges Analysis proposal** **LJ will draft strawman for 2x 1hour workstream discussion** **For inclusion in above**
What signals should demand TNUoS send, and how? Investment? Operational? Signals for different size users	
Are triads fit for purpose?	
How should complex sites be represented?	
What is the current strength of signal – is it too strong and how this links to absolute charges?	**Workstream to have further discussion to define the problem** - why / how is the signal too strong/weak? What is the definition of just right? **Can we measure the strength**? What does "How does it link to absolute charges" mean?

Work package 2
Long-term fixing of TNUoS

Taskforce Question	Workstream Action
Document high level principles, objectives & criteria for fixing	Identify, define & document transmission system user groups, reason and eligibility for fixing (and for releasing from obligation to pay), when, what, for how long etc. **2x 1 hour discussion meetings with possible analysis to evidence benefits**
Impact of fixing on levels of cost reflectivity i.e. consider pace at which network changes and investment timescales.	Describe specific impact of fixing, scope analysis to assess divergence between charges and costs **For discussion in above meetings**

Work package 3

Locational investment signals for offshore

Taskforce Question	Workstream Action
Locational investment signals for offshore –understand what has been done elsewhere (OTNR workstreams etc)	JT & AM to present OTNR work to identify any other items for workstream consideration
Understanding the HND framework solution - Examine whether lack of wider charges offshore would be cost reflective and consistent with the principles of wider charging onshore.	LJ will draft simple illustration of expected HND charges for workstream to discuss & assess if cost reflective

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Lunch

Next session starts at 13:45

Market Wide Half Hourly Settlement

Neil Dewar & Keren Kelly

The objective of this session is to provide:

- To raise awareness of MHHS Programme amongst TNUoS TF members, including relevant milestones and impact on CUSC.
- To highlight the implications on TNUoS Charging methodologies as a result of MHHS.
- Seek to explore and develop solutions to allow MHHS Programme to be delivered to plan whilst ensuring appropriate TNUoS Charging arrangements are in place for start of migration of MPANS.
- Agree next steps for TF members and the ESO.

- Market Wide Half Hourly Settlement (MHHS)

ESO Update – October TNUoS TF

- Neil Dewar and Keren Kelly

nationalgridESO

Agenda

1. MHHS - Purpose and benefits
2. Governance Structure
3. MHHS Milestones
4. MHHS Expectations on Code Bodies, including CUSC
5. MHHS treatment of Measurement Class in the BSC
6. Current TNUoS Charging Methodologies
7. TNUoS Task Force Problem statements and ask
8. Potential Solutions

MHHS Purpose and Benefits

MHHS – Background Information

Market Wide Half Hourly Settlement (MHHS) Programme

What is it?
Industry wide Programme to implement a new Target Operating Model (TOM) for the electricity market where site-specific, half-hourly energy consumption is recorded for all metering points. The planned programme go-live was 2025, but the anticipated dates for a change to the new Settlement timetable are December 2026 –May 2027. Migration of Meter Point Administration Numbers (MPANs) is due to occur between April 2025 and October 2026

Where did this come from?
In 2017 Ofgem initiated the Electricity Settlement Reform Significant Code Review (SCR) and published their decision in April 2021. The output was that Market-Wide settlement reform is a key enabler of the move to a smarter, more flexible energy system and has a fundamental role in delivering the smart systems and flexibility plan towards Net Zero

What is cost of delay?
DESNZ and Ofgem have reported that for each year of delay to implementation of MHHS, there is £90m p.a of lost benefits to consumers

MHHS – Benefits of Settlement Reform

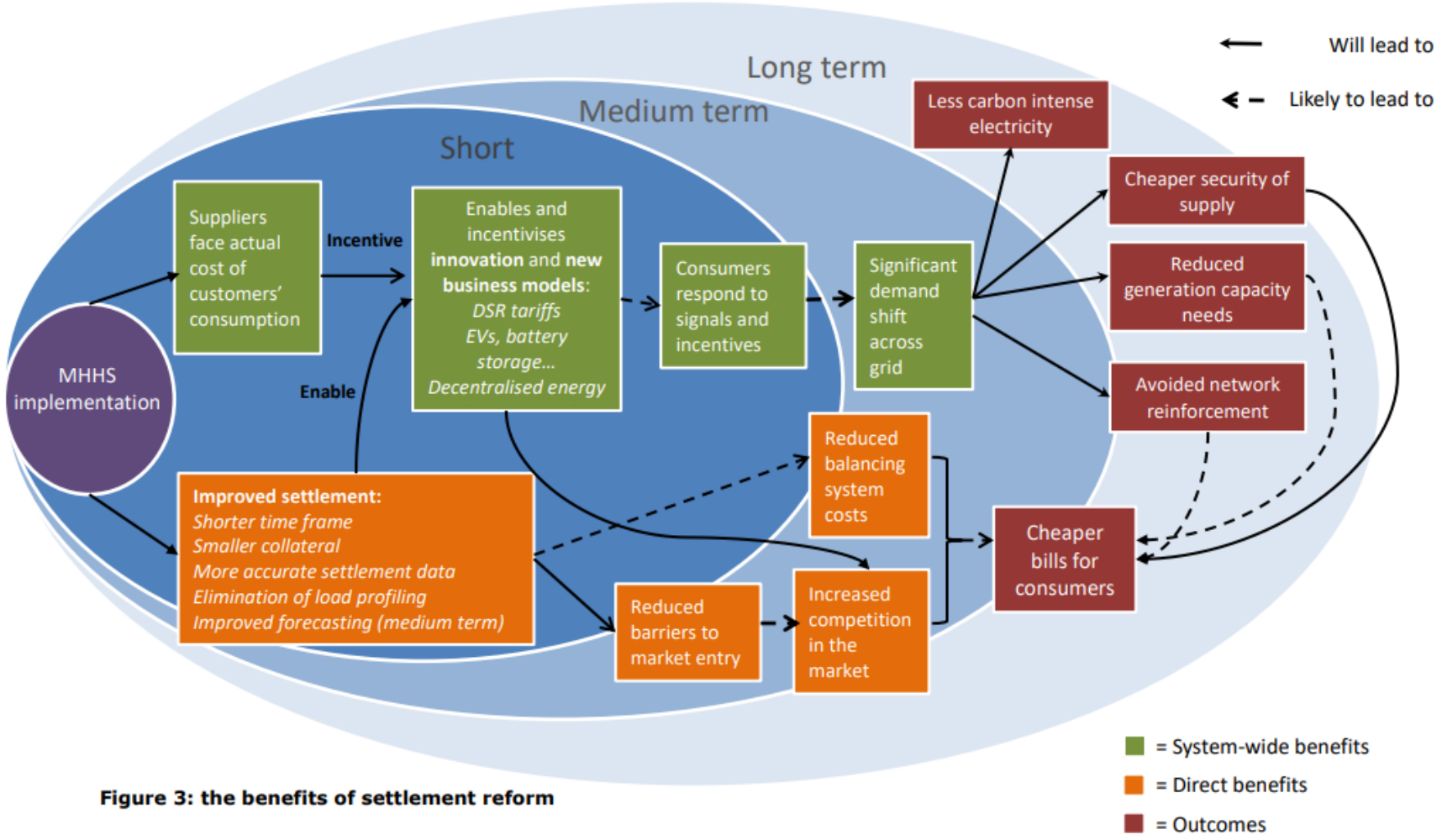
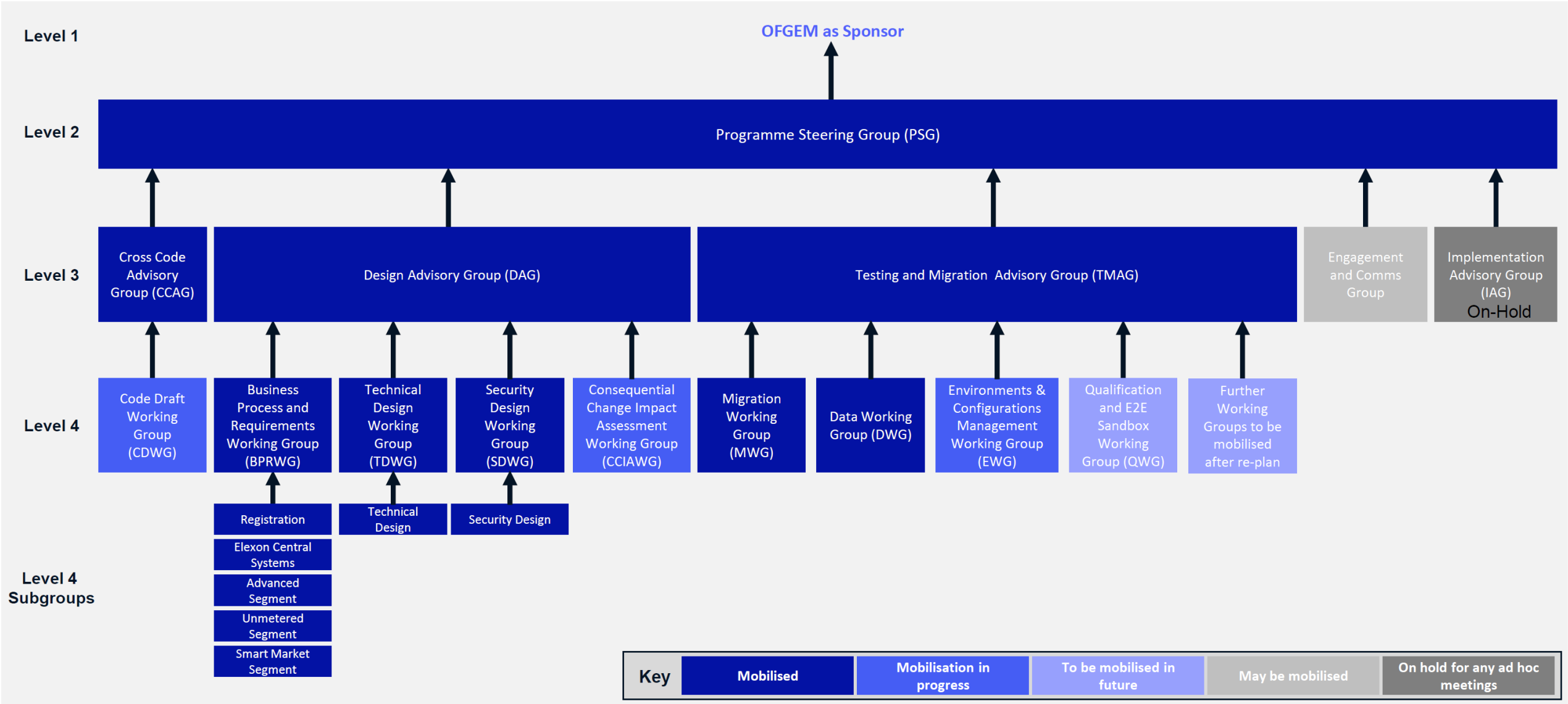


Figure 3: the benefits of settlement reform

Source: https://www.ofgem.gov.uk/sites/default/files/docs/2018/08/marketwide_settlement_reform_outline_business_case.pdf

MHHS Governance Structure

MHHS Governance and Decision-making Structure



MHHS PROGRAMME
Industry-led, Elexon facilitated

MHHS Milestones

Ofgem Project Milestones – Replan dates

Milestone Ref	Milestone Title	Replan Date	Description
M6	Code change and detailed design recommendations delivered	Aug 24	The (Code Drafting Work Group) CDWG will deliver the recommendations aimed at addressing any outstanding areas of the DWG's TOM design, and will deliver the recommendations for the changes to the Industry Codes and subsidiary documents necessary to enable the TOM.
M7	SCR Powers enabled	Nov 24	Time limited (5 year) powers in Primary Legislation for Ofgem to make changes to Industry Codes for the purposes of MHHS are activated.
M8	Code changes delivered	Mar 25	All changes to regulation (licences, industry codes (including BSC, SEC, REC, DCUSA)) have been made setting out the regulatory baseline.
M9	System Integration Testing Start	Oct 23	System Integration Testing (SIT) involves the central parties (Elexon, DCC, comms network providers and the registration system providers) along with a number of agents and suppliers.

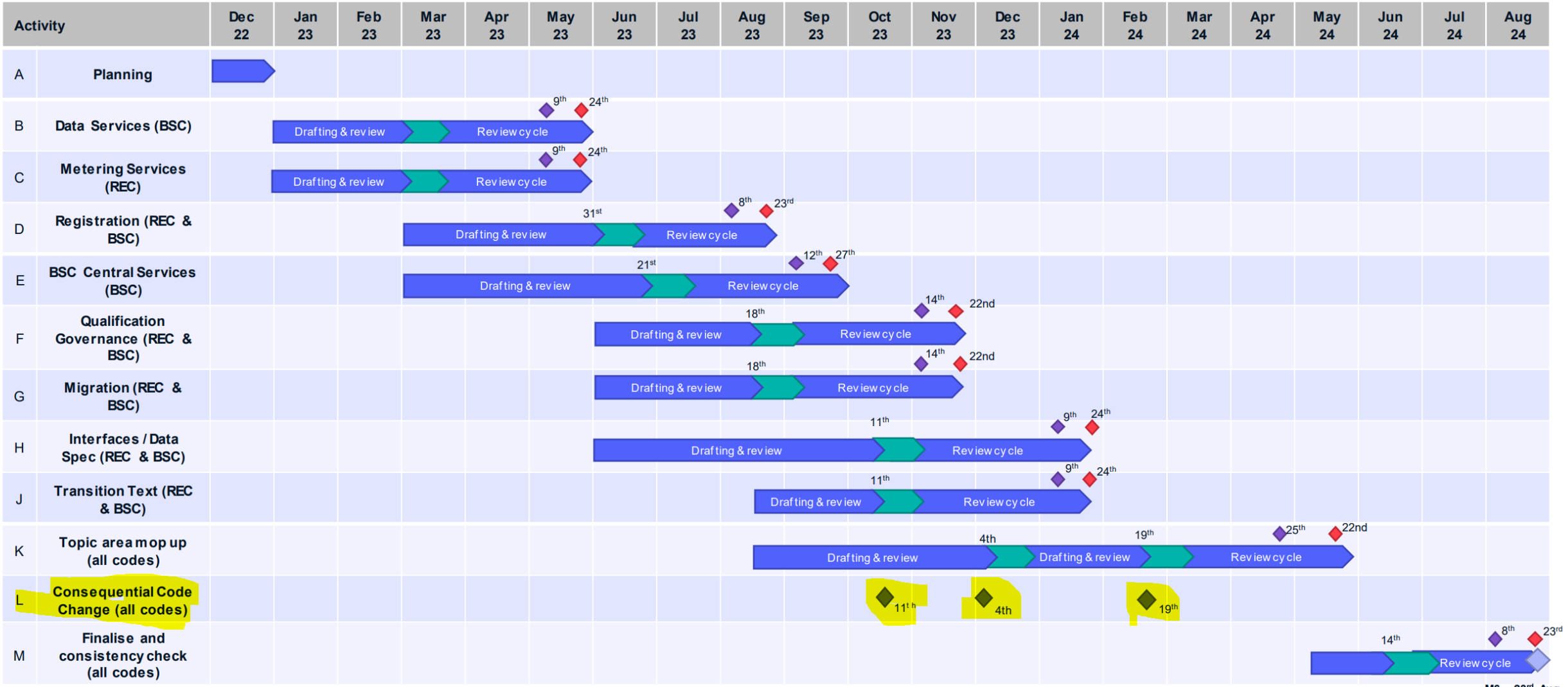
Ofgem Project Milestones – Replan dates

Milestone Ref	Milestone Title	Replan Date	Description
M10	Central systems ready for migrating MPANs	Mar 25	Following completion of the testing phase (excluding TE18 Security Testing), the Central Systems (BSC central systems, registration, DCC and communication systems) will be ready to initiate migration of Meter Point Administration Numbers (MPANs) from the current market roles into the new market roles.
M11	Start of 1 year migration for UMS/Advanced	Apr 25	Start of migration window for suppliers to move all UMS and advanced meter points to be settled in the new arrangements.
M12	Start of 1 year migration for Smart/Non-smart	Apr 25	Start of migration window for suppliers to move all smart and non-smart meter points to be settled in the new arrangements.
M13	Load Shaping Service switched on	Mar 25	The LSS will be switched on after a period used to gather and validate settlement period level data from the smart meter data service.
M14	All suppliers must be able to accept MPANs under the new TOM (one way gate)	Mar 26	Deadline by which all suppliers must have the systems and services in place to accept MPANs under the new TOM. From this point MPANs cannot be moved back into NHH regime on change of supplier.
M15	Full transition complete	Oct 26	Completion of implementation activities including 18 month migration.
M16	Cut over to new settlement timetable	Dec 26	The date of the cut over to the new settlement timetable will occur after the end of migration. The decision on when the settlement timetable should be reduced should be taken nearer the time, and on market monitoring against trigger points. Industry should ensure that the new settlement timetable is introduced as soon as practical after the end of migration, ideally 2 months
M16*	Cutover to New Settlement timetable – Latest cutover	May 27	The latest date for cutover is c.8 months after the end of migration (M15) then this decision should be brought to Ofgem

Code Drafting POAP

Key:

- Industry Consultation
- CCAG
- CDWG
- Consequential code change consultation



MHHS PROGRAMME
Industry-led, Elexon facilitated

MHHS Expectations on Code Bodies, including CUSC

CUSC Requirements under MHHS

- By February 2024, submit amended CUSC legal text to MHHS Programme reflect new arrangements effective from xx/xx/xx (date selected by Ofgem).
- MHHS Programme go out to Industry consultation between April 2024 and August with any queries being sent back to Code Body for response.
- CCAG Approve in August 2024 and send to Ofgem for review.
- Modifications to each code will be raised as Authority-Led SCR Modifications.
- Ofgem will look to approve CUSC changes using SCR Powers in March 2025 along with other Code Body changes.
- ESO is still discussing internally and on a bilateral basis with Ofgem on how this affects Tariff setting for the relevant Charging Year when Migration starts

MHHS treatment of Measurement Class in the BSC

BSC Measurement Classes

BSC defined definition

A classification of Metering Systems which indicates how Consumption is measured i.e.

- Non Half Hourly Metering Equipment (equivalent to Measurement Class “A”)
- Non Half Hourly Unmetered Supplies (equivalent to Measurement Class “B”)
- Half Hourly Metering Equipment at above 100kW Premises (equivalent to Measurement Class “C”)
- Half Hourly Unmetered Supplies (equivalent to Measurement Class “D”)
- Half Hourly Metering Equipment at below 100kW Premises with current transformer (equivalent to Measurement Class “E”)
- Half Hourly Metering Equipment at below 100kW Premises with current transformer or whole current, and at Domestic Premises (equivalent to Measurement Class “F”)
- Half Hourly Metering Equipment at below 100kW Premises with whole current and not at Domestic Premises (equivalent to Measurement Class “G”)

Removal of Measurement Classes as part of MHHS

- Measurement Class as a concept/data item will not exist under the MHHS arrangements, as outlined in Ofgem's Final decision letter from 20th April 2021 on the Full Business Case for MHHS (p25 Clause 3.10).
- From April 2025 – October 2026 (migration period), once a site migrates to the new settlement arrangements, there will be no Measurement Class held for that site. This is true for both sites that are HH and NHH settled pre-migration.
- Measurement Class is not being deleted from MDD, but MDD is being replaced under MHHS by Industry Standing Data (ISD) and ISD does not contain Measurement Class.
- When an MPAN moves to the new MHHS arrangements, the P0210 (TUoS – HH/NHH Split) file will no longer show a Measurement Class identifier.
- Migration will be done by Supplier MPANs by group during the Migration period
- If an MPAN changes Suppliers during the course of the Migration period and ends up with a Supplier that is still on the old arrangements, there is the concept of Reverse Migration which means that P0210 Measurement Class information would be re-instated.

Impact on MPANs

- As it stands, once a site moves to the new TOM arrangements, it will be treated as a Half Hourly settled irrespective of how site is metered.
- If the end consumer changes Supplier who is participating in new arrangements between April 2025 and October 2026 to a Supplier who is not, the end consumer will move back into the old arrangements
- It has been established that the new/updated Consumption Component Class (CCC) indicators will not be adequate for segmenting data to create a pseudo Measurement Class
- The TUoS Report, (file, P0210 – Half Hourly HH / Non Half Hourly NHH Split) states that HH data is provided for Measurement Classes C,D,E,F and G.
- ESO then uses this information to charge for HH Demand
- CMP401 extended the protection of Double Charging for MPAN's in Measurement Classes F and G (extending P272 and CMP318) should there be a change in Measurement Class during the year to prevent HH and NHH Charging during the same Charging Year. This protection no longer exists for MPAN's in the new arrangements.
- Subsequently, there is a risk of double charging of end consumers MPANs depending on when Suppliers move to the new arrangements i.e. portion of year on old arrangements/ rest on new if nothing changes.

Current TNUoS Charging Methodologies

M6 - CUSC Charging – (TNUoS)

- How are suppliers and directly connected demand charged for TNUoS?
- Half Hourly Settled (generally commercial) :
  - Half hourly customers are charged according to the demand (MW) they take over the three ‘Triad’ periods each year; the charge is levied through a £/kW tariff
  - Triads are defined as the three half-hours with the highest system demand, between November and February, separated by at least ten clear days.
  - TNUoS tariffs are set a year ahead and charges are reconciled based on actual usage at the end of that year. Users are then billed monthly for this TNUoS charge
- Non Half Hourly (generally domestic, or smaller non-domestic premises) :
  - Non half hourly charges are based on their annual consumption between 4 and 7pm (in kWh), through a p/kWh tariff.
- For all final demand customers, there is a daily site charge which replaced the previous residual charge.

TNUoS Task Force – Problem statements and ask

Problem Statements and Ask

Problem Statement :

- How do we address changes to CUSC, protect end users from double charging implications by April 2025 (Start of Migration), while fitting in with MHHS Programme M6 and not being a blocker to the success or delaying implementation?
- What should TNUoS charging look like after MHHS Migration?

Ask :

- The ESO has come up with some initial potential solutions to resolve the double charging but would welcome your ideas and thoughts on how to remedy the situation and find an innovative solution as part of the Signals work

Potential Solutions

Information contained on Slides 24-27 is not the policy position of the ESO. The potential benefits, risks and consumer impacts are included as discussion points

Solution 1 – All MPANs Move to Triad Methodology or replacement

- Benefits/Upside
- CUSC obligations will be met to allow MHHS Programme to be delivered (assuming nothing changes)
- Consumers will be able to access benefits of flexible dynamic tariffs by Suppliers

- Risks/Downside
- Delay to the MHHS Programme preventing access to new tariff arrangements
- All Suppliers will not move at the same pace and consumer benefits may be delayed

- End Consumer Impact
- Adverse cost impacts as domestic consumers will be subject to HH Charging Methodology
- Negation of benefits of MHHS Programme

This is not the policy position of the ESO. The potential benefits, risks and consumer impacts are included as discussion points

Solution 2 – All MPANs Move to Non Half Hourly Methodology

- Benefits / Upside
- CUSC obligations will be met to allow MHHS Programme to be delivered (assuming nothing changes)
- Suppliers not charged as much, so could re-invest in infrastructure, Net Zero etc
- Reduced bills for end consumers as lower pass through costs

- Risks / Downside
- Delays to the MHHS Programme preventing access to new tariff arrangements
- Suppliers may not pass on benefits
- Material changes of HH (Commercial Charging) arrangements in future may be harder to introduce/enforce - as they will undoubtably be more penal than this arrangement

- End Consumer Impact
- Potentially increased Supplier focus on domestic end consumers rather than commercial

This is not the policy position of the ESO. The potential benefits, risks and consumer impacts are included as discussion points

Solution 3 – Try to maintain the Status Quo of the best P0210 File

- Benefits
- CUSC obligations will be met to allow MHHS Programme to be delivered (assuming nothing changes)
- Reduced impact on Suppliers trying to resolve consumer queries
- This “fixes” the issue on a temporary basis for some sites and means that for Day 1, things work – sticking plaster solution
- ESO Charging teams

- Risks
- Not all MPANs from Measurement Classes C and F are going to be able to be validated
- Some MPANs will incur Double Charging but expected to be a minimal amount – indications from Elexon are that we have a 95% comfort level. Information from Suppliers is needed to validate this.

- End Consumer Impact
- Most consumers will see little impact

Solution 4 – Exhaust all avenues and issue a Change Request to MHHS to re-instate Measurement Classes

- Benefits
- Pre Migration TNUoS charging arrangements can remain in place throughout the MHHS Migration

- Risks
- Large changes required at MHHS to change Programme Design
- Increased resource requirements at Elexon
- Limited benefit as changes could be redundant at end of Migration depending on enduring arrangements for demand charging
- May not be able to be delivered in current Milestones, so delaying MHHS Programme
- A high cost, limited return option

- End Consumer Impact
- Status Quo fully retained - so no adverse consequences
- Once migrated by their Supplier, would be able to extract MHHS intended benefits – ToU tariffs etc

This is not the policy position of the ESO. The potential benefits, risks and consumer impacts are included as discussion points

Annex

New Consumption Component Classes

ISD Entity ID M5 - MHHS Consumption Component Classes

CCC ID	Market Segment Indicator	Measurement Quantity	Consumption Component Indicator	Connection Type Indicator	Settlement Period Quality Indicator

Column Name	Data Type/Length	Other information
CCC ID	Int(3)	Mandatory. Unique Identifier for MHHS Consumption Component Classes
Market Segment Indicator	1 character	Mandatory. Either 'U', 'S' or 'A'
Measurement Quantity	2 characters	Mandatory. Either Active Import 'AI' or Active Export 'AE'
Consumption Component Indicator	1 character	Mandatory. Either Consumption 'C' or Losses 'L'
Connection Type Indicator	1 character	Mandatory. Either W, L, H, E or U
Settlement Period Quality Indicator	5 characters	Mandatory. E.g. A, E1, E2, E3, E4

Source: Industry Standing Data: MHHS Entities/Data Items Version 5.3

New Market Segment Indicator

ISD Entity ID M1 - Market Segment

Market Segment Indicator	Effective From Settlement Date {MSI}	Market Segment Description

Column Name	Data Type/Length	Other information
Market Segment Indicator	1 characters	Mandatory. Either 'U', 'S' or 'A'
Effective From Settlement Date {MSI}	Date	Mandatory
Market Segment Description	Up to 50 characters	Mandatory

Example:

Market Segment Indicator	Effective From Settlement Date {MSI}	Market Segment Description
U	2025-04-01	Unmetered Supplies Market
S	2025-04-01	Smart and Non-smart Market
A	2025-04-01	Advanced Market Segment

Source: Industry Standing Data: MHHS Entities/Data Items Version 5.3

New Connection Type Indicator

ISD Entity ID M2 - Connection Type Indicator

Connection Type Indicator	Connection Type Description

Column Name	Data Type/Length	Other information
Connection Type Indicator	1 characters	Mandatory, Either W, L, H, E or U
Connection Type Description	Up to 50 characters	Mandatory. Either Whole Current, Low Voltage with Current Transformer. High Voltage with Current transformer, Extra High Voltage with Current Transformer or Unmetered

Example:

Connection Type Indicator	Connection Type Description
W	Whole Current
L	Low Voltage with Current Transformer
H	High Voltage with Current transformer
E	Extra High Voltage with Current Transformer
U	Unmetered

Source: Industry Standing Data: MHHS Entities/Data Items Version 5.3

Charging Futures

Reforming electricity charging together

Break

Next session starts at 15:30

AOB

- Location on November meeting.
- Mod tracker and interactions with Taskforce.
- Collaborative workspace (Teams/SharePoint).
- TCMF rota.
- Innovation feedback.

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Next Steps and Close

Jamie Webb

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Reforming electricity charging together

Thank you

Where CUSC Mods in Play or Awaiting Decision, fit into the TF Workstreams

Mod	What is it	Where it's at	Which TF Workstream and why ?
CMP286/7	Predictability: Increased notice of target revenue and other inputs used in Tariff-Setting	Sent back June; procedural issues and lack of standalone analysis for 287	Data inputs (TF Priority 3) "Identify data inputs that drive volatility" Backgrounds (TF Priority 1) "Should backgrounds be locked down" Signals (TF Priority 2) "Long term fixing" (a weak mapping as is not long term)
CMP292	Cut off date for charging changes six months ahead of the start of each charging year	Implemented	Signals: "Long term fixing" (a modest/weak mapping to this line, as it is not very long term in its effect)
CMP315/375	Making the expansion constant once again reflect changes in TO build costs; has built-in smoothing-in of new TO cost data; WACM2 also builds up to 30 year TO cost averaging	Soon to go to CAC, Panel vote & FMR to Ofgem	Signals: "Impact of fixing on levels of cost reflectivity i.e. consider pace at which network changes" (the smoothing-in of new cost data per year, significantly slows down the impact of changes in TO investment cost data on the slope)

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Where CUSC Mods in Play or Awaiting Decision, fit into the TF Workstreams

Mod	What is it	Where it's at	Which TF Workstream and why ?
CMP316/397	TNUoS Arrangements for co-located generation sites (e.g. mixed conventional and intermittent generation) A proportion of TEC to be assigned to each tech type, each with its own ALF, & apply charges pro-rata	CAC is next.	Technology type (TF Priority 6): "Is it appropriate to treat different technology types differently? If there should be different treatment what level of granularity do we need in terms of technologies? Do we have the correct generation categories?"
CMP331	Option to replace generic Annual Load Factors (ALFs) with user ALFs		Data inputs (TF Priority 3): "Review of Annual Load Factors (ALFs)"
CMP405	TNUoS Locational Demand Signals for Storage	At WG	Signals (TF Priority 2): "Principles for locational demand charges i.e. should signals be investment/operational & level of visibility of signals for various size users; Are Triads still fit for purpose –do they need to change / consider an alternate?; Appropriateness of negative locational charges for generation, and or demand – consistent treatment"

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Where CUSC Mods in Play or Awaiting Decision, fit into the TF Workstreams

Mod	What is it	Where it's at	Which TF Workstream and why ?
CMP393	Using Imports and Exports to Calculate Annual Load Factor for Electricity Storage	WG	Data inputs (TF Priority 3): "Review of Annual Load Factors (ALFs)" Technology type (TF Priority 6): "Is it appropriate to treat different technology types differently?"
CMP413	Rolling 10-year wider TNUoS generation tariffs	WG	Signals (TF Priority 2): "Long-term fixing of TNUoS and the impact on signals; Impact of fixing on levels of cost reflectivity i.e. consider pace at which network changes and investment timescales".
CMP419	Generation Zoning Methodology Review	WG	Reference Node (TF Priority 4): "Consider changes to zoning and how this may impact reference node suitability".
298, 304, 305, 328, 330/374, 341, 344, 376, 379, 392, 398/412, 402, 403, 404, 408, 411, 412, 414, 415, 416, 417, 418	These are miscellaneous live CUSC mods that do not map to TF work areas/priorities.		

Charging Futures

Actions from Meeting 8

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
1 15/09	3	Check whether OpTIC would smoothen step changes in network development, check whether the model could cope with half a circuit. Consider timing and frequency of phasing data with ESO outputs.	JD		Ongoing	Open
2 15/09	5	Set up a working session between the OpTIC proposers and ESO NOA experts (including exploration of risk)	CP	HH happy to be part of this conversation	TBC	Open
3 15/09	5	Set up bilateral conversations with OpTIC proposer to pick up specific questions	GMa, Amo, PJ		Ongoing	Open
4 15/09	5	Share thoughts with the Authority representative as to the OpTIC model falling within scope for the Task Force	Task Force		October	Open
5 15/09	6	Provide absolute values for the Y-o-Y tariff changes across regions (re: historic volatility)	Frontier/LCP		TBD with Frontier/LCP	Open

Charging Futures

Actions from Meeting 8

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
6 15/09	8/9	Check with ESO SQSS experts as to a review of sharing factors to play back to the Task Force (and the Backgrounds workstream)	JW		TBC	Open
7 15/09	8/9	Signals and Tech Type workstreams to feed back to Task Force their views on the treatment of demand raised in the Backgrounds workstream	GM, Amo		Nov/Jan meeting	Open
8 15/09	12	Contact the Abs v Rel workstream if there are other views for a case for change	Task Force		Oct/Nov meetings	Open
9 15/09	12	Contact the Abs v Rel workstream with thoughts/questions	HH		Oct meetings	Open
10 15/09	13	All workstream leads to create a high-level timeline and action plan for each workstream	Workstream leads	Timings to be collated by CP to create a longer-term Task Force road map	Meeting 9 (11 Oct) if possible	Open

Charging Futures

Actions from Meeting 7.5

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
1 18/08	2	Backgrounds Case for Change to be shared with the Task Force for review and comment	JS		Mtg 8	Open
2 18/08	2	Consider using initial workstream proposals as alternative format for information to stimulate stakeholder feedback.	Task Force	Discuss in Next Steps of Mtg 8 based on what's shared	Mtg 8-10	Open
3 18/08	4	Ownership and timings defined for the OTNR Sub-Group closure report	JS	Closure Report to be shared with TF once complete (NP @ESO)	October	Open
4 18/08	7	For completeness, Task Force members not present at Mtg 7.5 are to provide their view on progressing the Reference Node case into a modification proposal	EB, DS		1 Sept	Open

Charging Futures

Actions from Meeting 7.5

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
5 18/08	7	A one-page report for the Charging Futures website to summarise the reference node modification plans and individuals involved.	JS	To also reflect any further views not captured at TF meeting 7.5 and provided as part of action 4 above.	15 Sept	Open
6 18/08	7	Draft modification proposal to be raised.	JT		Mid-Oct (JT to advise)	Open
7 18/08	7	BAU update to TCMF with ESO/Propose to agree who will present the Reference Node proposal to relevant TCMF.	JT, JS/CP	Topic to be added to TCMF Sept agenda for BAU update, Oct agenda to present mod	31 Aug (TCMF 7 Sept for BAU update)	Open
8 18/08	8	Co-ordinate with project leads about deliverables ahead of Mtg 8	JS	Check whether the Backgrounds workstream scope of work includes scaling as a consideration	30 Aug	Open

Charging Futures

Actions from Meeting 7.5

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
9 18/08	8	Share draft 'negative scaling' modification proposal with the Task Force to review prior to submission	JS/MC	JT and Backgrounds workstream to link with this project for updates	Q4 2023	Open
10 18/08	9	Review the current modification tracker for a version to feature in future Task Force meetings or shared for visibility.	JS, CP, DS, EB	An overview to alert workstreams of mods to consider	Mtg 8	Open

Charging Futures

Open Actions from Meetings

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
1 27/07	3	Consider whether updating the 'pseudo-CBA approach' to scaling factors is currently feasible with the data available and whether case for change should include the analysis from the consultants	JT	Consider as part of Backgrounds case for change	Mtg 8	Open
2 27/07	3	Provide a viewpoint as to the extent to which scaling factors currently mitigate volatility	Frontier/LCP		Mtg 8	Open
3 27/07	3	Consider whether backgrounds are complicating understanding of how charges work or a necessary element of the cost reflectivity of the model.	Task Force		Mtg 8	Open
6 27/07	5	Review past calculations for sharing to provide a recommendation for what work would be feasible now	Frontier/LCP	Information shared by SL 28 Jul	Mtg 8	Open
7 27/07	5	Consideration of renewables in sharing (wind vs wind, treatment of solar).	Frontier/LCP	JS to assess information needed	Mtg 8	Open

Charging Futures

Open Actions from Meetings

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
8 27/07	5	Exploration of turning off sharing to see impacts on final charges and volatility	Frontier/LCP		Mtg 8	Open
9 27/07	8	Consider calculating using a 5 year average rather than current 5 year method	Frontier/LCP		Mtg 8	Open
11 27/07	8	Consider the information available to share with consultants & TF re: potential new ESO products and impacts on FPN, and possible new data input modification	JS		TBC: updates can follow after final internal reviews of proposed products	Open
12 27/07	8	Absolute values to be shared for the impact of using FPN only on Year Round components of the tariff.	Frontier/LCP	Material impacts possible for different scales of plant	Mtg 8	Open
13 27/07	8	Contact DNOs for information on key assumptions used in their Wk 24 forecasting.	JS, NW		Mtg 8	Open

Charging Futures

Open Actions from Meetings

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
14 27/07	8	Consider aligning Week 24 data with the SQSS change and move to gross demand.	JZ		Mtg 8	Open
15 27/07	8	Contact TOs for a view on what data inputs could be more regularly updated (re: locational tariff calculations) with a material impact and their view on revenue being deferred for a year	JS, NW	Will form part of wider Data Inputs workstream and discussion	Ongoing	Open
5 26/06	3-7	Can indicative monetary values be provided for the impacts of the different backgrounds on differently-sized projects.	Frontier/LCP		Mtg 6-10	Open
7 26/06	3-7	Additional analysis shared on metrics used to compare volatility between actual and estimated charges.	Frontier/LCP		TBC – Frontier need a steer on what is required	Open

Charging Futures

Open Actions from Meetings

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
10 26/06	3-7	Bring together the Task Force representatives and the ESO SQSS Review team (when in a position to do so) to discuss potentially parallel/overlapping interests.	JS, SS to explore with BD	To feed into case for change if required	TBC	
11 26/06	8-10	Consultants are to explore the questions raised on zoning	Frontier/LCP	Considering what adding more zones would do to the existing Ref. Node work? Clarity needed around the definition for zones & differing from sharing factors. Frontier to provide additional note for pack?	Mtg 8	
12 26/06	8-10	Revisit ESO work on embedded generation in relation to the transport model and share with the Task Force if relevant	JS & NW	To consider as part of distributed generation element work package	Ongoing	

Charging Futures

Open Actions from Meetings

ID/ date	Agenda Item	Description	Owner	Notes	Target Date	Status
14 26/06	12	Task Force members are to engage industry colleagues and stakeholders and feed back at the next virtual meeting (incl. substantive effects on other work)	Task Force	TF decision on format and whether workstream proposals will serve this purpose	Ongoing	Open
1 26/04	1	Provide update on recruiting Non-Domestic user reps to Task Force	JS & NW	Discussions ongoing for a named rep. Non-Domestic Supplier forums updated by JS	Ongoing	Open
8 26/04	7	Further work on design vs cost reflectivity to be presented at Mtg 6	JS & NW	Feedback from legal and SQSS to be shared by JS via feed into case for change relating to Backgrounds	Mtg 8	Open
10 26/04	7	Investigate more granular data sources for DNO embedded distribution to support the methodology & analytics	JS	Need TF to identify the data needs before exploring sources (part of Distributed Generation work)	TBC	Open

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