

# **The Targeted Charging Review: stakeholder workshop**

**26 April 2017**

ofgem

2.00	Introduction	Frances Warburton
2.20	Residual charges: options	Judith Ross
2.40	International experience	Patrick Taylor (CEPA)
3.10	Tea/coffee break	
3.30	Discussion of proposed principles	All
4.00	Report back from tables	All
4.30	Charging Coordination Group	Andrew Self

# Introduction: the changing energy system

## Forward Work Plan 2017/18

- The way energy is produced, generated, transported, stored and supplied to consumers is changing. The drive to reduce carbon emissions and the deployment of new technologies means the energy system is in transition to one that is lower carbon, more decentralised, and more dynamic and responsive.
- We are proposing to work in this area under these **three themes**:
  1. Considering how the **future network regulation, forward-looking charging, access and wholesale markets** may need to evolve to support a wide range of future outcomes.
    - This includes our work on the future System Operator (SO), flexibility, future-focused strategy and regulation of heat networks
  2. Addressing how **some other network charges are recovered from users**, in particular how residual charges are recovered from network users, so that distortions are reduced and all users are treated fairly.
    - This includes our work on embedded benefits, the **Targeted Charging Review** in electricity and supporting the Gas Charging Review
  3. **Facilitating the key enablers of this transition** to ensure the critical infrastructure is in place. This will support the move to a smarter and responsive energy system by ensuring timely, accurate and relevant information is available to consumers and other market participants, based on efficient and responsive processes.
    - This includes our work on the smart meter rollout, half hourly settlement, Project Nexus, code governance reform and Innovation Link

- Network companies are regulated using price controls (now under RII0) which determine the amount of revenue they can recover from those who use their networks. This revenue recovers ongoing costs as well as a return on past investment. Most of these costs are fixed in the short-to-medium term (with a few exceptions), in particular since network assets have typically long asset lives.
- Electricity network charges include transmission network charges and distribution network charges and together comprise about 25% of the typical electricity bill
- Charges for using the transmission and distribution networks currently include connection charges (for connecting to the networks) and 'use of system' charges which are levied for ongoing use of the networks.

# Background: network charges

- There are broadly two types of network ‘use of system charges’:
  1. **Forward-looking charges** which aim to reflect the costs associated with generating or consuming energy at particular locations on the network. These charges are often calculated using Long Run Marginal Cost (LRMC) models and are designed to provide incentives for efficient use of the system.
  2. **‘Residual’ charges (sometimes called cost-recovery charges)**, which are the ‘top up’ part of network charges to ensure regulated network companies receive their allowed revenues. These charges do not specifically relate to particular network costs.

<b>2017-18</b>	<b>Residual/scaling charges</b>	<b>Total network charges</b>
	<b>£million</b>	<b>£million</b>
Transmission generation	<b>32</b>	<b>453</b>
Transmission demand	<b>2,258</b>	<b>2,255</b>
Aggregate distribution charges <sup>i</sup>	<b>1,437</b>	<b>5,235</b>

<sup>i</sup> These are the vast majority of distribution network charges. Users connected to a distribution network at the Extra-high voltage level pay an additional c£150m in distribution network charges.

Residual charges are:

- Around 80% of transmission charges
- Around 30% of distribution charges
  - Although this varies by DNO area – in some places as high as 50%

Our consultation proposes a review of:

- Residual charges – for both transmission and distribution, and both generation and demand
- Other ‘embedded benefits’ that may be distorting investment or dispatch decisions

We propose to look at these issues in a **Significant Code Review**

We are also consulting on changes to residual charges, and BSUoS charges, for storage

- We have engaged extensively engagement with industry on charges for storage, in the Smart Grid Forum’s workstream 6, following our Position Paper in October 2015, and in relation to our joint Call for Evidence with BEIS
- If the way forward on these charges is clear, we would expect that industry could take changes forward faster than an SCR
- **This workshop is intended to focus on residual charges**

- We launched this consultation alongside our recent ‘minded-to’ decision on CMP 264 and 265 which is focussed on the Transmission Demand Residual (TDR) payments
  - The SCR is proposed to consider other elements of residual charging and embedded benefits
  - If GEMA decides not to approve any modification, there is scope to bring TDR payments within the SCR
- This work is running alongside our future-focused strategy work, which will consider other potential changes to charging structures
  - If other changes are made to the forward-looking charges, we still expect that there will be residual charges that will need to be recovered
- We plan to decide this summer on whether to launch an SCR, and its scope
  - Will take account of the responses to the TCR consultation and outcome of the consultation on the ‘minded-to’ decision
- We know there is a lot of other charging work going on in industry
  - EDCM and CDCM reviews, NG charging review, ENA’s DSO-TSO Transition Project
  - We think a Charging Co-ordination Group would help to ensure a coherent and efficient approach, and say more on this later



# Our proposed principles for residual charges

- We have considered the relevant code objectives, our statutory duties and relevant academic literature in developing proposed principles for the review of residual charges.

## *Our proposed principles:*

- Reducing distortions
  - Fairness
- Proportionality and practical considerations

# Residual charges - options

# The challenge in setting residual charges

- Forward-looking charges can be designed to provide efficient signals:
  - Which network to connect to – transmission or distribution, EHV or lower down in the distribution network
  - Where to connect
  - When to generate or use electricity

In contrast:

- Residual charges don't relate to costs we can allocate to particular users, or to particular actions they take
  - They might amplify the signals in the forward-looking charges, or dampen them
- Any system of residual charges for users will have some distortionary effect
  - We are trying to find a system with lower potential to incentivise responses that are harmful to consumers' overall interests
  - But it's difficult to predict responses – we can't predict technology costs or new business models

# Options for residual charges

Who should pay residual charges, and how much should each group of users contribute?

Which options should we pursue, or rule out? Are there others we should consider?

## *Options in our consultation:*

- Net consumption
  - Fixed charge(s)
- Fixed charges set by capacity
  - Gross consumption
  - A hybrid approach

# International experience

# Discussion of proposed principles

# Our proposed principles for residual charges

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## *Our proposed principles:*

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- What would each option mean for you?
  - Net consumption
  - Fixed charge(s)
  - Fixed charges set by capacity
  - Gross consumption
  - A hybrid approach
- Would it prompt you, or others, to change their behaviour?
- In your view, would that change have system benefits or costs, or wider benefits or costs?



- What would be fair, or unfair, in a new system of residual charging?
- What aspects of a residual charge determine whether it is fair or not?

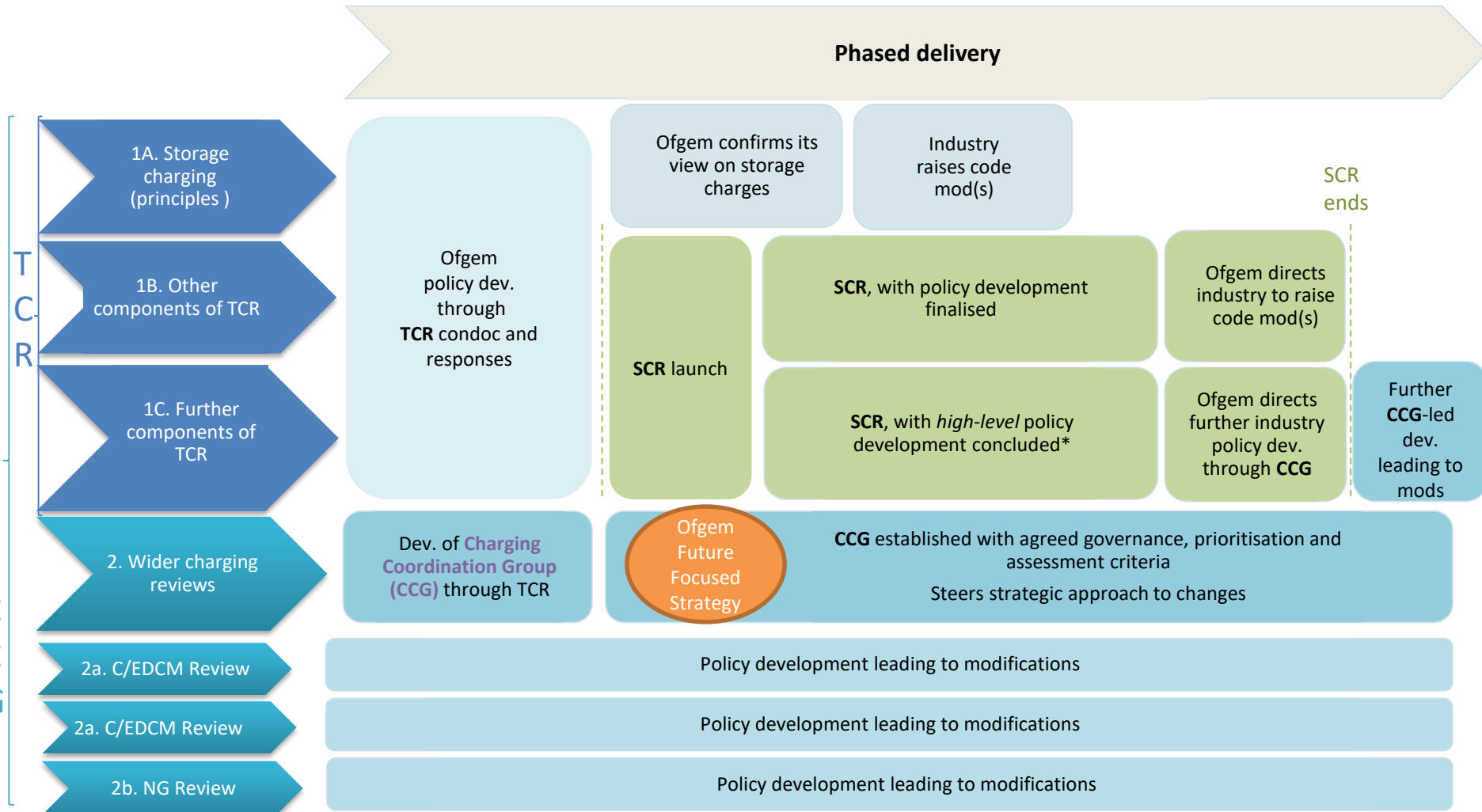
# Questions: practical considerations

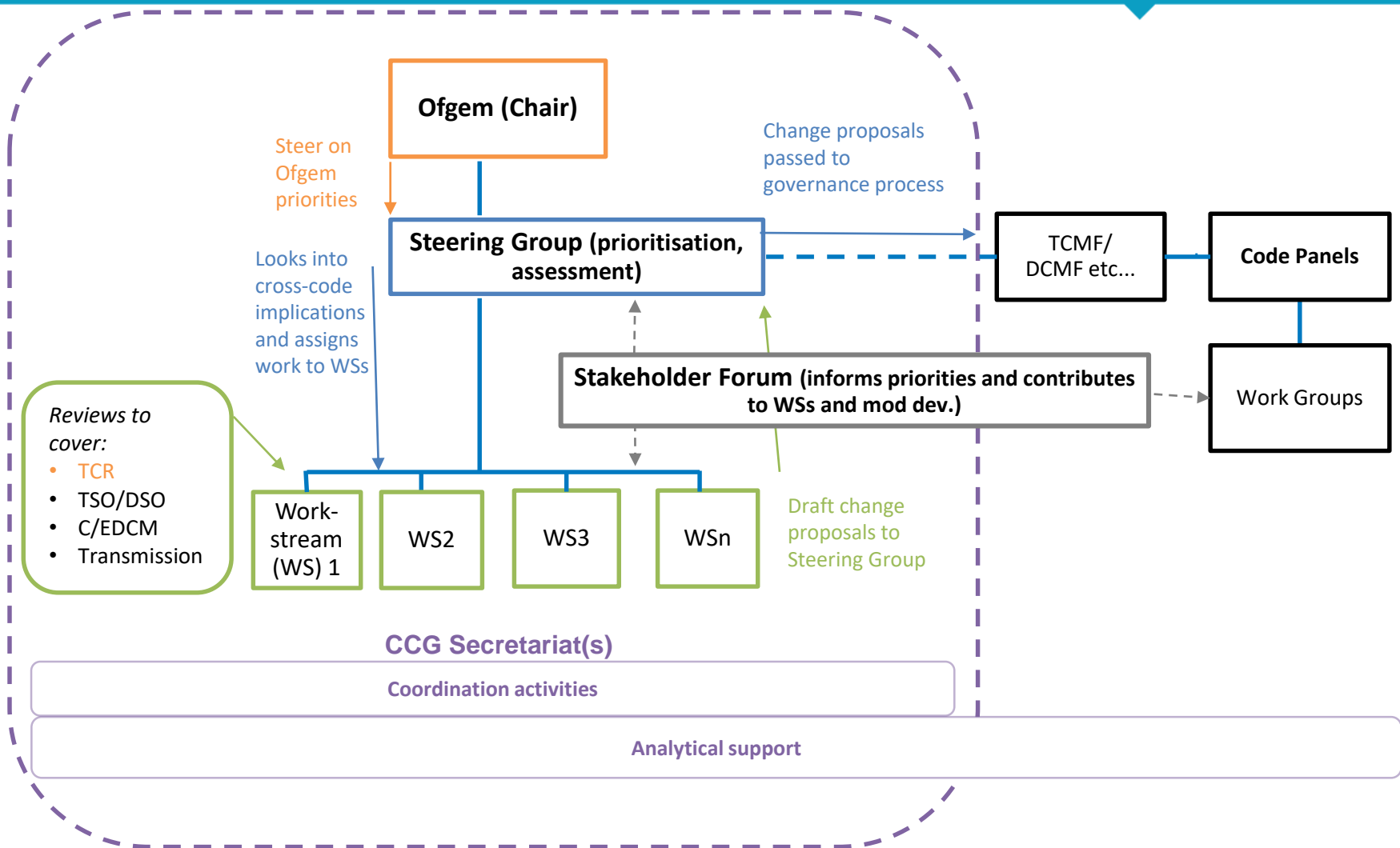
- What are the key practical considerations that we would need to consider (if we review residual charges in an SCR)?
- Are there particular implementation challenges for any option?
  - For example, related to the system design in GB?
  - Are there ways any option could be refined to be easier to implement?
- Are there specific timing issues, like interactions with other electricity system processes?

# Report back and discussion

# The Charging Coordination Group

# How our preferred delivery approach might work





*For the Steering Group to agree, once established. Will be informed by consultation responses.*

## Steering Group

- Prioritisation
- Assessment
- Examines cross-code issues
- Assigns work to Workstreams
- Passes change proposals to code governance process

## Stakeholder Forum

- Informs priorities
- Contributes to workstreams
- Contributes to mod development
- Analytical support provided by Secretariat(s)

## Workstreams

- Develop policy areas under guidance of Steering Group
- Draft change proposals to Steering Group (but not analysis for mod workgroups)

## Secretariat(s)

**Coordination activities:** Stakeholder Forum, communications, and central programme coordination

**Analytical support to CCG as a whole:** Bespoke workstream analysis; TSO/DSO consistency; Consumer impact; Long term economic assessment; (supplemented by participants in existing reviews)

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# Questions?



# Thank you!

Please respond to:

[TCR@ofgem.gov.uk](mailto:TCR@ofgem.gov.uk) *new email*