



# Developments in electricity network charging: For demand users

19 February 2018



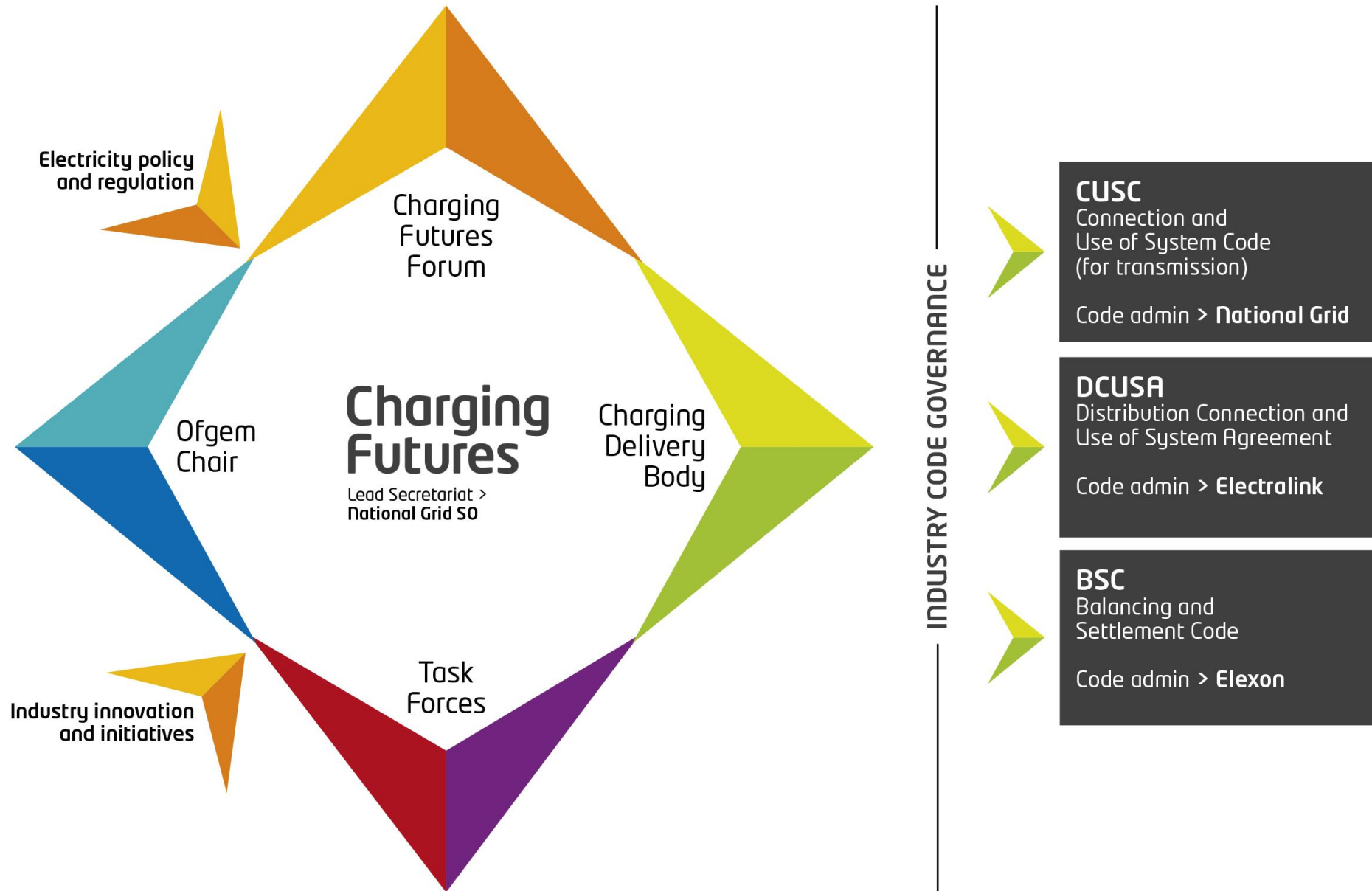


# Today

- > Charging Futures quick overview
- > Programme of reform in charging and access
  - > Access and Forward Looking Charges
  - > Targeted Charging Review
  - > Next steps
- > What this means for you as demand users
- > Q & A through webex chat

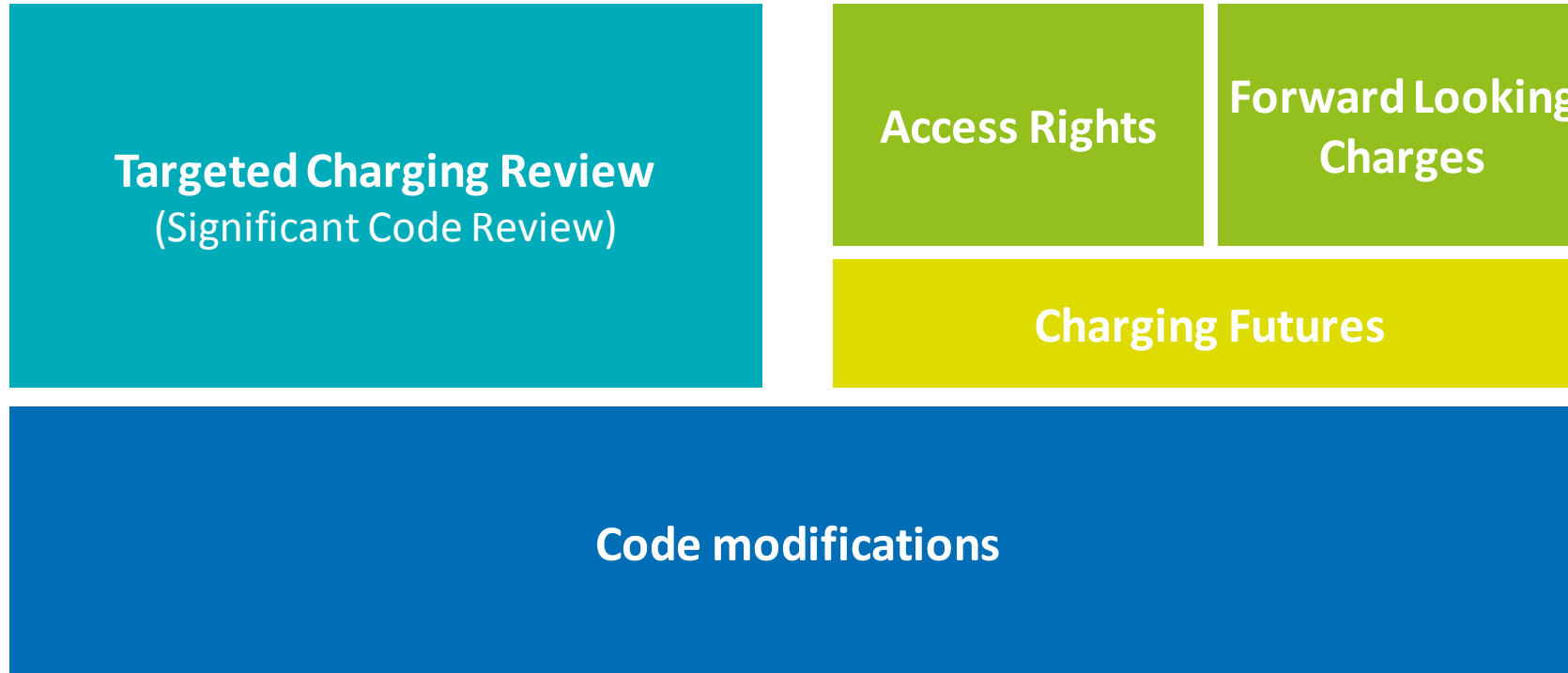


# What is Charging Futures?





# Current Change



# Quick poll

**Today's webinar hosts:**

**Stephen Perry  
& Andrew Self**

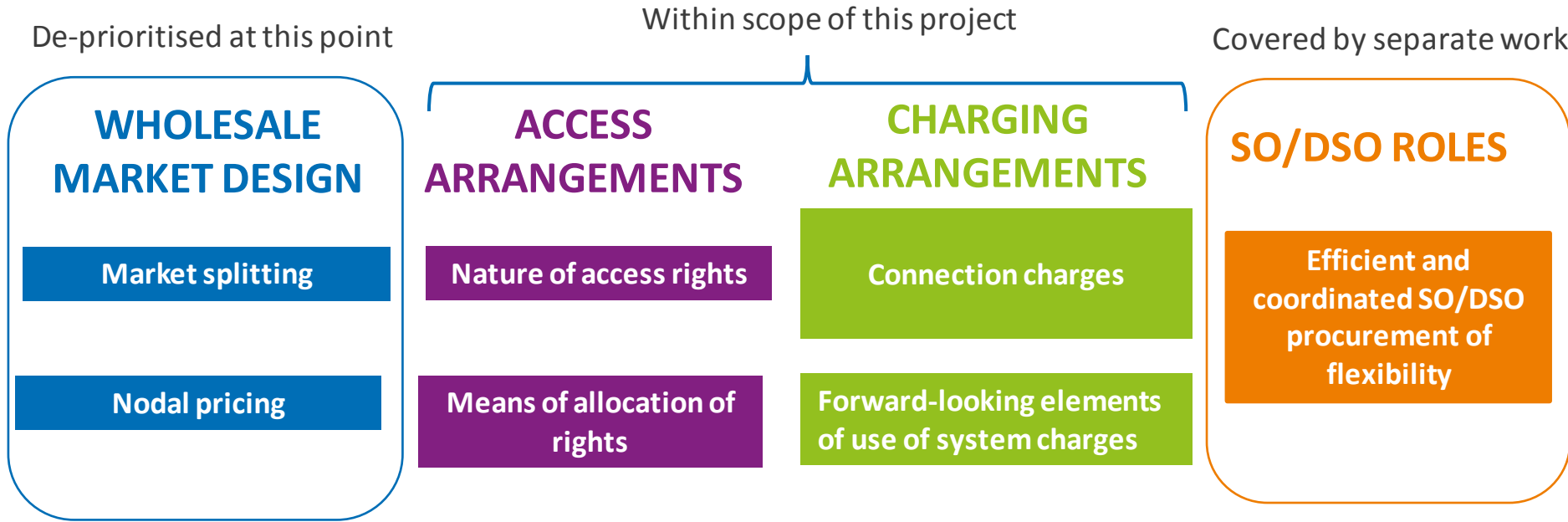
**Ofgem**



# Access Rights & Forward Looking Charges Stephen Perry



# Charging Futures Task Forces



The two main objectives of the project are to consider:

- > The nature of network access rights and whether different ways of constructing and allocating them could have value
- > The appropriate forward-looking charges for access and use of networks. This covers what changes might be merited both with and without changes to access arrangements



# What are Access Rights & Forward Looking Charges?

Some introductory concepts

## Network access rights

- The network capacity a user has allocated to them in order to import or export electricity from their target market
- Requires a connection from the user's equipment to the wider network, and then **allocated capacity on that wider network**

## Forward-looking charges

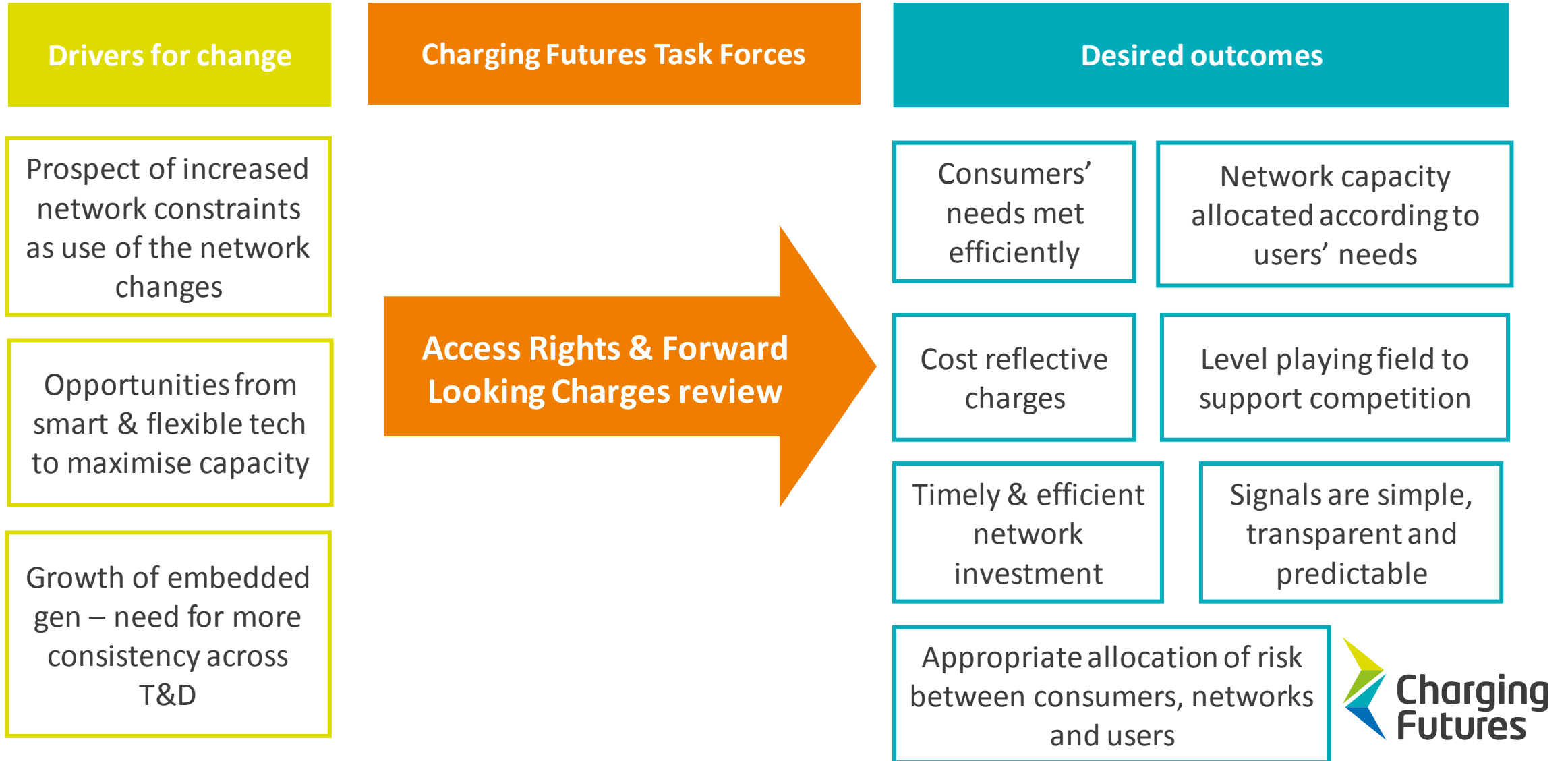
- The elements of network charges that look to provide signals to users about how their behaviours can increase or reduce future (ie incremental) costs on the network
- Includes connection charges and elements of use of system charges

## Access vs usage charges

- Access charges reflect the cost/value of providing a user with a certain amount of network access, regardless of whether the user actually ends up using it or not
- Usage charges aim to reflect the cost/value conferred on the network by the user's actual usage. May be used where less emphasis on access rights.



# Access Rights & Forward Looking Charges reform





# What are the options for change?

Network access arrangements		Forward looking network charges	
Nature of access rights	Time aspects	Structure of the charge	Types of costs
	Firmness		Types of charge
	Geographical nature		Basis of charge
Timing of payment and degree of user commitment			
Associated conditions	Level of granularity	Locational granularity	
Initial allocation		Types of locational signal	
Reallocation and trading		Temporal granularity	



# Next steps for Access and Forward Looking Charges project

## Industry engagement events:

1. 28 Feb 2018 - Charging Futures Forum, London
2. 6 March 2018 – Workshop at University of Strathclyde, Glasgow

## April 2018

CFF Network Access and Forward Looking Charging Task Forces publish their reports on their view of preferred future reforms

## Summer 2018

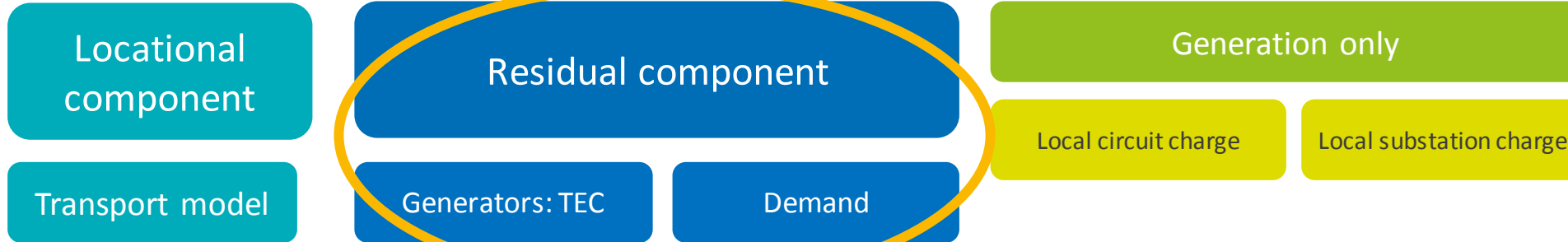
Publication of a consultancy document on future reforms of network access and forward looking charges

# Targeted Charging Review

Andrew Self

# ➤ What is the demand residual and scaling factor?

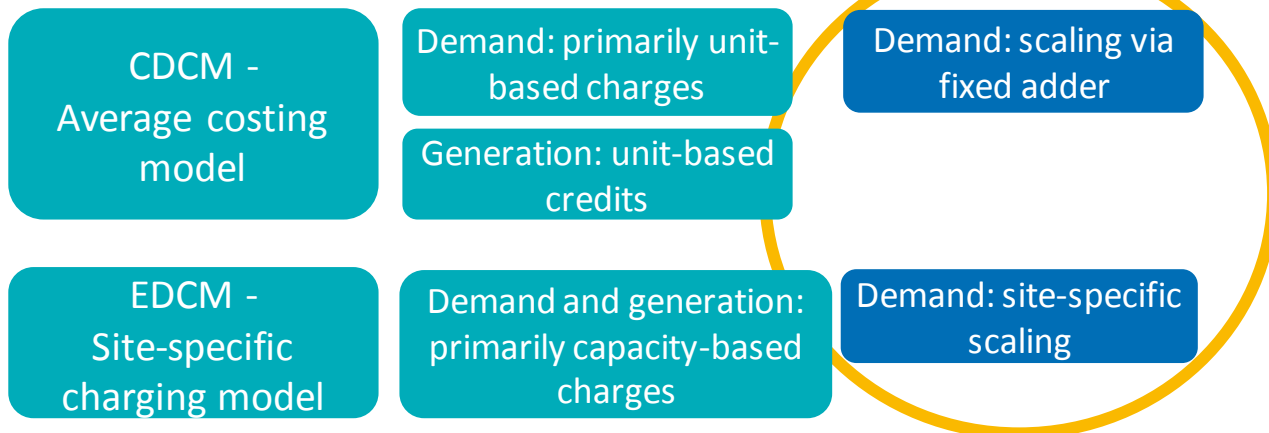
## Transmission Network Use of System Charge (TNUoS)



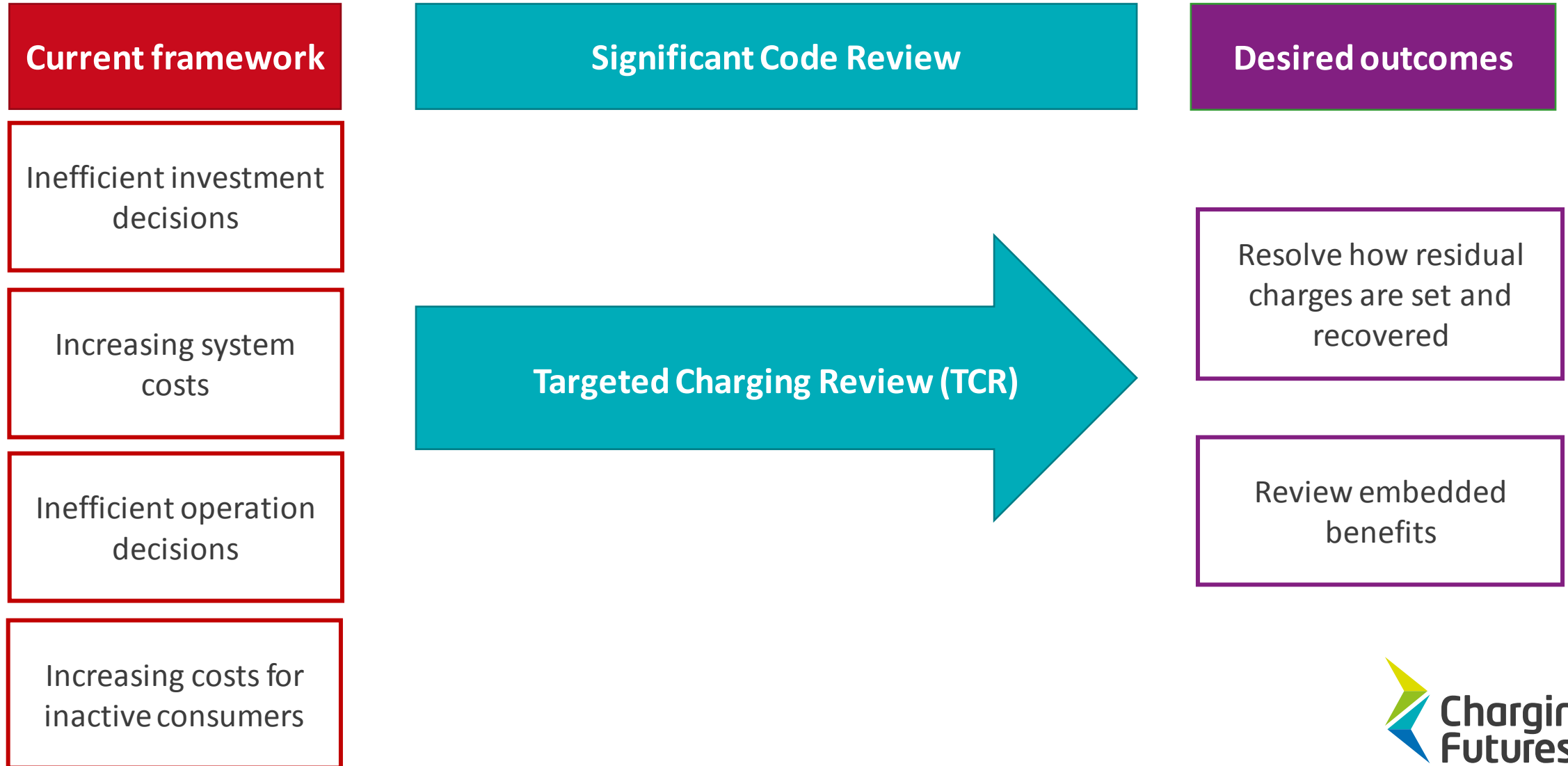
Total TNUoS split in 2018/19:



## Distribution Use of System Charge (DUoS)



# Targeted Charging Review overview





# Principles of the Targeted Charging Review

Reducing harmful  
distortions

Fairness

Proportionality and  
practical considerations



# Who should pay the demand residual and how?

Who should pay?

**Demand**

**Generation**

Our shortlist for further analysis

**Fixed charges**

- Based on a range of implementation options

**Capacity demand charges**

- Ex post
- Ex ante

**Gross consumption charges**

- For business consumers

**Baseline arrangements**

- For T and D charging

# Next steps for the Significant Code Review

Now that we have developed a short-list of options, we are ready to move on to the next phase of the SCR which will mean further analytical work.

## Three levels of analysis:

- What are the residual charges and associated incentives faced by individual users due to the existing arrangements, and how are they affected by a change in the method by which residual charges are collected?
- What aggregate (whole system) changes might be expected from a change to residual charges.
- Costs of change

# Overview of change

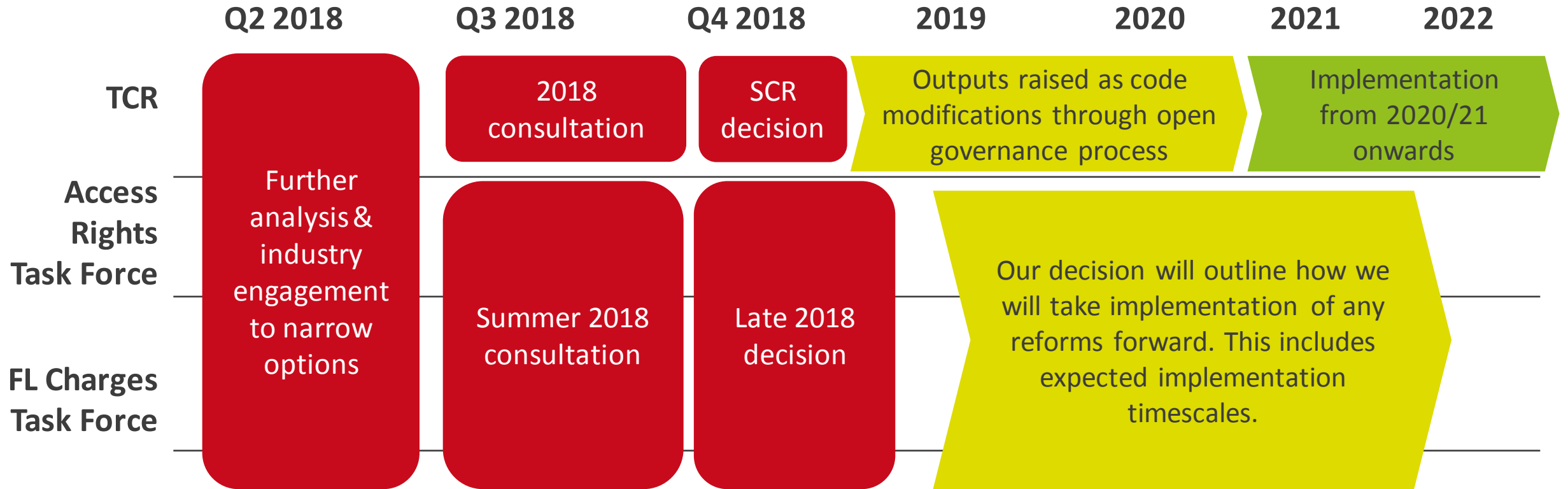
# ➤ How do these changes fit together?

**Targeted Charging  
Review  
(Demand Residual)**

**+**

**Access and  
Forward Looking  
Charges**

# Timeline for change



# Your involvement



**Learn**



**Ask**



**Contribute**



# What does this mean for me?



**Triad**

**Storage**

**BSUoS**

**Future market  
opportunities  
(Access rights allocation  
& reallocation)**



# More info

Visit the Charging Futures website for

- Introductory webinars on how transmission and distribution charges work
- Learn more about Charging Futures
- Summary notes on the progression of charging reform
  - Targeted Charging Review
  - Access and Forward Looking Charges Task Forces
  - Storage
  - BSUoS
- Sign up to the Charging Futures distribution list

[www.chargingfutures.com](http://www.chargingfutures.com)



# Quick poll

# Q & A

Please use the chat box to ask your questions

# Website:

[www.chargingfutures.com](http://www.chargingfutures.com)

# Contact:

[Chargingfutures@nationalgrid.com](mailto:Chargingfutures@nationalgrid.com)