

Access Challenge Group – 24 July 2019



Agenda topic	Time
Welcome and introductions	10:00 – 10:05
Actions update	10:05 – 10:15
<ul style="list-style-type: none"> • Project update • Purpose of today • What happens after today • Our Approach chapter • Update on outcomes of Access survey 	10:15 – 10:45
Case studies	10:45 – 11:15
Linkages with flex	11:15 – 12:00
Access rights	12:00 – 12:30
Lunch (including ability to provide feedback on each chapter)	12:30 – 13:15
Distribution locational cost models	13:15 – 14:15
Distribution (DUoS) and transmission (TNUoS) charging design	14:15 – 15:15
Breakout session: considering how options could be packaged for different case studies	15:15 – 15:45
AOB	15:45 – 16:00

Actions update

Project update

We are listening to your feedback: You wanted an opportunity to review the working paper prior to it being published. We circulated a draft version prior to this meeting.

Purpose of today: This an opportunity to provide feedback on the our draft working paper. We are keen to hear your views.

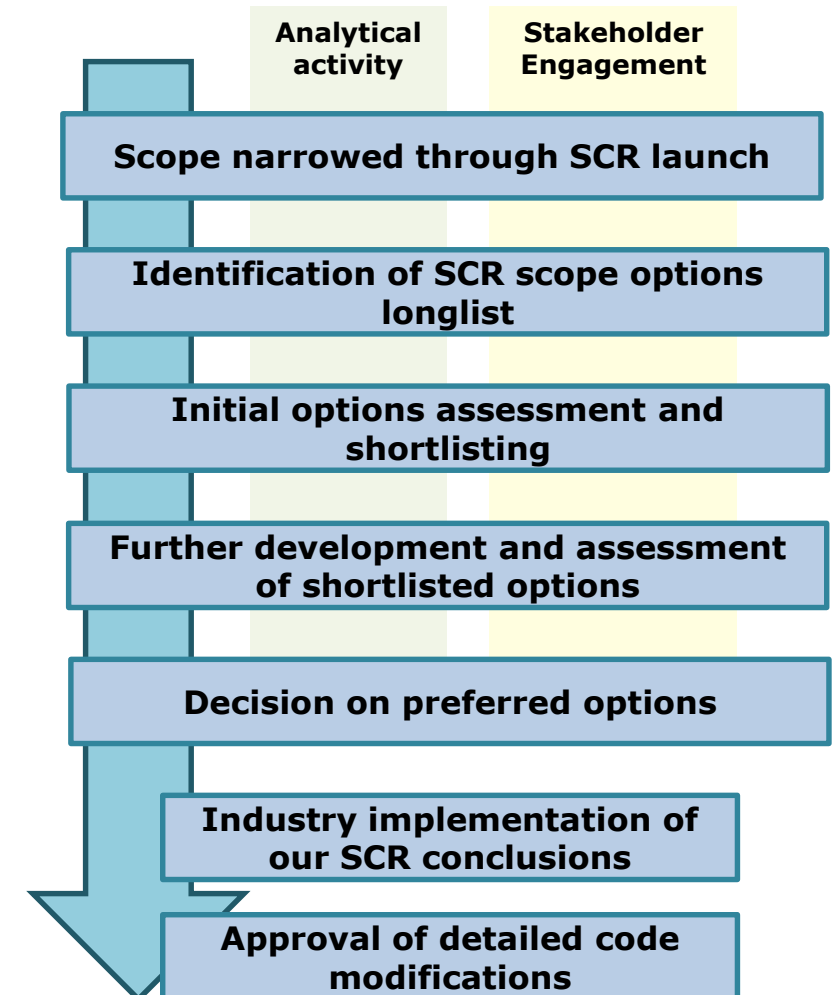
- We will take account of your feedback in developing the 1st working paper for publication later this Summer. Much of the Charging Futures Forum in September (19 Sept) will be focused on the 1st working paper.
- We will publish a second working paper at the end of the year that will focus on:
 - 1. Small user consumer protections**
 - 2. Distribution connection charging**
 - 3. Focused transmissions reforms**

The September Challenge Group will be focused on our second working paper.

- We intend to publish our minded-to decision in 2020. We currently envisage any changes will be implemented by April 2023.
- We will continue to engage with the Challenge Group and wider stakeholders to help inform our thinking.

- Our Approach Chapter in the Working Paper describes the work we have done to date in the SCR and how we currently intend to take forward the reforms for network access and forward-looking charging arrangements through the SCR process
- Since launching the SCR, we have focused on the development and analysis of a longlist of options within the areas we have prioritised as within scope of the SCR
- These options do not exist in isolation from one another and we will carefully consider the impact of relevant interactions and interlinkages in our assessment
- We intend to shortlist which options to take forward for more detailed assessment early next year. During Summer 2020 we will then consult widely on our draft conclusions as to which reforms should be taken forward.
- We will take into account the feedback to that consultation in reaching our final decision on which options should be taken forward, and we will then direct industry to raise code modifications to implement these

Simplified approach diagram



Our approach chapter also provides an update on the guiding principles which we set out in the our SCR launch paper. Where appropriate, we have developed our thinking of the considerations which underpin each of the principles. Not all of these considerations will be applicable to each option under consideration. These are summarised below but discussed in more detail in the working paper.

Principle 1: Arrangements support efficient use and development of system capacity

- Access arrangements support network capacity in allocation to users' needs and value to network usage
- Signals reflect costs and benefits of using network at different times and places
- Signals support efficient use of capacity
- Signals ensure no undue cross-subsidisation between users
- Effective signals for justified new network capacity
- Reduce barriers to entry
- Enable new business models

Principle 2: Arrangements reflect the needs of consumers as appropriate for an essential service.

- Avoid inappropriate outcomes or unacceptable impacts for small users
- Users are able to understand arrangements
- Users have sufficient information to predict their future access and charges

Principle 3: Any changes are practical and proportionate.

- Impact on existing data collection, processing and analysis requirements
- Impact on existing systems, assets and equipment, potential requirement for new IT/operational systems (eg billing systems)
- Modifications to charge calculation and settlement methodologies
- Adaptions to engineering or planning standards
- Impact on customer engagement or commercial agreements
- Ease of implementation

Overview: The access rights survey received 23 responses (not all questions answered by each respondent). The majority of responses were from generators.

Key takeaways:

- Network users would require significant discounts to accept new access choices (~25-30%) and some would pay more for financially firm access or to exceed their normal access limits in specific circumstances (~20%).
- Responses considered it challenging to specify access options that would benefit all user groups. Instead responses focused on how access choices could be useful for individual users.
- Improving clarity on curtailments was very highly valued by network users. Improving the definition of non-firm access options would increase the likelihood of acceptance.
- Short-term time-limited access does not appeal significantly to users.
- Shared access divided opinion – some thought that it could be very useful. Others did not consider that it would be useful.

Next steps: These responses are shaping our policy development on access choices and have fed into our draft working paper. We are seeking to collect further feedback from stakeholders (eg Charging Futures Forum (CFF), Challenge Group and Large User Group).

Case studies

Purpose of this session: get your views on the case studies

In our working paper we provide four case studies to illustrate the potential impact of options we are considering. The case studies are purely illustrative and are intended to represent a range of large users. Our second working paper will include small user case studies.

These illustrative case studies are intended to help explain:

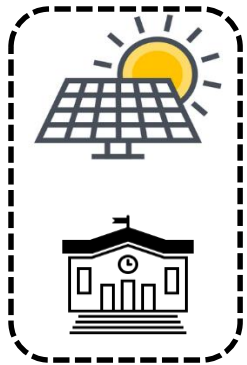
- the expected outcomes that we want to achieve,
- the potential impacts of the proposed options for reform on different types of network user, and
- how potential reforms could impact users' access to, and use of, the network.



Case study: a wind generator is seeking connection to the distribution network in a generation-dominated area with network constraints. Due to the volume of distributed generation connected to the local network, the DNO has to curtail distribution generation output at certain times and the distribution network frequently exports power onto the transmission network.

Desired outcomes:

- Incentivise users to install and manage their generation in a way which **takes into account network costs** (eg deciding where to locate generation and what technology to install).
- **We do not want arbitrary differences** in network access and charging arrangements across voltage boundaries to influence generator decisions.
- We want the generator to be able to **gain access to meet their needs, as efficiently and quickly as possible.**
- We want arrangements to **provide high quality information to network and system operators** about where and when generators, need or value new network capacity.



Case study: A community energy project is seeking to connect a new 'solar farm' and large, new community centre at separate sites. Both of these connections are to the low voltage (LV) electricity distribution network. This party is seeking to be self-sufficient, by matching generation and demand locally.

The local network is generation-constrained. New sources of demand are beneficial in alleviating the generation constraint, but new generation can trigger the need for expensive network reinforcement.

Desired outcomes:

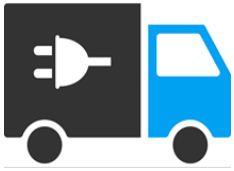
- We want all users to be able to **choose the type of network access that most suits their needs.**
- We want to ensure that **arrangements reflect where local energy can bring benefits to network management.** For example, incentivising users to match generation and demand locally to avoid need for expensive reinforcement.
- We want charging and access arrangements to **influence the development of community energy projects,** so that the projects are designed to take into account network charges (eg deciding where to develop community energy projects).



Case study: a large demand user with the ability to participate in demand-side response, is seeking connection to the extra high voltage (EHV) distribution network. It also has an onsite generator, which can meet some of its demand.

Desired outcomes:

- We want this demand user to be able to **gain access to meet their needs**, as efficiently as possible.
- We want the user to **face cost reflective forward-looking charges** that reflect the cost or benefit they confer on the system. This should allow all users to compete on a level-playing field.
- We want to ensure **flexibility provision is rewarded** for the value it can bring to the flexible energy system



Case study: a delivery company is looking to invest in a fleet of electric delivery vans. The delivery company is located in a demand constrained area and is considering increasing its maximum import capacity to connect several rapid electric vehicle (EV) chargers for its fleet of delivery vans.

Desired outcomes:

- We want arrangements to **facilitate the decarbonisation of transport** at least total cost, taking into account the costs for networks as well.
- We also want the delivery company to be able to **obtain access to the network that reflects their needs.**
- We want **forward-looking charging arrangements to incentivise users, like this delivery company, to charge EVs in ways that are cheaper for the network.** This might include influencing decisions on where to charge the fleet and how (eg potentially using some self-generation), and on whether to discharge electricity back to the grid during peak times (vehicle-to-grid arrangements).

We are keen to ensure that we capture the feedback from all of the breakout tables. The Ofgem representative on each table will be responsible for taking notes during breakout sessions.

We want a Challenge Group member to Chair each breakout discussion. Under each seat there is an envelope. The envelope states which breakout session you will Chair.

Breakout group – case studies

In your groups we want to know:

1. Do you agree with the desired outcomes for each case studies?
2. Are there types of customers that are not represented by these case studies (excluding small users).

These case studies will be used during today's last session; discussing how the potential options for reform can be packaged to benefit each of these case studies.

Linkages with flexibility

Charging, access and flexibility procurement can work together to provide efficient signals for flexibility – each instrument has its own role to play

In this session we intend to:

- Provide an overview of the flexibility links of the 1st working paper
- Discuss anything that you disagree with or anything that you think is missing

Energy and generation capacity		Wholesale market (including Peer to Peer and price arbitrage)
		Capacity market revenues
		Balancing revenues
Network management	Network price signal flexibility	Access rights and forward-looking network charges/credits
		Embedded benefits
		Residual charge avoidance
	Contracted flexibility	Trading of access rights/curtailment
		Procurement of shorter term network management services
		Procurement of longer term network reinforcement services

No access right choice

Agreed capacity
based charges

Flexibility is mainly valued through flexibility procurement. This is effectively the current approach for transmission generators (via the Balancing Mechanism). Exceedance charge methodology could also be used to value flex.

Significant access right choice

Users are able to indicate they are **willing to offer flexibility in their choice of access right, in exchange for a lower capacity charge**. Additional flexibility procurement may be needed.

Time-dependent
charges

Flexibility is valued through time of use charging, though additional flexibility procurement may be needed to the extent that charges do not reflect value in a particular location at different times

As left and above, **flexibility may also be valued through access right choice**. However, users may have limited incentive to choose more flexible access rights if charges are solely time of use based.

Ability to signal local and real time conditions

Competitive price discovery leading to more efficient solutions

Ease of engaging with wide range of users and user experience

Certainty of response

Expense of implementation and operation

	Merits	Barriers
Access	<ul style="list-style-type: none"> Non-firm access rights have the potential for DNOs to instruct users to turn down when there are local constraints. 	<ul style="list-style-type: none"> n/a
Charging	<ul style="list-style-type: none"> Critical Peak Pricing could provide an increase in the efficiency of the flexibility signal, as the constraints are signalled just a day (or more) ahead, and so can more accurately reflect the time of network constraints. 	<ul style="list-style-type: none"> For highly localised constraints, it may not be feasible to calculate a network charge that can accurately signal the constraint. Averaging the charges both flattens the signal for flexibility, and incentivises flexibility where there are no constraints.
Procurement	<ul style="list-style-type: none"> DNOs and the ESO are able to procure flexibility where it is needed, and define their tenders or requests to reflect the value of flexibility at that location 	<ul style="list-style-type: none"> n/a

Competitive price discovery leading to more efficient solutions

Merits

Barriers

Access

- Curtailment obligations trading would introduce a market mechanism for valuing flexibility. The price that users are willing to pay others to avoid being curtailed will be revealed through a competitive market.

- Access rights generally will not have market mechanisms to reveal the efficient price of access.

Charging

- Charging is not reliant on there being adequate competition, and so could be more suited to areas where there are market power concerns, or where flexibility markets are in their infancy.

- Charges are set by the ESO and DNOs through an administrative price setting process and based on pre-agreed common methodologies.

Procurement

- Where there is adequate competition, this should reveal the efficient price for delivery of flexibility services.

- In areas where there are market power concerns – this could also lead to higher prices and inefficient outcomes.
- There is a risk that those users causing constraints end up being paid to fix them, with the cost of this being socialised across a wider consumer base.

Ease of engaging with wide range of users and user experience

Merits

Barriers

Access

- May help users have a more direct choice of the extent to which they offer flexibility
- Rights could also be used as a form of hedging against volatile charges

- It might be difficult for small users to understand and engage with access rights
- Users may be wary of committing to being flexible at the time of agreeing to an access right.

Charging

- A signal can be sent to all users of the network. This means that network charges are able potentially to drive a shift in the baseline

- Dynamic pricing is inherently more volatile and this could increase the risk exposure
- Volatility could raise the risk premium, which might flow into the prices they charge their customers

Procurement

- A role here for aggregators to engage with users

- Flexibility procurement relies on network users being more proactive in their engagement.

	Merits	Barriers
Access	<ul style="list-style-type: none"> A significant degree of certainty in the response if implemented via active network management (ANM). 	<ul style="list-style-type: none"> There are other options for enforcement (such as exceedance charges) which would result in a lower level of certainty of response.
Charging	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Users have the choice to respond to the price signal or continue using the network and pay the associated price. DNOs will need to estimate the level of response for planning purposes.
Procurement	<ul style="list-style-type: none"> Providers will be contracted to provide response to the system or network company. 	<ul style="list-style-type: none"> Less than the level of certainty provided through non-firm access rights currently employed through flexible connections, which involve the installation of control equipment giving the DNOs' certainty that they will get a response.

	Merits	Barriers
Access	<ul style="list-style-type: none"> There are already flexible access rights being used through the implementation of flexible connections. 	<ul style="list-style-type: none"> Monitoring and enforcing the access right choices would entail technology and systems costs. Feasibility challenges due to the impact on network planning standards.
Charging	<ul style="list-style-type: none"> The current charging framework already has some elements of time-of-use and seasonal pricing already. 	<ul style="list-style-type: none"> More dynamic and localised charging could require significant investment in systems and technology. The practical challenges of implementing dynamic charging increase as you go down the voltage levels
Procurement	<ul style="list-style-type: none"> Network monitoring equipment for ESO/DNO procurement can be rolled out on a targeted, strategic basis 	<ul style="list-style-type: none"> Flexibility procurement markets are not yet mature There are institutional developments and technological solutions that need to be implemented to deliver the full benefits.

Should the cost of flexibility procurement be reflected in the network charging cost model?

- Marginal cost of flexibility procurement could be include in the basis of the charging signal.
- However, no clear record of flexibility procurement deferring the need for network investment.
- May be a case for reviewing in future.

Is there any case for a distribution-level Balancing Service Use of System charge?

- Having an additional distribution-level Balancing Services type charge sending a forward-looking signal could amount to double-charging.

Is it OK for users to be exposed to contradictory signals?

- There is a need to ensure the signals worked together to drive an efficient outcomes
- Users could value stack their access benefits and participation in flexibility markets
- If signals accurately reflect the different value that a user can provide to different parts of the system then this shouldn't inherently be an issue in supporting an efficient overall system

On each of your tables, please discuss the following questions:

- Are there aspects of the chapter that you do not agree with? If so, what changes would you suggest?
- Have we missed anything relating to the issues we cover in this chapter?

Access rights

Network access rights define the nature of users' access to the network and the capacity they can use – how much they can import or export, when and for how long, and whether their access is to be interrupted and what happens if it is.

In this session we intend to:

- Provide an overview of the access chapter of the 1st working paper
- Discuss anything that you disagree with or anything that you think is missing

Level of firmness	Description
Access could be defined by physical drivers	The firmness of a user's access could be defined by the physical assets that connect them to the wider system and the design of the network at the point they are connected.
Access could be defined by consumer experience	Firmness could also be defined by measuring the customer's experiences of curtailment.
Eligible for compensation	Description
Non financially firm access	Would allow users to be curtailed, within specified parameters (eg specific time-periods), without financial compensation at the time of curtailment. However, users would be compensated in other ways.
Financially firm access	Would require users to be financially reimbursed when their access to the system is limited or unavailable.

- “Physical drivers” may be less meaningful for users than consumer outcomes, but could be easier for network/system operators to provide.
- We consider that financially firm access could be valuable to users and could help improve transmission/distribution consistency.
- However, we are concerned that there may be insufficient time to develop and implement the necessary planning and security standards for financially firm access, in time for SCR implementation.

Level of firmness	Description
Static time-profiled	The firmness of a user's access could be defined by the physical assets that connect them to the wider system and the design of the network at the point they are connected.
Dynamic time-profiled	Access limits vary over time depending on specific conditions (eg when the wind exceeds a threshold level or when the wholesale price exceeds a specific amount).

- Time-profiled access could support more efficient use of the network and appear feasible to offer.
- Stakeholders consider that time-profiled access would be valuable – intend to develop further.
- However, network/system operators have concerns that dynamic time-profiled could be challenging to deliver.

Shared access rights would involve multiple users across multiple sites in the same broad area obtain access to the network, up to a jointly agreed level, with the ability to coordinate between themselves how they share the access. We have differentiated between:

- **Local shared access** - where some users within the same specific location share access.
- **Wider shared access** - where multiple users within a broader location share access.

Preliminary views:

- Some practical issues to resolve (eg monitoring and enforcement), but could lead to more efficient use of the network.
- Sharing access over wider area presents additional challenges (eg if access not equivalent).
- There are similarities between trading and sharing access, we need to consider respective roles.

Short-term access (eg fixed duration access of less than a year)

- Stakeholders consider that this will offer limited benefit, suiting only specific circumstances.

New conditions of access (eg Use-it-or-lose it) – wider reforms (eg charging and trading) should incentivise users to release unused capacity. We will consider need once we have refined wider reforms.

- **Standardisation of access rights:**

- There is a trade-off between efficiency and complexity limitations. Standardised options may be easily understood, but inefficient and potentially ill-suited to individual users. Bespoke access may achieve efficient network utilisation, but may be difficult to administer. Hybrid options may offer the benefits of both.
- Additionally, access rights need to be cost-reflectively charged. With a shallow connection boundary it may be challenging to reflect the value of bespoke access rights in UoS charges.

- **Transmission access rights:**

- Currently access rights differ at transmission and distribution. Alternative access options are unlikely to be popular at transmission if the charges are equivalent to those for firm access.
- We will consider the applicability of these reforms to the transmission charging arrangements.

- **Monitoring and enforcement:**

- Consequences of exceeding access rights should be visible, understandable and proportionate to the impact of overrunning access rights. Current approaches may require modification with the development of new access rights.
- The approach to enforcing access rights may be another area where we can introduce greater choice of access rights (eg introducing physical limitations on ability to exceed access rights, if this resulted in a cheaper connection).

- **Links with other markets:**

- Some users' access will impact their ability to sell services in different markets. This can influence their access choices. For example, providing blackstart services to NG ESO requires 24/7 access.
- We intend to work with government, NG ESO, the ENA and any new markets to remove undue barriers for users with alternative access choices in these markets.

On each of your tables, we want to know:

- As there aspects of the chapter that you do not agree with? If so, what changes would you suggest?
- Have we missed anything relating to the issues we cover in this chapter?

Lunch

Distribution locational cost models

Distribution locational cost models covers the options for reform of how locational charging signals are calculated.

1) Network cost models

Options for how forward-looking network costs are estimated.

2) Locational granularity

Options for how distribution network charges vary by location.

In this session we intend to:

- Provide an overview of this chapter of the 1st working paper
- Discuss anything that you disagree with or anything that you think is missing

1) Network cost models – Short Run Marginal Cost (SRMC)

We identified two options how an SRMC-based network charge could be set:

- **SRMC charge set ex-ante**

This would involve attempting to forecast network conditions and the marginal cost of resolving any constraints ahead of time. This forecast would be used to set the charge ahead of each period.

- **SRMC charge set ex-post**

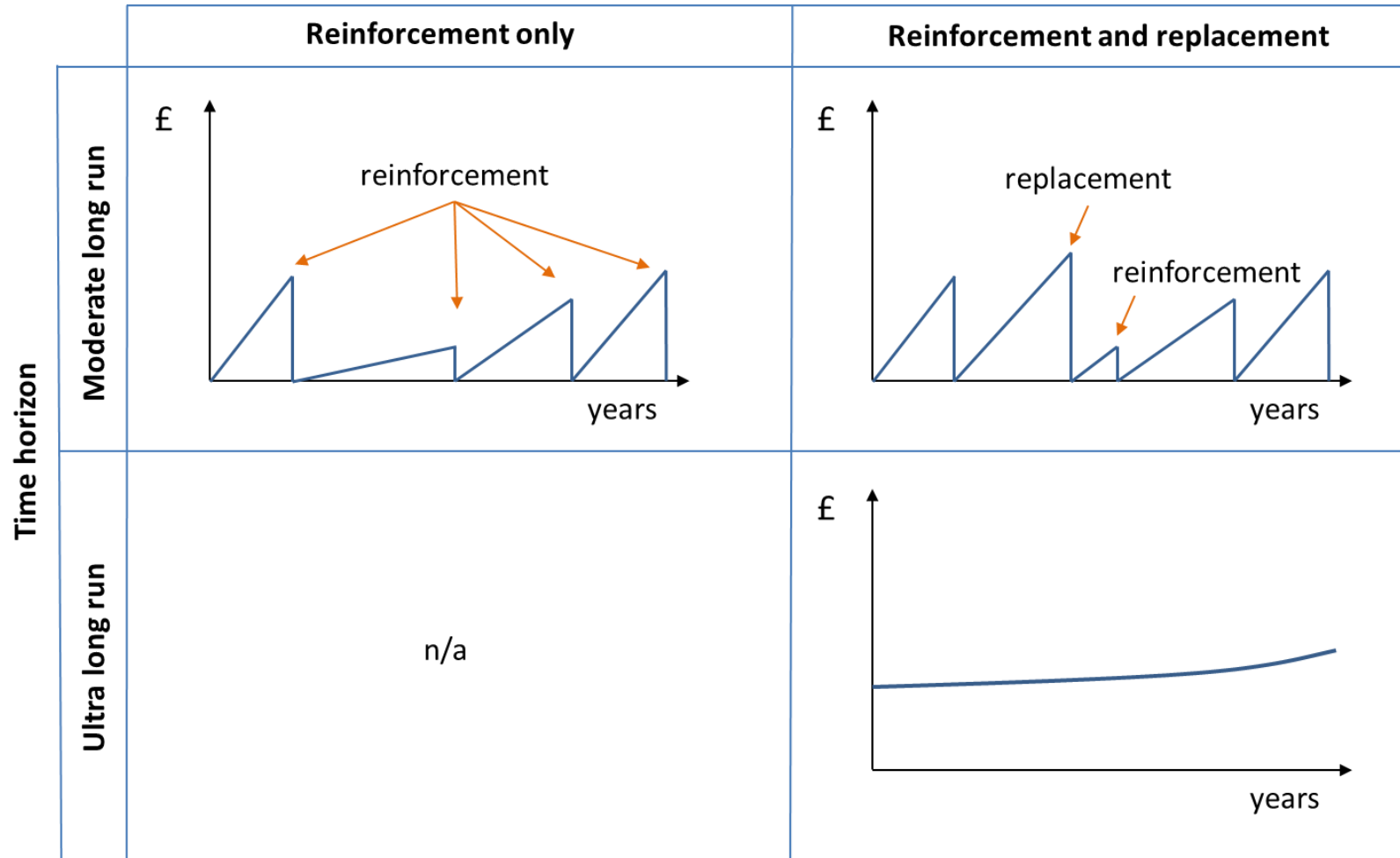
This would involve attempting to calculate the SRMC of each time period after it had finished, based on the constraints that occurred and any curtailment actions that the DNO needed to implement.

Summary of preliminary view:

Administratively set pricing would not be the correct approach to SRMC implementation. This would be better delivered through market-based price discovery. However, we do not believe this is feasible at distribution and continue to consider it out of SCR scope.

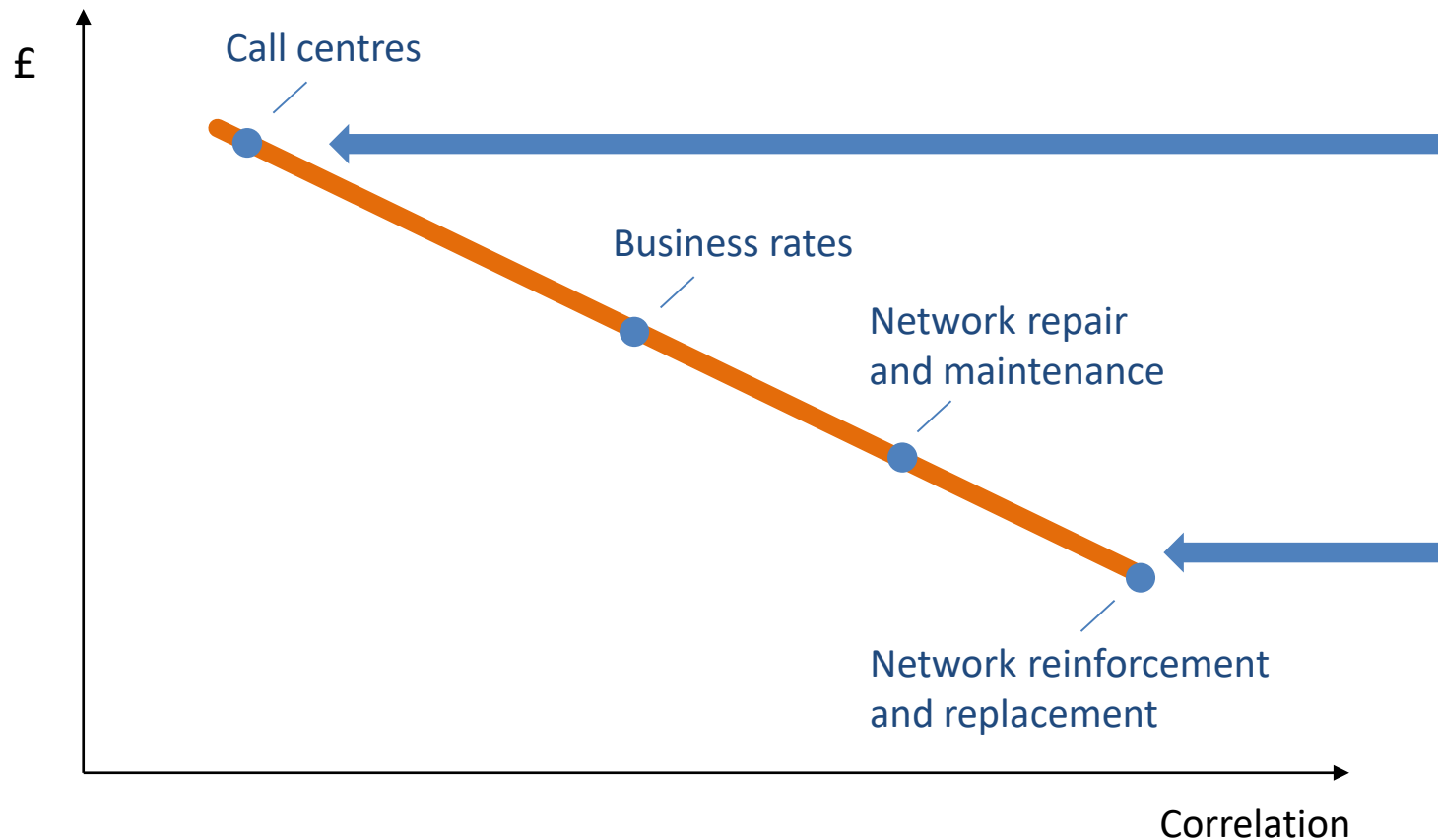
Which costs should be modelled?

What is signalled?



1) Network cost models – Long Run Marginal Cost

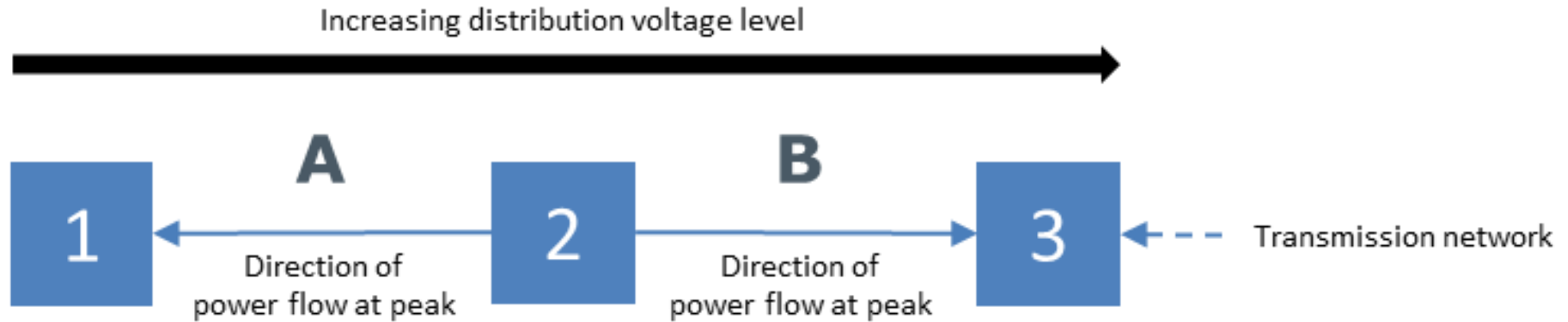
What is the extent of costs to be charged for?



Inclusion of costs that are only loosely correlated to cost of developing network capacity would increase forward looking charge, but may not be an accurate way of allocating all costs.

Only including costs directly related to network capacity may lead to too low a forward-looking charge as it would miss other costs that are closely correlated to demand for network capacity.

Who should receive the charge?

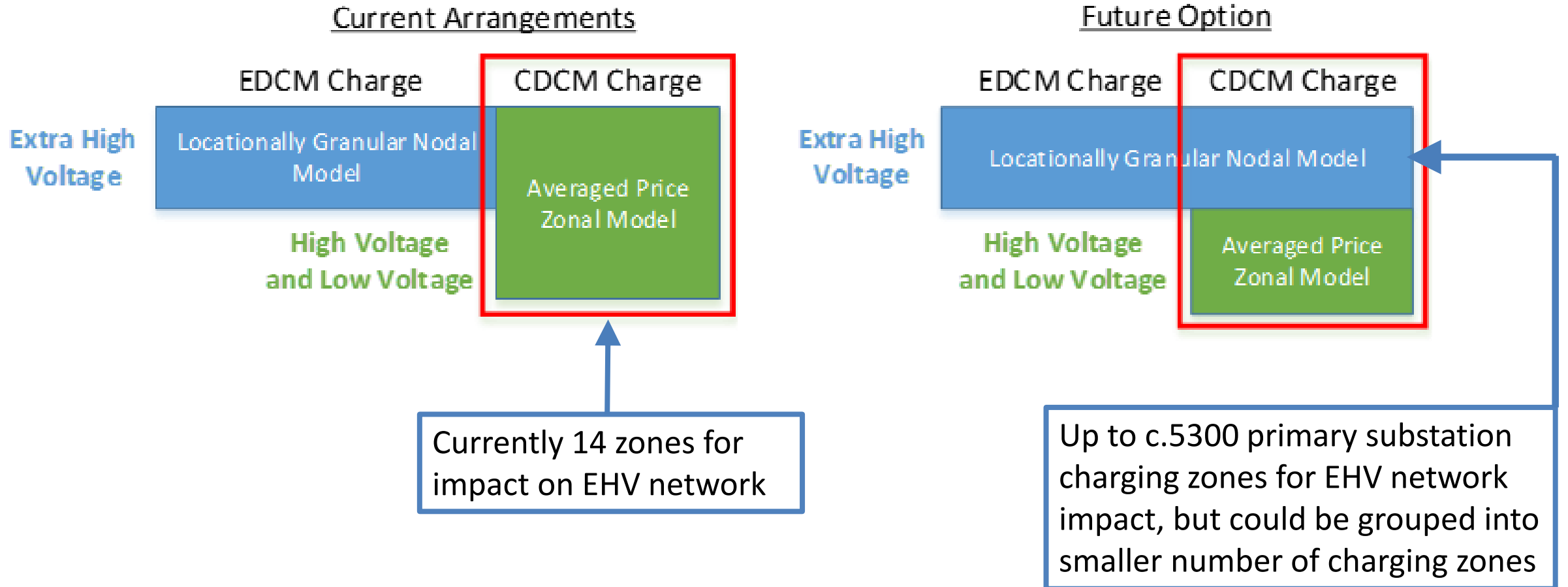


Under status quo arrangements:

Description	Circuit	Additional Increment	Node 1	Node 2	Node 3
<ul style="list-style-type: none"> - Upstream only - Both charges and credits - Demand assumed to drive costs 	A	Demand	charge	-	-
		Generation	credit	-	-
	B	Demand	charge	charge	-
		Generation	credit	credit	-

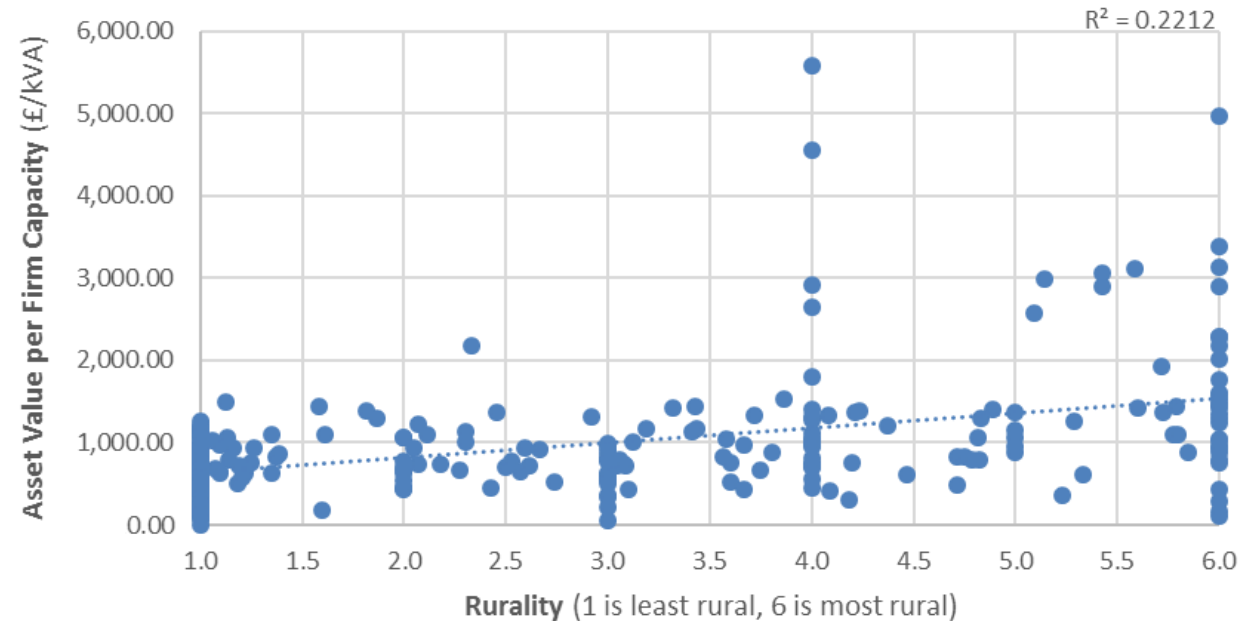
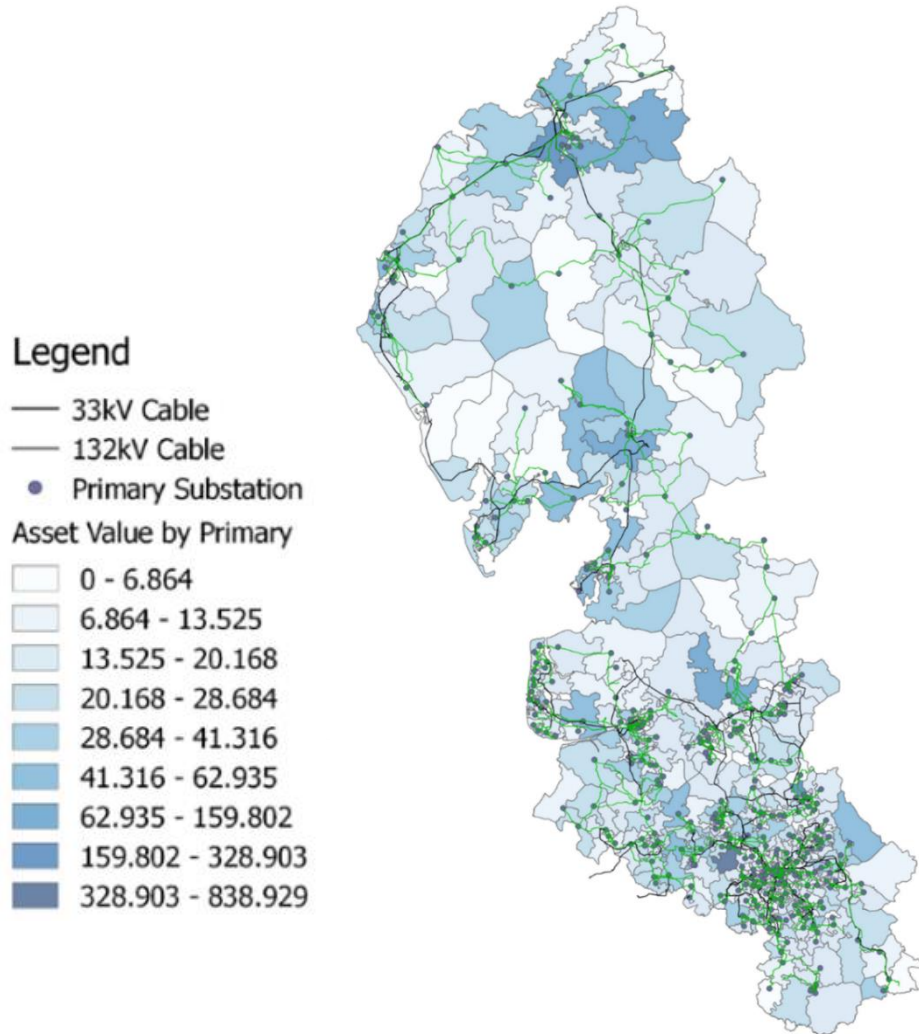
2) Locational granularity – integrating across voltages

Exposing HV/LV connected users to locational impacts at EHV



2) Locational granularity – more granular charging

Extent to which greater locational granularity can be achieved



- Our preliminary view is that distribution charges should continue to be based on LRMC based approaches. SRMC approaches may be possible in the future, but we do not believe that an administratively set charge would be the correct approach and there are significant feasibility challenges to distribution level implementation.
- We are continuing to investigate the merits of different options for the estimation of LRMC. We think there is a reasonable case for including replacement costs and possibly other network costs that are closely correlated with network development in the charging signals.
- We note that there are presently inconsistencies in how costs are treated at different voltage levels, which could be treated more consistently.
- We are continuing to assess the different ways in which the network could be grouped, particularly at HV/LV, to reflect differences in network costs by primary substation (or averaged charges across similar primaries).

The two areas we have outlined today are:

- 1) Network cost models
- 2) Locational granularity

On your tables, for each of these areas we want to know:

- As there aspects of the chapter that you do not agree with? If so, what changes would you suggest?
- Have we missed anything relating to the issues we cover in this chapter?

DUoS/TNUoS charge design

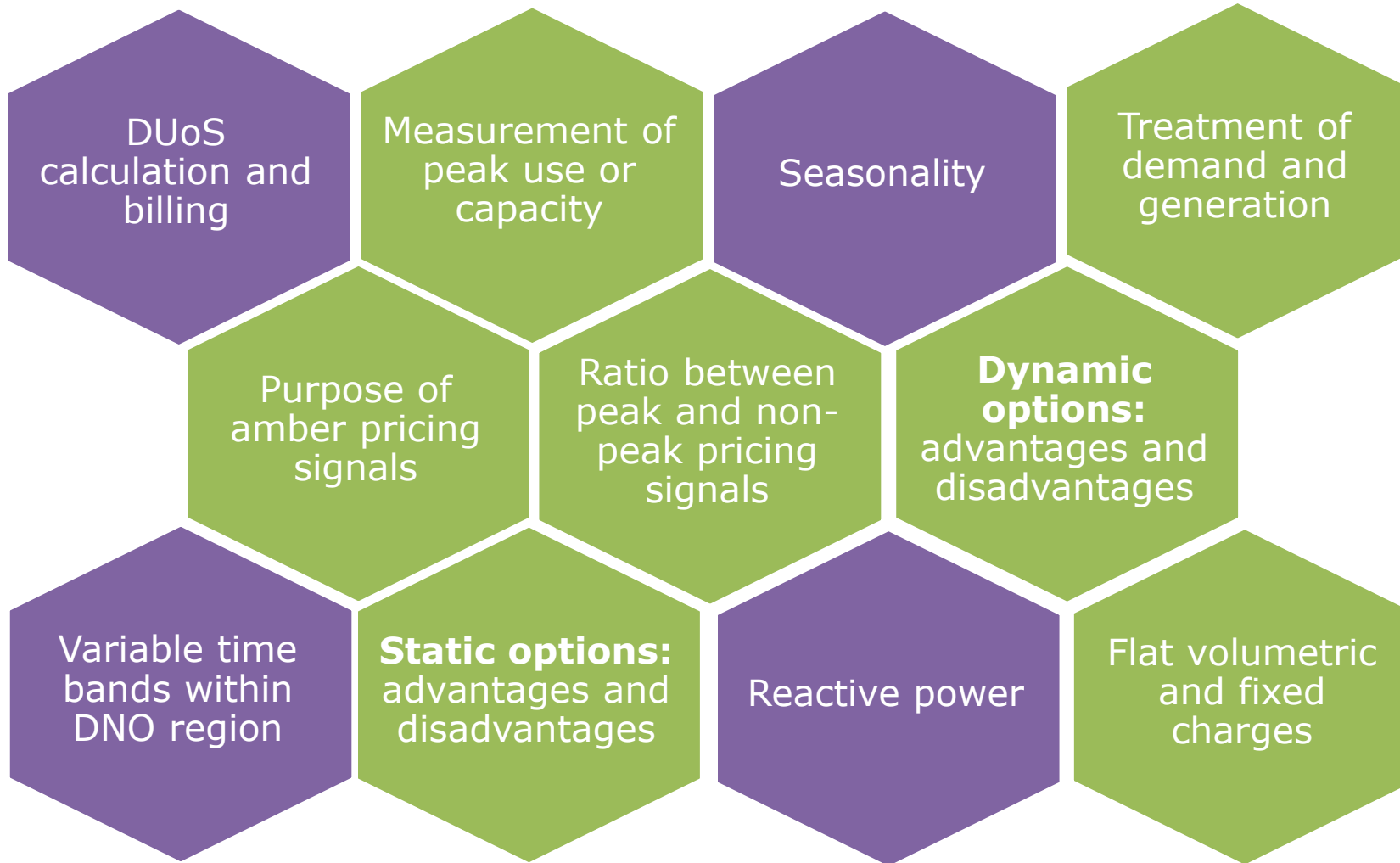
Suppliers incur **distribution use of system (DUoS)** charges and **transmission network use of system (TNUoS)** charges, reflecting their customers' use of the distribution and transmission networks to access or export electricity

In this session we intend to:

- Provide an overview of the DUoS and TNUoS chapters of the 1st working paper
- Discuss anything that you disagree with or anything that you think is missing

Option	Description	Preliminary assessment
Volumetric time-of-use	<ul style="list-style-type: none"> • Different unit rates are assigned to different periods of the day, which vary according to the probability that the network will be congested during that period • Customers are charged for their actual consumption during the different time bands 	<ul style="list-style-type: none"> • Not a key driver of costs so may not be the most cost reflective • There may still be reasons to continue applying some form (e.g familiar to small users) • We will consider benefits of introducing seasonality and more locational granularity
Actual capacity	<ul style="list-style-type: none"> • Customers are charged for their actual maximum capacity measured ex-post • Charges may only apply during a specific peak period, or customers could face different rates based on time bands 	<ul style="list-style-type: none"> • May be more cost reflective, as costs are driven by peak usage, rather than consumption • We will need to consider if there are additional network benefits to using capacity to those applicable for volumetric ToU
Agreed capacity	<ul style="list-style-type: none"> • Customers are charged, based on maximum capacity they have agreed with their DNO (this could have a time-of-use element) 	<ul style="list-style-type: none"> • May be more cost reflective, as costs are driven by peak usage, rather than consumption • Need to consider the administrative burden to agree and maintain capacities with millions of domestic customers • Consider whether deemed capacities would be appropriate

Option	Description	Preliminary assessment
Dynamic charging	<ul style="list-style-type: none"> • Real time pricing - Customers are notified in advance of the price for every hour (or half hour), which reflects short term network conditions • Critical Peak Pricing – Customers are notified in advance that there is going to be a critical peak period, during which high charges will be applied to consumption 	<ul style="list-style-type: none"> • Real time pricing may not be feasible by 2023, due to the changes required to support it (same issues as with SRMC) • It may also not be feasible to introduce Critical Peak Pricing by 2023. However, we will need to do further work to better understand if a form of it would be possible and the associated benefits
Critical Peak Rebates	<ul style="list-style-type: none"> • Similar to Critical Peak Pricing, except that the customer receives a rebate for actions taken during the critical peak period 	<ul style="list-style-type: none"> • A baseline level of usage would need to be agreed with customers, in order to determine whether they have reduced it in response to a signal • As above for Critical Peak Pricing, we will need to consider whether there is a form that could be possible and the benefits



In addition to the discussion on the identified issues, we have formed preliminary views on several issues:

- It is likely to be more cost reflective to introduce a seasonal element
- If the locational granularity work permits, it may be more cost reflective to have more than one set of time bands within a DNO region
- We have not identified any evidence to suggest DNOs should not continue to charge for excess reactive power
- There is no compelling reason to move to individual billing for small users

On each of your tables, we want to know:

- As there aspects of the chapter that you do not agree with? If so, what changes would you suggest?
- Have we missed anything relating to the issues we cover in this chapter?

- We have considered how our five basic options could apply to transmission use of system charges (TNUoS) for **demand** customers and set out our initial views

Option	Description	Initial views	Suitability for different users	Feasibility between Tx and Dx
Dynamic charging	Reform current Triad approach <ul style="list-style-type: none"> Ex-ante charging Local network peaks Additional critical peak periods 	<ul style="list-style-type: none"> The reforms could address the disadvantages with the current Triad approach Reforming Triad could be more valuable than moving to a static charging option 	<ul style="list-style-type: none"> May be more difficult for small users, but we recognise the role suppliers could play 	<ul style="list-style-type: none"> More advanced ability to monitor and forecast at transmission May be feasible for TNUoS, but less clear if so for DUoS in SCR timeframes
Critical peak rebates	Customers would receive a credit for reducing usage during a critical peak period	<ul style="list-style-type: none"> We will not proceed with this option, as the current critical peak charging approach has been successful in eliciting a response 	N/A	N/A

Option	Description	Initial views	Suitability for different users	Feasibility between Tx and Dx
<p>Agreed capacity</p>	<p>Under this static charging option, customers would pay charges, based on their agreed capacity</p>	<ul style="list-style-type: none"> If agreed capacity is chosen for DUoS, apply to TNUoS could improve consistency 	<ul style="list-style-type: none"> For larger generation, there is an adjustment for tech and ALF. May be difficult to apply to all generation Unclear how this would work in an approach with charges and credits 	<ul style="list-style-type: none"> Unlikely to be feasible for ESO to agree capacities with distribution connected customers direct Depends on whether an agreed capacity approach is chosen for DUoS, as same capacity could apply
<p>Static options:</p> <ul style="list-style-type: none"> Volumetric time-of-use Actual capacity 	<p>Customers would be charged for volumes consumed (or actual capacity) during different time periods</p>	<ul style="list-style-type: none"> May be easier for small users to understand If a volumetric ToU is chosen for DUoS, there may be a case for adopting same approach for TNUoS for consistency 	<ul style="list-style-type: none"> Potentially a simpler framework for small users to engage with 	<ul style="list-style-type: none"> Both options are feasible for transmission and distribution

On each of your tables, we want to know:

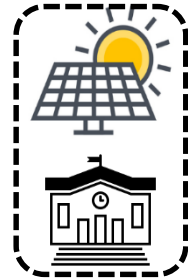
- As there aspects of the chapter that you do not agree with? If so, what changes would you suggest?
- Have we missed anything relating to the issues we cover in this chapter?

How options could be packaged for different case studies?

At the start of the day we discussed four case studies:



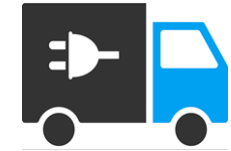
**Distribution-connected
wind generator**



**Community
energy
project**



**Large industrial
user**



**Vehicle fleet
operator**

Across the day, we have also discussed four main areas of reform:

Access rights

DUoS cost models

**DUoS charge
design**

**TNUoS charge
design**

In each of your tables, we want you to discuss **how the potential options for reform could be packaged up to benefit each of these users.**

It is the Chair's responsibility to ensure that the breakout group discusses all (i) four case studies and (ii) all four areas of reform.

Any other business

Next Charging Futures Forum

- 19 September (etc venues, County Hall, London) - this will focus on 1st working paper.

Next Challenge Group

- 30 September (ENA offices) – this will focus on the 2nd working paper

Webinars

- Suppliers Webinar on Wednesday 31 July at 2-4pm followed by a short online survey to better understand the extent to which suppliers' approach to retail tariff design for small energy consumers would be affected by reforms. This is an opportunity to share your organisation's views and help inform our policy shaping when choosing between different options for network access and charging. Please email FutureChargingAndAccess@ofgem.gov.uk if interested.
- Once we have published the 1st working paper we intend to host a webinar – to provide an overview of the document.

More information on future webinars can be found on the Charging Futures website - <http://www.chargingfutures.com/>