



Forum

Future Charging and Access reform

22 September 2022



nationalgridESO





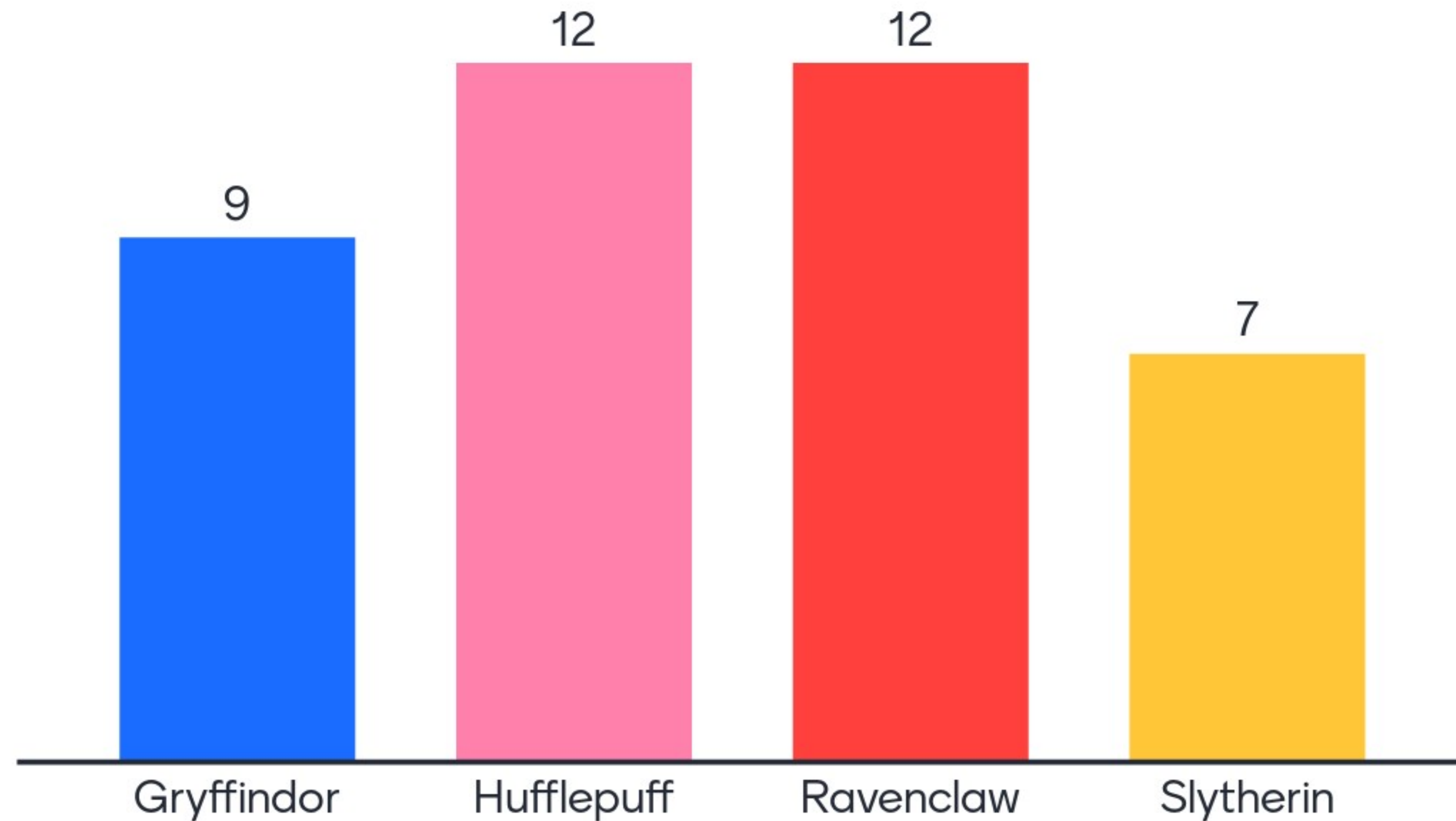
Mentimeter

- > Please go to www.menti.com, using code on screen to access the presentation.
- > Submit Q & A questions at any time

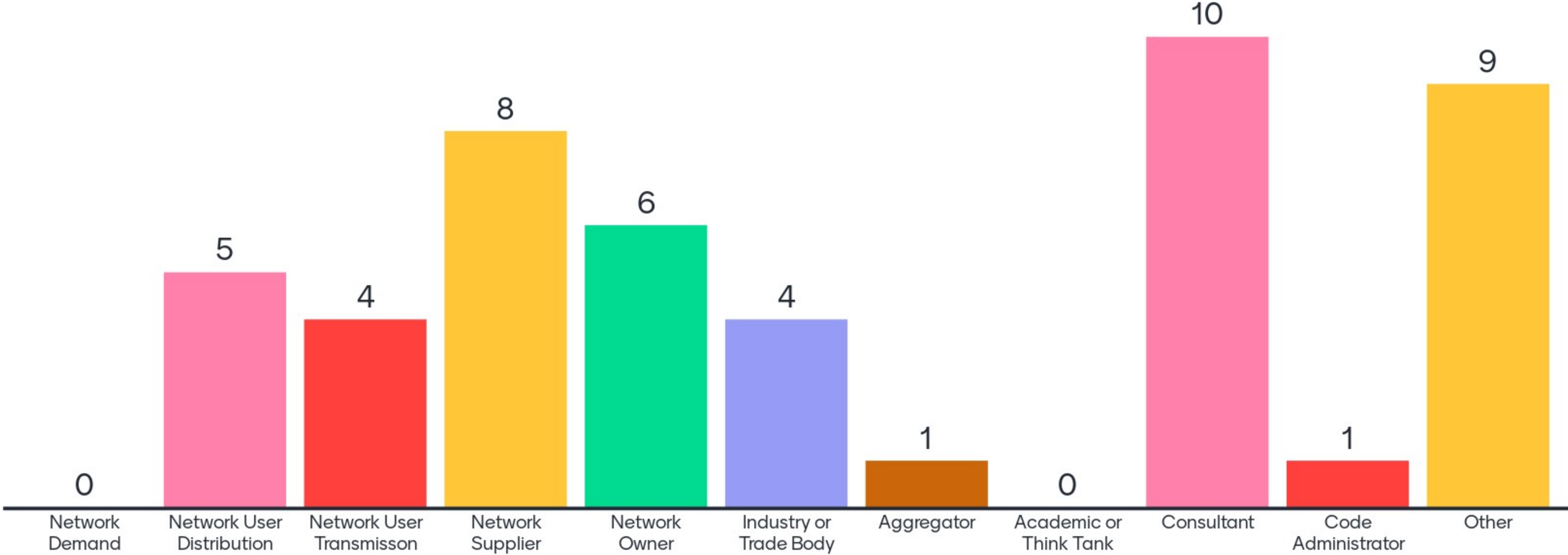
➤ Menti Question

- > Which of the four houses of Hogwarts would you choose?
- > Gryffindor
- > Hufflepuff
- > Ravenclaw
- > Slytherin

Which of the four houses of Hogwarts would you choose?



Which category best describes your organisation?



Future Charging and Access

Louise Schmitz, Ofgem

➤ Future Charging and Access

Introduction

- > Today's Charging Futures Forum is the latest step in a series of reforms to network charging and access arrangements that have been running for a few years.
- > We recently concluded the consultation on our Access and Forward-Looking Charges proposals, but there is still a lot happening in the charging and access space.
- > We are going to discuss our current thinking across the different areas on which we are currently focusing
- > We are keen hear your views on our current thinking and proposed way forward.



Agenda

First hour

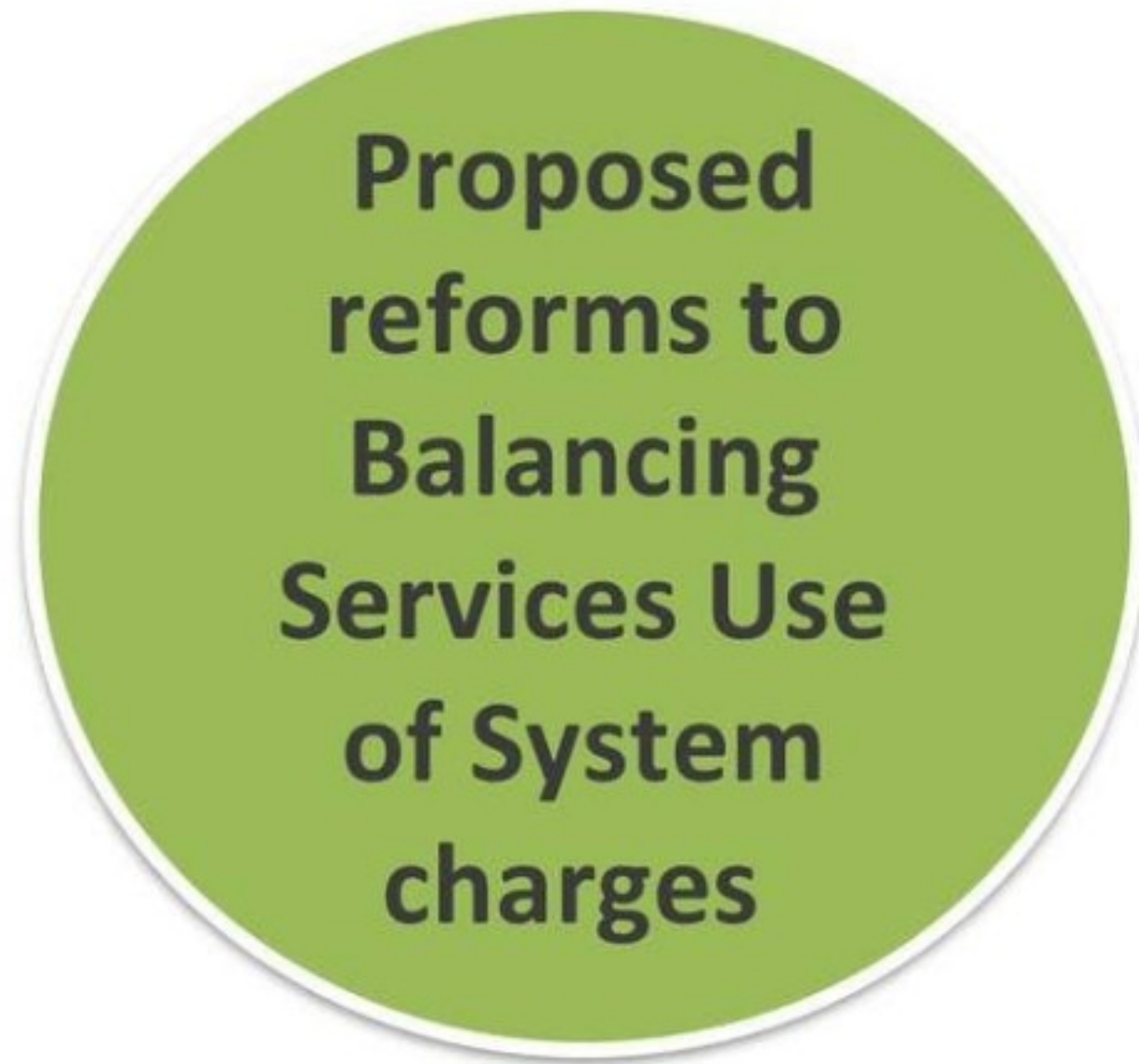
- > Overview of Network Charging Reform – Louise Schmitz, Ofgem
- > Update on BSUoS analytical work – Lynda Carroll, Ofgem
- > Access and Forward-Looking Charges SCR – Patrick Cassels
- > Transmission Charging – Harriet Harmon, Ofgem

Second hour

- > Facilitator-led breakout rooms
- > Question Panel chaired by David Wildash, ESO
 - > Lynda Carroll, Ofgem
 - > Patrick Cassels, Ofgem
 - > Harriet Harmon, Ofgem

Balancing Services Use of System charging reforms

Lynda Carroll, Ofgem

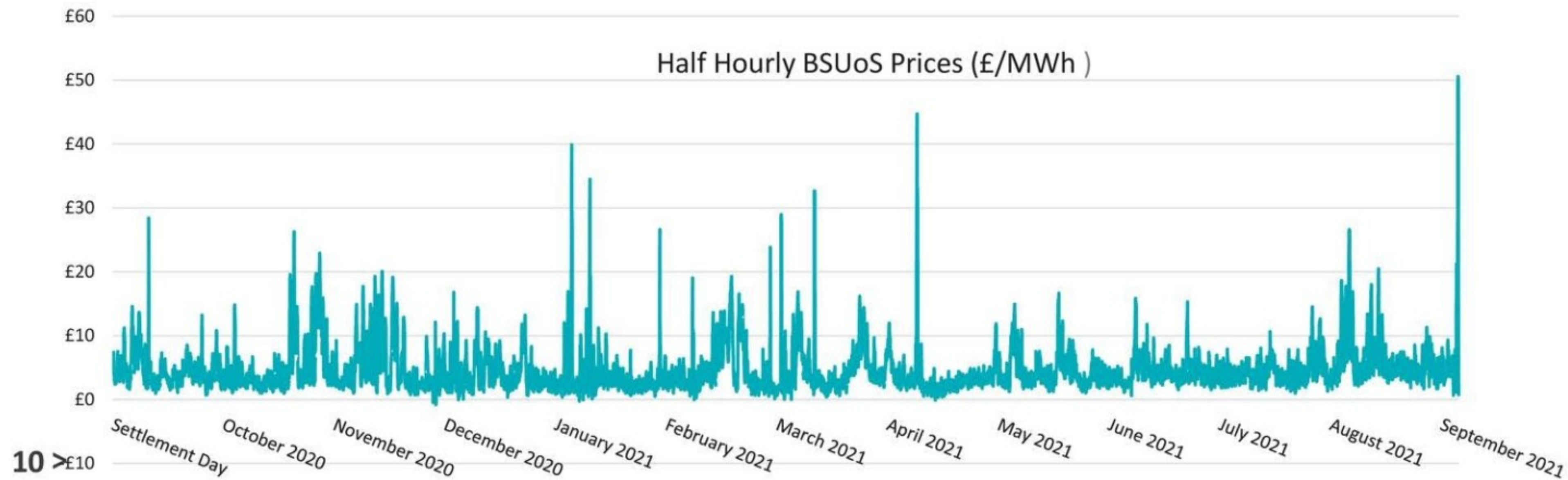


The key questions:

- Who should be liable for BSUoS charges?
- How should BSUoS be paid?
- Timelines and next steps

Balancing Services charges today

- > Balancing Services charges (BSUoS) are how the Electricity System Operator recovers the costs of balancing the system.
- > BSUoS is currently calculated half-hourly and charged out to large generators and suppliers as a per MWh charge that is the same across GB.
- > BSUoS prices can send perverse signals – for example, in times of low demand or high wind, BSUoS prices increase markedly, giving demand users a signal not to consume, the opposite to what is needed.



We have accepted the recommendations of the second BSUoS Task Force in principle:

1. Who should be liable for BSUoS charges?

- The Task Force proposed recovering BSUoS costs from **final demand only**

2. How should BSUoS charges be recovered?

- The Task Force proposed **charges should be set in advance**

Frontier/LCP assessment of impact of proposed recovery of BSUoS costs from final demand only (CMP308)

Key Changes

- Generators no longer face BSUoS costs or BSUoS forecasting risks
- Demand faces higher direct BSUoS costs

Key Impacts

- BSUoS demand charges increase
- Wholesale energy costs decrease
- Low carbon policy costs decrease

Net Impact

- Systems benefits up to £1,220m to 2040, when estimates of emissions across interconnectors are factored in, where these are not included systems benefits are up to £490m
- Reductions in aggregate consumer bills of around £320- £370m over the period to 2040.
- Net impact for individual users is small and varies over time and depending on future energy scenarios
- Highest costs are for those with a higher proportion of overnight consumption

This is because generators no longer price in BSUoS costs

BSUoS is generally highest overnight

Frontier/LCP assessment of impact of proposal that BSUoS charges should be set in advance (CMP361)

Key Changes

- A single BSUoS charge applies at all times of the day, for the duration of the fixed period. The charge is notified in advance.
- BSUoS forecasting risk is shifted to the ESO.

Different fixed and notice periods are being considered

Key Impacts

- The application of a fixed charge means that impacts on users no longer vary with consumption patterns and BSUoS forecast risk, for suppliers or end users, is reduced or removed.
- Overall risk management costs should fall because the ESO should be able to hold BSUoS forecast risk more cheaply than suppliers or end users. The risk management benefit to individual users will depend on contracting arrangements, contract length and potentially cost of risk capital.

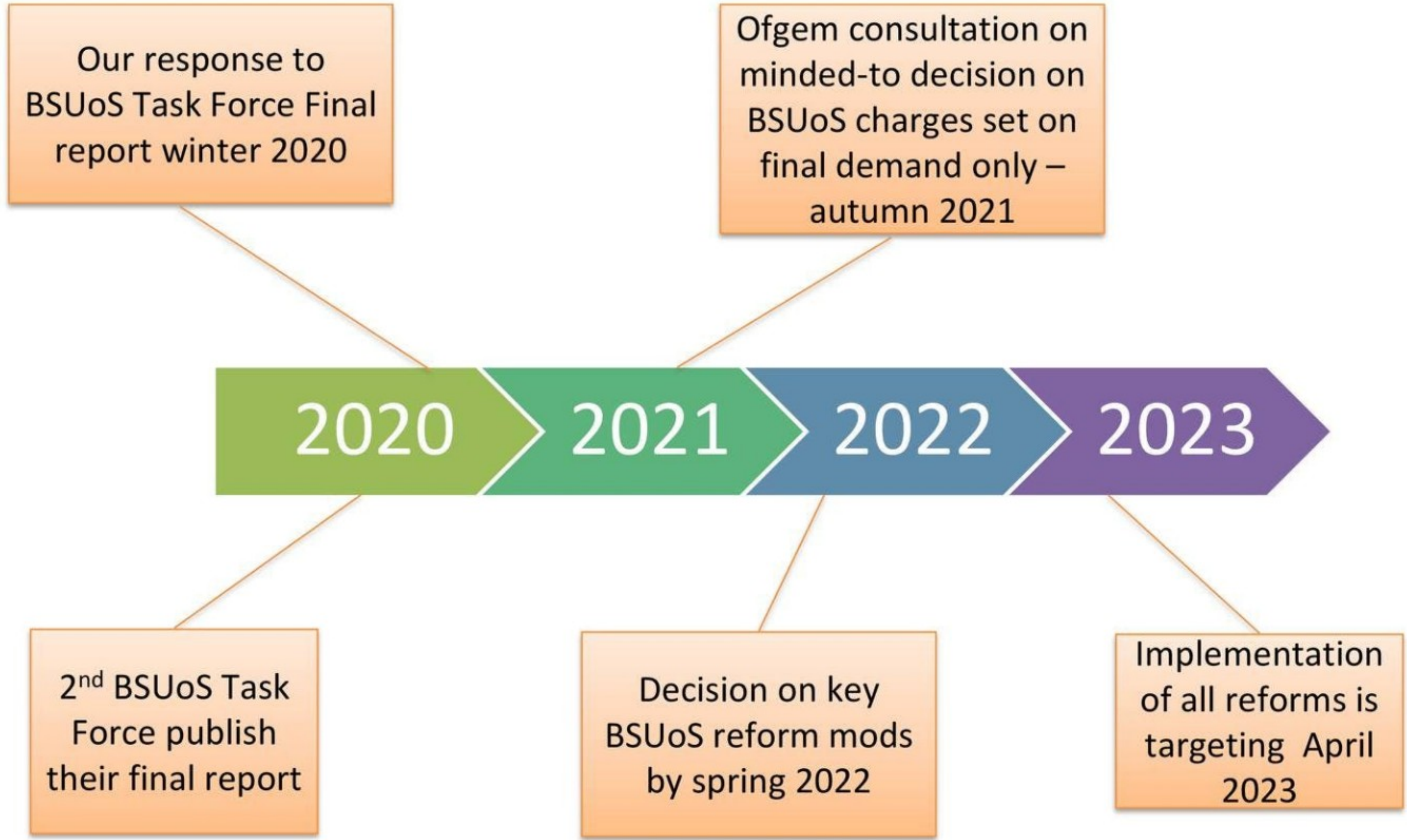
For parties directly liable for BSUoS, contracts shorter than the sum of fixed and notice periods show largest benefits.

Net Impact

- The Frontier/LCP analysis indicates material benefits from a transfer of forecasting risk: the estimated annual risk premia benefit for the sample year of 2025 is £10.2-10.8m based on an ESO cost of capital of 1.8%. If this benefit was achieved each year, then the net benefits of this proposed reform would be £140-148m to 2040.



High level timeline for BSUoS charging reform



Ask me anything

73 questions
174 upvotes

Access and Forward Looking Charges SCR

Patrick Cassels, Ofgem

Access and Forward-Looking Charges SCR

Consultation update

The consultation on our minded-to proposals closed on 25 August. We received over 150 responses from a wide range of stakeholders and are currently working through these to help inform our final decision.

> **There was broad support for our proposed reforms to connection charges.**

Some respondents flagged large costs associated with making this change and highlighted a potential need to limit the exposure faced by DUoS customers in some cases. We think there is merit in exploring this further. Our changes also require consideration of secondary legislation, which we are actively discussing with BEIS and the DNOs.

> **There was support for our access right proposals but several areas where further clarity is required.**

We are working with the DNOs to explore this ahead of the final decision.

> **There was very strong support for a wide-ranging review of transmission charging.**

We received a lot of strong views on our proposals to introduce transmission charges for small distributed generation, which many respondents felt would be better implemented as part of wider changes to transmission arrangements.

We remain minded to make changes to connection charging and access rights – but there are some areas we need to consider further before issuing a final decision.

Access SCR - timeline

- We previously indicated our intent to publish a final decision by the end of this year, however, the possibility of changes in response to feedback, and/or additional analysis to support our decision, mean that this could be delayed.
- We currently think that the end of Q1 2022 would be a more practical backstop date for a decision that achieves April 2023 implementation. We intend to adhere this critical path for implementation by RIIO ED-2.



➤ Distribution Use of System (DUoS) Reform



Objectives for today:

- Provide an update on DUoS reform
- Key areas of development
- Next steps

Updates on DUoS reform

We intend to consult on splitting the current Access SCR into 2 distinct phases:

- **Phase 1:** Current minded-to scope (target 2023 implementation)
- **Phase 2:** Wide ranging review of DUoS (post-2023 implementation)

Rationale

- > Allows us to proceed with phase 1 proposals to a time scale aligned with RIIO-ED2 and reduce the need for significant re-openers
- > Opportunity for us to engage with wider policy developments to inform future DUoS design. For example:
 - Ofgem's full-chain flexibility programme
 - The potential for market reform
 - Transport and heat decarbonisation
 - Distribution System Operation (DSO) and whole systems regulation

Key areas of development (not exhaustive)

Decarbonisation, digitalisation, and decentralisation are changing the use of distribution networks creating new challenges for network operation, cost recovery, regulation, and investment. DUoS needs to evolve to meet these challenges.

Principle based areas

Updated case for change

Principles and trade offs in network charging

Role of DUoS in the emerging energy system

What signals to send and to whom

Distributional impacts, vulnerability, and fairness

Technical choices

Resolving outstanding issues from access reforms

Linkages to flexibility

Choice of cost model

Locational granularity and time bands

Charge design



Next Steps

- > **Oct/Nov 2021:** Publish procedural 4-week consultation on “splitting” the SCR into two phases, taking DUoS forward under a separate SCR process, with scope and governance arrangements consistent with the original process.
- > **Next few months:** Engagement internally and with industry to explore “principle based areas” and alignment with Ofgem’s wider strategic change programmes.
- > **Q1 2022:** Circulate detailed plan, milestones, and timescales for DUoS reform.

Ask me anything

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Transmission Network Use of System Charging

Harriet Harmon, Ofgem

TNUoS Next Steps

We recognise the potential need for TNUoS reform

Several stakeholders and members of industry have met with us to share their views on TNUoS arrangements. The messages we've heard can be grouped thematically:

- > The charging methodology underpinning TNUoS is too complicated and inherently leads to volatility which some parties find difficult to manage;
- > The foundation of the charge being the distance between sources of generation and sources of demand does not lead to charges which provide a useful signal;
- > Charges are unpredictable to such an extent that they are a barrier to investment;
- > Cost-reflectivity could be improved as there is a disconnect between the charging methodology and the realities of the network and planning regimes;
- > Charges are too high in Scotland and are too high in comparison to generators in EU Member States;
- > The (comparatively small) size of the demand locational charge may hamper efforts to improve Demand-Side Response among consumers.

We don't believe we've necessarily seen strong evidence in support of *all* of these areas but recognise industry has lacked a specific vehicle for provision

TNUoS – a new CfE

We will shortly be issuing a Call for Evidence

We expect this Call for Evidence to run for several weeks, providing industry and stakeholders with the opportunity to provide evidence regarding:

- > The extent to which reform of TNUoS arrangements is required;
- > Priority areas of reform (and rationale);
- > The right vehicle for change; and
- > Timescales

All responses will be reviewed, alongside information already submitted by some industry parties.

We intend to announce our proposed next steps this quarter.

Potential areas for reform

We have already given significant thought to aspects of the TNUoS charging methodology which might be reviewed in any reform programme. We are interested in your views on the below non-exhaustive list of potential areas for review

Area for review

Signalling of spare/available capacity

Backgrounds

Use and calculation of multipliers

Reference node

LLES/Storage signals

Why?

This information is currently absent – TNUoS sends message based on flow not capacity – is there the potential for distorted signals?

Is static ACS the right measure? Does it limit charge design? Decreasing conventional plant capacity in FES – review Peak/Year Round?

Concerns have been raised re: the underlying calculation of security and expansion factors – review for cost-reflectivity?

Last year we said we didn't see enough evidence to consider change was warranted – we would be open to receipt of additional information

Storage/LLES may be used in resolution of network issues rather than being a discrete network user – whether/how best to reflect that role in arrangements

➤ TNUoS – what's the right vehicle?

There are many ways of changing arrangements

We're interested in your views on whether reform should be delivered through:

- > A new TNUoS SCR;
- > Open governance;
- > Task Forces; and/or
- > A hybrid approach

There are pros and cons to each option – we'd welcome your initial views in advance of the CfE.

Ask me anything

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174 upvotes

Break

5 mins

➤ Breakout sessions

Your say

- > 20 mins ~5 mins on each topic
- > Each room will have a facilitator from Ofgem or the ESO
- > The facilitator will have a set of questions on the topics covered today to guide the discussion
- > Record the main discussion points from your group into menti (everyone can submit comments)
- > After 20 mins you will be pulled back into the main room
- > Any technical issues – contact us in the main Teams chat

Breakout discussion

Right idea to split the SCR but industry said timing was a challenge all along. But why taken so long

BSUoS - good to get insight need long lead time on tariff setting

TNUoS - how does TNUoS reform fit with wider market reforms

Immediate reaction on DUoS/SCR plans is frustration. Still don't know what the questions on DUoS will be, never mind the answers

BSUoS - be good to understand under recovery potential and how it will be reconciled

BSUoS - proposals good & supportive of changes. Issue for suppliers is getting notice is key i.e. longer notice period. Counter is that its more accurate charge if shorter notice

BSUoS reform going in right direction

Market/world is moving faster than the SCR process was built for

TNUoS - is peak demand the right measure, can the methodology be synchronised with the weather if renewables are a cost driver

Breakout discussion

BSUoS - principle of final demand paying is good but need to ensure that prices move in wholesale market to reflect that. Also need to understand how wholesale costs reflects that in price cap method

Access - glad that it's being picked up from responses that DUoS customers need protection from significant £m's that will be socialised

Access - not as close to, seem to make sense. Shallower boundary moving to DUoS, are difficult to know without understanding impact on DUoS. Feel confused about future of DUoS - need clarity on phase 2.

Access - Economic test in IGT could serve as inspiration for bill payer protections

Access - good to make decision later to take on board feedback

Access - ENA looking at implementation sub groups to enable customer and stakeholder priorities and needs

BSUoS - How do we know which final demand sites it should be levied on? Are there requirements on DNOs

Need to think about the effect of DUoS post connection-refom, esp. in light of higher prices

TNUoS - taskforces worked well for BSUoS and could be a useful route here. Ofgem shouldn't be afraid to comment for fear of being held to comments that were intended to better inform debate

Breakout discussion

Access - greater alignment of Tx and Dx rights are needed. Financial firmness for distribution users would be needed. BM access could help but its not full financial firmness.

DUoS - splitting in to separate SCR makes sense - but where are you picking up the work from (current developed options or more fundamental thinking)

DUoS - glad to hear that work will be done on DUoS. Need to think about time profiled access - ie gen capacity charges

DUoS - need to consider how DUoS will interact with DNO 'balancing services' and ESO balancing services

DUoS - don't introduce overly complex changes to achieve what might be niche goals

DUoS - what about financially form connections, are they on or off the table now?

DUoS - SCR launched in 2018, so it takes a long time to make changes via an SCR. If not then implemented in 2023, then it could be a significant wait for reforms to come in.

TNUoS - key issue at the moment is uncertainty. Hard to plan if you are a small generator.

DUoS - TNuoS reform and waiting for SDG paying TNuoS, may be worth considering more in depth analysis of their impact on the 'system'

Breakout discussion

TNUoS - ESO 5 year forecast give lots of sensitivities if mods do/don't happen. Really helpful but show impact of change. Hard to turn concept into up/down for a user. Ofgem should use this resource

TNUoS - support wider review,

Broadly supportive of Access split. Has been going on for quite some time and we need to make progress. What's important is that the DUoS changes do happen

TNUoS - welcome review of charging difficult and volatile etc currently

TNUoS - needs to be done

TNUoS - SCR process is very slow but affords all parties more of an opportunity to feed in. Industry self governance is cloistered and issues more likely to be captured by large incumbents. Task force a good option?

TNUoS - SCR takes a long time.

Need to resolve distortions between T/D and connections charging.

Access - grandfathering arrangements should be considered

Breakout discussion

When can industry next feed into Ofgem thinking for AFLC Ph2 regarding DUoS interactions with other issues?

need to ensure that more consideration is given to other areas important to investment, such as planning

Not sure what's to be done but will the connection boundary changes lead to a hiatus whereby developers will wait until 2023 for the cheaper route to deploy LCTs?

TNUoS needs to be made investable fast! It is currently too expensive and too high risk for the large scale of new generation investment needed between now and 2050

BSUoS direction decided and clear but processes rickety - for establishing Non Final Demand for SVA sites.

TNUoS - need to determine what TNUoS should be doing before looking at the detail - what's the principles/philosophy behind the charge?

TNUoS - SCR takes too long, but we need the ability to input and inclusiveness. So could we devise a targeted and streamlined SCR which clearly understands its problem statement, is narrowly focused and sets clear milestones for decisions?

ESO should be made to provide a 10 year (25 year better) TNUoS forecast to at least give industry a focal point for understanding risk and sensitivities

Flexibility signals should come from wholesale price, balancing mechanism and ancillary services...not network charges. Network TOU distorts competition in these other flex markets

Breakout discussion

can early headline messages on DUoS reform be made; e.g .
will charges be locationally granular - to what extent - such
decisions will require significant changes

Breakout Plenary

Q & A

**Chaired by David Wildash,
National Grid ESO**

- > Lynda Carroll, Ofgem**
- > Patrick Cassels, Ofgem**
- > Harriet Harmon, Ofgem**

Ask me anything

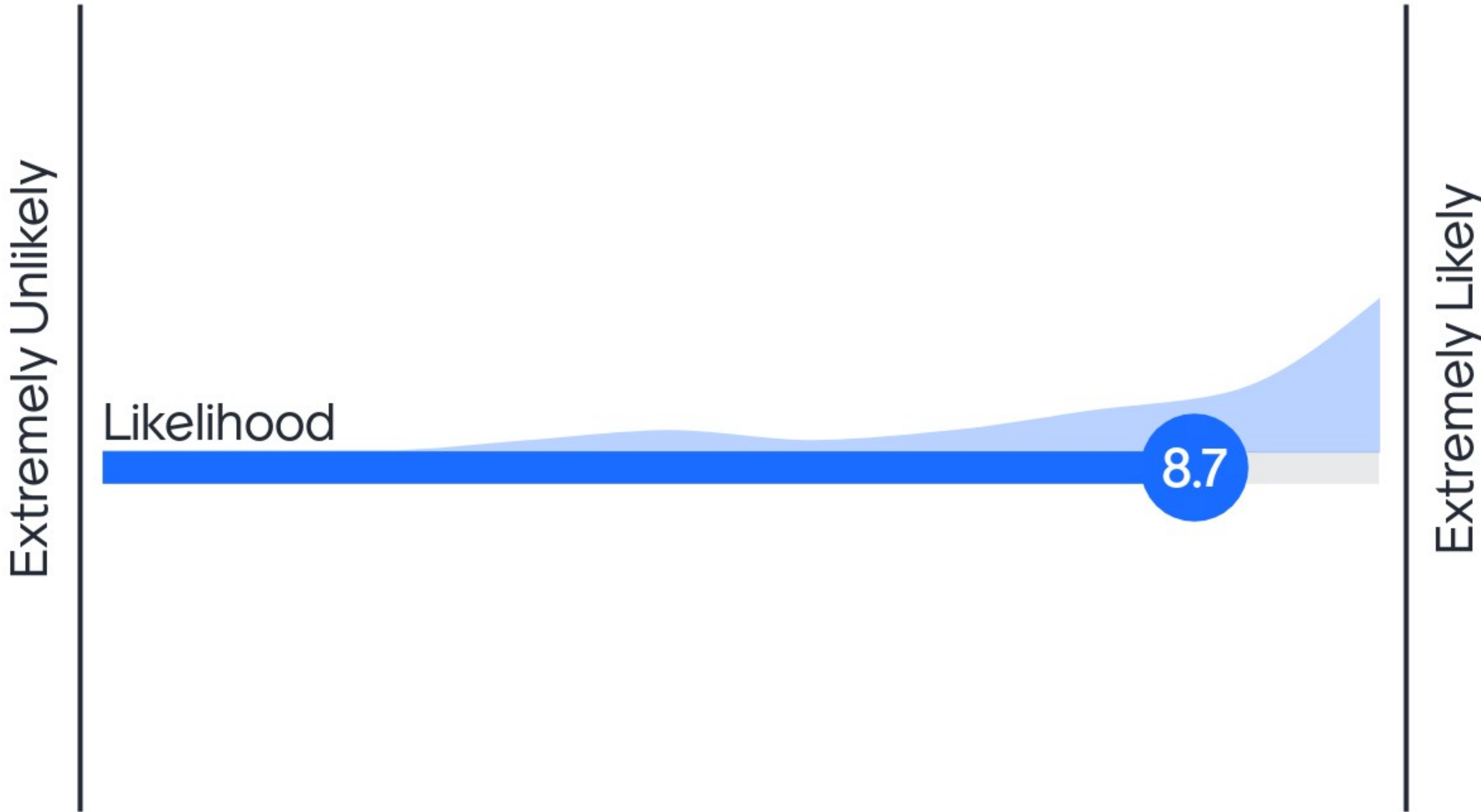
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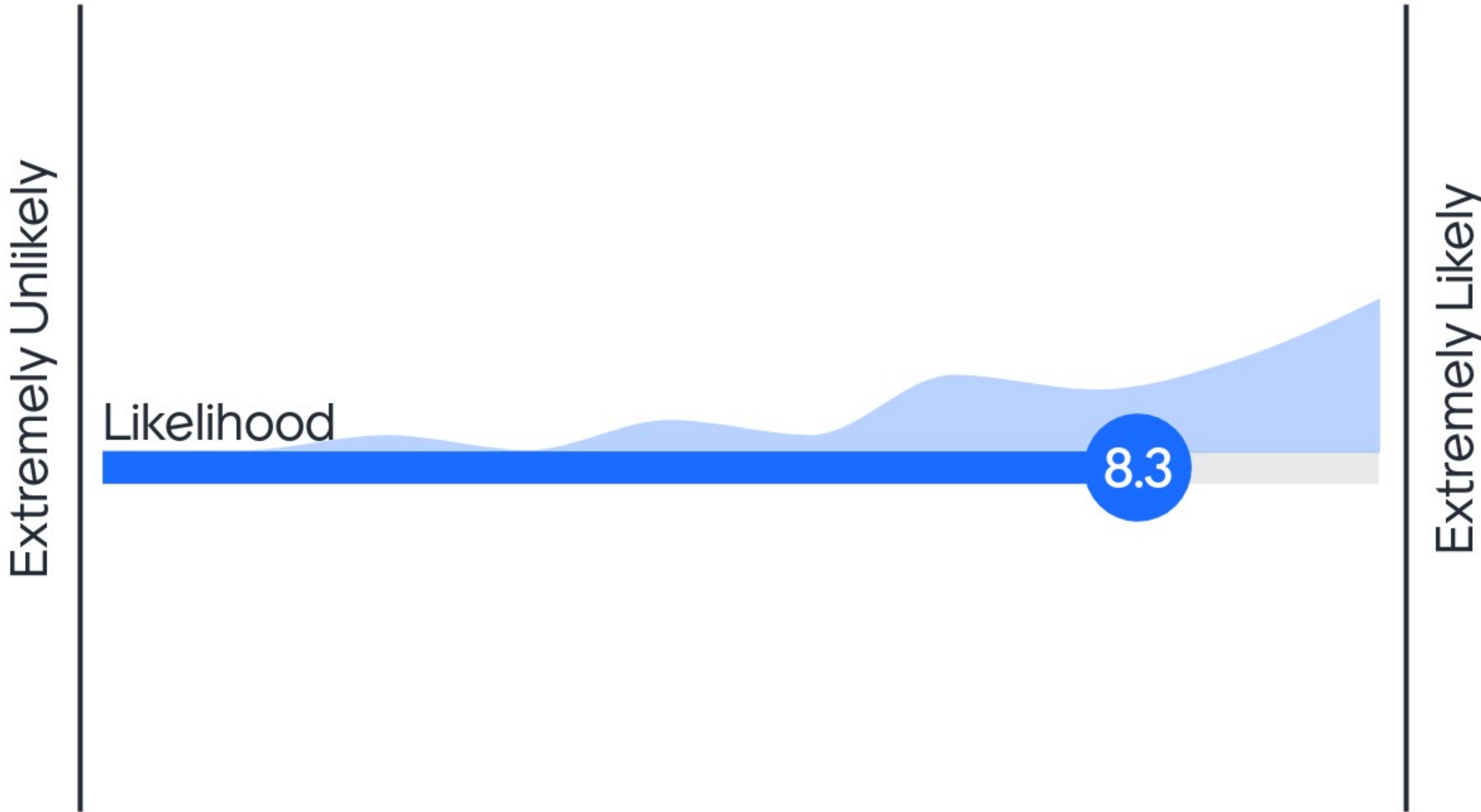
Feedback

> How did we do?

On a scale of 1-10, how likely are you to recommend this event to a friend or colleague?



On a scale of 1-10, how likely are you to recommend the secretariat of this event?





Forum

Thanks

