

Executive Summary – Winter 2019 working paper

1.1. Our energy system is undergoing a radical transformation as the process of decarbonisation, digitisation and decentralisation accelerates. We are undertaking a package of reforms to enable competition and innovation, decarbonisation at lowest cost and to protect consumers in the transition to a smarter, more flexible and low carbon energy system.

1.2. Our Future Charging and Access programme is an important part of these reforms. The Future Charging and Access programme aims to ensure that all users pay a fair share towards the costs of the existing networks and systems, whilst supporting efficient decisions and reducing harmful distortions to the forward-looking, cost-reflective charges. The programme goes hand in hand with enabling greater use of flexibility and builds on the Smart Systems and Flexibility plan we produced with government.

1.3. As part of our programme, in December 2018 we launched a Significant Code Review (SCR) into network access¹ and forward-looking charging.² The objective of the SCR is to ensure that electricity networks are used efficiently and flexibly, reflecting users' needs and allowing consumers to benefit from new technologies and services while avoiding unnecessary costs on energy bills in general. The SCR is consistent with our strategic narrative for 2019-23 to focus on enabling competition and innovation, decarbonisation, and protecting consumers, particularly the vulnerable.³

1.4. This is the second Access and Forward-looking charges working paper that we have published this year.⁴ The first working paper focused on options for reforming the choice and definition of access rights, improving the locational accuracy of distribution charges, and reforming the design of distribution and transmission demand network charges. It also

¹ Network access rights define the nature of users' access to the networks – how much they can import or export, when and for how long, where to / from, and how likely their access is to be interrupted and what happens if it is.

² Forward-looking charges are the elements of network charges that signal to users how their actions can either increase or decrease future network costs in different locations. These charges include the upfront connection costs for connecting to the system and the ongoing forward-looking use-of-system charges.

³ Our strategic narrative for 2019 – 23: <https://www.ofgem.gov.uk/system/files/docs/2019/07/our-strategic-narrative-2019-23.pdf>

⁴ <https://www.ofgem.gov.uk/publications-and-updates/access-and-forward-looking-charges-significant-code-review-summer-2019-working-paper>

identified and assessed the different approaches for valuing system flexibility. In addition, it set out the context and approach to this SCR and outlined the current arrangements.

1.5. The second working paper builds on this with a set of discussion notes setting out our current thinking on:

- **Options for reforming the distribution connection charging boundary:** currently new users seeking connection to the distribution networks pay for new connection assets (as with transmission), and can also be asked to pay towards any reinforcement costs needed to connect them. We consider whether this difference between transmission and distribution arrangements is creating problems, including potentially undue barriers to new connections at distribution level, distortions between transmission- and distribution-connecting projects, or inefficient network development. We also consider the options for reform, including moving to a shallower distribution connection boundary (ie where less reinforcement costs are funded via connection charges), moving to a fully shallow connection (where no reinforcement costs are funded via connection charges) and options to keep the current connection boundary but make other changes, such as allowing connection charges to be paid over time. We also set out options for making consequential changes to the liability and security arrangements for customers connecting at distribution.
- **Options for focused reforms to transmission network charges:** distributed generation can contribute towards transmission network costs in some locations, and reduce transmission network costs in others. However, the transmission charging arrangements for distributed generation do not fully reflect these cost differences and are different from those for larger generators. In this paper we consider the issues this creates and outline options to better align transmission network charges for different sizes of distribution-connected and onsite generation. We also consider the “reference node”, which drives the proportion of the forward-looking transmission charges which are recovered from generation and demand parties. We assess whether the current approach could drive distortions between different types of user and set out possible reform options. We also build on the discussion in our first working paper of the different options for the design of transmission network charges for demand users. In undertaking this work, we will

continue to consider where greater alignment of arrangements at transmission and distribution level is appropriate.

- **How options could be applied to small users:** we outline our current thinking about how the options we are considering should apply directly to small users. We define small users as distribution-connected users who do not have an agreed capacity requirement as the basis for their distribution network charges – this includes domestic users. We consider the case for potential adaptations to enable small users to engage and ensure that there are not undue impacts to certain groups (especially those in vulnerable situations) from the reforms we are considering. This includes considering the extent to which our regulation of the retail market could provide sufficient protection, or whether we may need to make adjustments to how our options for access and charging would apply for small users.

1.6. We are also publishing supporting notes:

- **Consumer Panel report** and **Behavioural Insights report** on small users: alongside our thinking on how options could apply to small users, we have published a report of feedback from a Consumer Panel workshop on access and forward-looking charges and a report setting out our findings of a review of existing studies on the behavioural responses of small users.
- **Illustrative examples:** we explain how the options we are considering could benefit different users of the system. We build upon several large user examples that we published in our first working paper (a wind generator, a local energy scheme, an existing large industrial user, a business with a large vehicle fleet and a storage operator). We also identify several small user illustrative examples.
- **External engagement:** we provide an overview of the engagement we have undertaken with industry stakeholders relevant to this working paper, including work informed by our Challenge and Delivery groups (discussed below) and

information about interviews we conducted with suppliers and a summary of their responses.

- **Current arrangements:** An overview of the current access and charging arrangements. We have updated this with additional content on transmission arrangements since our summer working paper.

Taking forward the review

1.7. The analysis set out in this set of discussion notes represents our current thinking on the long-list of options, and we will continue to develop this. We intend to consult on our draft SCR conclusions and draft Impact Assessment in mid-2020, with a decision on final conclusions and Impact Assessment early in 2021. This would include a direction to industry to raise the necessary code modifications to take our decision forward. We are planning on the basis that the reforms would be implemented in April 2023.

1.8. We are committed to undertaking our work on Future Charging and Access reforms in a transparent and open manner. To help support the development of the SCR we have launched a Challenge Group⁵ and Delivery Group.⁶ In addition, we will continue to engage stakeholders more widely, including through Charging Futures.

1.9. We will be presenting the content of this paper and gathering feedback at the Charging Futures Forum on **18 December 2019**.⁷ Please contact chargingfutures@nationalgrides.com to sign up to the Charging Futures distribution list and receive regular updates on future Charging Futures events and webinars.

⁵ The Challenge Group provides ongoing stakeholder input into the SCR. This group provides a challenge function to the work of the Delivery Group and ensures policy development takes into account a wide range of perspectives.

⁶ The Delivery Group comprises of network companies, the Electricity System Operator and relevant code administrators. The Delivery Group support us in developing and assessing options, drawing on their expertise and knowledge of how the networks are planned and operated.

⁷ <http://www.chargingfutures.com/about-charging-futures/charging-futures-forum/18-december-2019-forum/>

1.10. We would welcome any further comments on this paper by **Friday 24 January 2020**, and in particular from those stakeholders who have not been able to engage with us via the Charging Futures Forum or the Challenge and Delivery Groups. Any views on whether there are additional options we should be taking into account or issues we should consider which are not included in this working paper or our summer working paper⁸ would be particularly helpful. Please send your responses to FutureChargingandAccess@ofgem.gov.uk.

⁸ <https://www.ofgem.gov.uk/publications-and-updates/access-and-forward-looking-charges-significant-code-review-summer-2019-working-paper>