

Small users – discussion note

Summary

This note provides an overview of existing arrangements for small users and considers how the potential access and charging options we identified in our Summer working paper could apply for small users. It also explores any adaptations which might be needed.

Access and charging reforms aim to send signals to network users about how their behaviour can affect future network costs and benefits. Consumers overall should benefit through our reforms from reduced future network costs, while facilitating the uptake of new, low carbon technologies. Consumers who take action will realise benefits, either directly or via overall lower tariffs from their supplier. Consumers who aren't able to respond themselves will also benefit from a more efficient and lower cost system. The scale of benefits will depend on the extent to which users can be incentivised and enabled to change behaviour in response to signals. In our strategic narrative we set out three key objectives, with a focus on enabling competition and innovation, decarbonisation, and protecting consumers, particularly the vulnerable.¹

Changes to better define and increase choice of access rights could enable users' access to more closely match their requirements, while price signals sent through charging could encourage users to change behaviour at times or in places where capacity is limited. But the access and charging options which make sense for larger, commercial users, may not always be as well suited to smaller consumers. Adaptations may be needed to enable consumers to realise the benefits and protect them from potentially adverse consequences, given the essential service nature of electricity. This is particularly true for those in vulnerable situations.

We have considered how our general access and charging options could apply for small users, the types of opportunities for benefits, and potential consumer risks which could follow from our reforms. We have also considered a range of potential adaptations – to access and charging options directly, or which the retail market could deliver – which would be aimed at addressing these risks.

¹ Our strategic narrative for 2019 – 23: <https://www.ofgem.gov.uk/system/files/docs/2019/07/our-strategic-narrative-2019-23.pdf>

Suppliers currently act as consumers' interface to the energy system. The regulatory framework should keep pace with the rapid change in products and services being offered to energy consumers. Retail market rules must also evolve if they are to keep pace with technological change and remain fit for purpose through the energy transition. We may therefore conclude no specific changes are needed. But where more specific risks may arise from our options, or actions of individual suppliers may not be sufficient to ensure vulnerable consumers are protected, there may be a need for further steps.

This paper presents our initial views on the options and approaches. We will continue to assess the potential benefits and practicalities of access and charging options for small users, and any need for adaptations or further protections for any groups.

1.1. This note is set out as follows:

- Section 1: An outline of the context to our work on small users
- Section 2: A description of the arrangements currently in place for small users
- Section 3: An outline of our approach to considering small users under our guiding principles
- Section 4: An overview of how our options could apply for small users, including an outline of the benefits and potential risks
- Section 5: An outline of potential adaptations which could be made for small users
- Section 6: A summary of our preliminary views and further work.

Section 1 – Context

1.2. As part of the Network Access and Forward-Looking Charges Significant Code Review (Access SCR), we are considering a suite of reforms to bring benefits to consumers by enabling them to benefit from new technologies and services, through enabling the roll out of low carbon technologies (LCTs) such as electric vehicles (EVs) and heat pumps, while reducing the need to reinforce the electricity networks to accommodate them. We have set out the reforms we are considering as part of our Summer working paper and other notes

(particularly, the connections charging boundary and transmission charging notes) we are publishing alongside this one.²

1.3. While we expect consumers overall to benefit from these reforms, we recognise that small users have diverse needs and capabilities and, in particular, some are in vulnerable situations. As we have set out in our Consumer Vulnerability Strategy 2025, we will give particular consideration to whether some aspects of our arrangements should be different from those for larger users for this reason.³

1.4. In this note we set out our initial considerations of how these options for reform could apply to small users.⁴ We are seeking to understand how far these could/should be applied directly for small user groups, or whether any adaptations or protections may be needed – to help consumers engage with and benefit from those options and to protect them from potential adverse impacts, eg from inappropriate access or tariff choices.

1.5. In our assessment, we have considered the types of opportunities and potential risks which may apply for small users under these basic access and charging options. In doing so, we have drawn on work with a cross-industry subgroup we established under our SCR Delivery Group, focused on small users, to help ensure our reform proposals are informed by industry understanding of customers' needs and how the range of options can work best in practice. This will continue to inform our thinking going forwards and will be published on the Charging Futures website⁵ once complete. We also build on previous research, discussed further in our note on the external inputs to our work, and a literature review of behavioural evidence review. We are publishing both of these pieces of work alongside this note, as part of the working paper. We have further considered our assessment of these options, building on the subgroup's work to date, and have additionally begun to explore potential regulatory approaches.

² Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper: <https://www.ofgem.gov.uk/publications-and-updates/access-and-forward-looking-charges-significant-code-review-summer-2019-working-paper>

³ Consumer Vulnerability Strategy 2025: <https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025> and Ofgem's regulatory stances: <https://www.ofgem.gov.uk/publications-and-updates/ofgems-regulatory-stances>

⁴ In launching the SCR, we defined small users as those distribution-connected users who do not have an agreed capacity requirement as the basis for their distribution use of system charges. These users are typically those that do not have Current Transformer meters. This includes small non-domestic consumers such as microbusinesses, as well as households, some of whom may be vulnerable.

⁵ <http://www.chargingfutures.com/charging-reforms/access-forward-looking-charges/resources/>

1.6. Following our assessment, we may conclude that no specific adaptations or additional protections are needed, and the existing protection framework afforded by the retail market regulatory framework and wider government policy is sufficient. Equally, depending on the main access and charging options shortlisted, some of the options for small users discussed in this paper may not need to be considered further, where any potential detriment is associated with a particular option not taken forward. We will consider which adaptations may be warranted for further assessment as part of the shortlisting and impact assessment process.

1.7. Should we consider additional steps are needed, these could involve changes within the access and charging reforms directly, or alternatively wider retail market policy reforms. We are mindful that different types of approach may be best suited to address different types of risks for different consumer groups, and are considering this in our assessment.

Section 2 – Existing arrangements for small users

1.8. Here we describe how the current access and charging arrangements apply for small users. This builds on the outline included in the note on current arrangements published as part of Summer working paper.⁶

Access arrangements

1.9. By access arrangements we mean the nature of users' access rights to the electricity networks (for example, how much and when users can import/export electricity) and how these rights are allocated.

1.10. Most small users do not currently have well-defined access rights to the network. The current user is often not the one who was party to the original connection agreement, which may have been made a long time ago. In practice, most consumers are only limited by their fuse size or service cable and may never have considered or "chosen" the level of access they require.⁷ There is no choice about the nature of their access, eg whether it is unlimited or

⁶ Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper. Current arrangements: https://www.ofgem.gov.uk/system/files/docs/2019/09/000_-_working_paper_-_summer_2019_-_existing_arrangements_final.pdf

⁷ Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper. Current arrangements: https://www.ofgem.gov.uk/system/files/docs/2019/09/000_-_working_paper_-_summer_2019_-_existing_arrangements_final.pdf

restricted at a certain time, or can be curtailed by their distribution network operator (DNO) under certain conditions.

Use of system charges

1.11. Forward-looking charges are the type of electricity network charges which signal to users how their actions can either increase or decrease network costs in the future.⁸ Suppliers face separate charges for use of the distribution and transmission systems on behalf of their customers.

1.12. As described in our Summer working paper, distribution use of system (DUoS) charges for small users whose suppliers have elected for them to be settled on a half-hourly basis consist of a fixed charge and three unit rates, which apply during different periods of the day (known as time bands) and reflect how constrained the network is assumed to be during that period.⁹

1.13. Charges for small users who are non-half hourly settled (currently the vast majority of customers) typically consist of a fixed charge and a single unit rate that is applied to the total volume they consume. Following a recent modification to better align the network charges faced by different types of users, non-half hourly settled customers will also have charges that consist of a fixed charge and three unit rates, which apply during the three time bands.¹⁰

1.14. A small proportion of households have long had time-varying charging and access arrangements – notably, many with electric storage heating. These customers have multi-rate tariffs. This load may be staggered overnight, helping avoid network impacts.¹¹

⁸ We recently published our decision on the treatment of residual charges under the Targeted Charging Review: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment>

⁹ Distribution Connection and Use of System Agreement DCP179 - Amending the CDCM tariff structure: <https://www.ofgem.gov.uk/publications-and-updates/distribution-connection-and-use-system-agreement-dcp179-amending-cdcm-tariff-structure>

¹⁰ DCP268 will introduce time bands which will apply to customer's profiled usage where they are not half-hourly settled. DCP268 - DUoS Charging Using HH Settlement Data:

<https://www.ofgem.gov.uk/publications-and-updates/dcp268-duos-charging-using-hh-settlement-data>

¹¹ On Economy 7 or Economy 10 tariffs, consumers get a cheaper rate for their usage for either 7 or 10 hours of the day. Further information is available at <https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/consumer-guide-understanding-energy-meters-ofgem>

1.15. Transmission network use of system (TNUoS) charges are calculated following application of the Transport model, consist of a volumetric charge based on usage between 4pm and 7pm year round, and are charged to suppliers.¹² Suppliers are charged based on profiled usage, with an average usage profile applied to their year-round consumption to estimate usage in the relevant period. Both DUoS and TNUoS charges vary by region, with different charges in each of the 14 distribution licence areas.¹³

1.16. As noted above, currently, suppliers can elect for their customers' energy consumption to be settled on a half-hourly basis. We are considering reforms to introduce market-wide half-hourly settlement for small users under our Settlement Reform SCR.¹⁴

Connection charging

1.17. Most households will not have applied individually to the DNO for connection – a developer may apply for an aggregate level of capacity for a site which will become a multi-property development. An individual connection agreement may not be readily available for many households, particularly for older properties.

1.18. In RIIO-ED1 we decided to socialise the cost of any new capacity required on the wider network arising from customers connected to the licensee's distribution system with a fuse size of 100 amp (or less) per phase, to enable the connection of LCTs.¹⁵ We clarified that the installation of most electrical equipment that would change a household's usage but still mean they would be underneath their fuse size would not be subject to a connection charge for

¹² Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper. Current arrangements: https://www.ofgem.gov.uk/system/files/docs/2019/09/000_-_working_paper_-_summer_2019_-_existing_arrangements_final.pdf

¹³In 2015 we published analysis on regional differences in network charges, available here: https://www.ofgem.gov.uk/sites/default/files/docs/2015/10/reg_charges_final_master_version_23_october_2015.pdf. Under our Targeted Charging Review, a separate residual element is being developed for non-half-hourly customers: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment>

¹⁴ Our SCR on the introduction of market-wide half hourly settlement is considering the extension of these arrangements to all consumers in existing profile classes 1- 4 – ie domestic and small non-domestic consumers. The introduction of market-wide half-hourly settlement would be a key enabler for a number of options we are considering. Further information is available here: <https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement>

¹⁵ This decision is outlined here, with the requirement introduced under standard licence condition 13C of the electricity distribution licence: <https://www.ofgem.gov.uk/publications-and-updates/strategy-decision-riio-ed1-overview>

wider network investment. We signalled this was intended as an interim measure, but recognised that there was no practical alternative to our decision until sufficient smart metering data became available. However, this decision means most existing households, and small non-domestic consumers, currently receive very limited signals about how their behaviour could create wider costs and benefits for the electricity network.¹⁶

1.19. Charges may apply if changes to a consumer's physical connection are required – for example if they wanted to install equipment (eg an EV charge point and a heat pump) which would mean they need to move from a single phase to three phase connection. In such cases, the 'shallowish' connection charge will apply as it would for larger users, where users are required to contribute towards any new capacity on the wider network required up to a voltage level above their point of connection.

Role of suppliers and wider retail market arrangements

1.20. Suppliers currently face DUoS and TNUoS charges on behalf of the consumers they supply. The introduction of market-wide half-hourly settlement aims to expose suppliers to the true costs of supply.¹⁷ It will be a key enabler for more cost-reflective charging signals to be sent to suppliers, and, as such, for many of our options. In turn, this should incentivise suppliers to encourage their customers to change behaviour, such as through load shifting, in a way which reduces future costs on the system. Consumers without these enablers are likely to have a limited choice of tariffs, which would reward flexibility.

1.21. Suppliers have a role in determining whether and how charging signals are passed through to their consumers, alongside wider costs associated with supplying their customers, combining options into tariffs. We expect the innovation driven by retail competition to ensure consumers are presented with different innovative offers, potentially including new technologies. We see significant potential benefits for consumers from innovation, but these new options may also present new potential risks for consumers.

¹⁶ Getting more out of our electricity networks by reforming access and forward-looking charging arrangements, published in December 2018. Further information is here: https://www.ofgem.gov.uk/system/files/docs/2018/07/network_access_consultation_july_2018_-_final.pdf

¹⁷ Electricity Settlement Reform: <https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement>

1.22. Suppliers are subject to principles-based obligations under their licence, covering, for example, requirements to treat customers fairly, including each domestic customer in a vulnerable situation, and to ensure consumers can easily compare tariffs and make informed choices.¹⁸ These have been designed considering how consumers will be protected under many of the sorts of tariffs which are emerging and may become more prevalent in future, as new and innovative models of supply develop, and consumers connect new more flexible loads.

1.23. Many approaches adopted under the existing principles will help protect consumers under any new access or charging options. We want to ensure we have considered how the framework would apply to any specific new access options or changes to network charges, and whether any adaptations or further protections may be warranted.

1.24. Currently retail price caps are in place, protecting customers on default and standard variable tariffs and prepayment customers from being overcharged.¹⁹ Through the joint BEIS-Ofgem Future Energy Retail Market Review (BEIS-Ofgem Review) we have been considering arrangements for protecting consumers in the retail market in the future. This includes considering any potential future measures which may be needed to protect consumers, for example following the current default tariff price cap or in relation to new, non-regulated market participants, such as third party intermediaries.

1.25. As mentioned in our Strategic Narrative for 2019-23, one of Ofgem's priorities by 2023 is to develop a successor regime to the current default tariff price cap, which must expire no later than 2023. The successor regime will look to ensure appropriate protections are in place for consumers in vulnerable circumstances. This could cover vulnerable consumers who may find it more difficult to engage in a more complex, increasingly digital market and hence benefit from innovations like new time-of-use tariffs. We are also considering how best to protect consumers that will engage with a broader range of companies or intermediaries, many of which are not regulated under our current regime,²⁰ and we have explored these issues in the joint BEIS-Ofgem Review.

¹⁸ SLC0, SLC0A and SLC25. Further details in the Standard conditions of electricity supply licence https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Supply%20Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm_source=ofgem&utm_medium=&utm_term=&utm_content=licencecondition&utm_campaign=epr

¹⁹ Further details on the energy price caps: <https://www.ofgem.gov.uk/energy-price-caps/industry>

²⁰ Our strategic narrative for 2019-23: <https://www.ofgem.gov.uk/system/files/docs/2019/07/our-strategic-narrative-2019-23.pdf>

Section 3 – Particular considerations for small user options

Guiding principles

1.26. In launching the Access SCR, we identified three principles which guide our assessment of options for reform of access and forward-looking charging:²¹

- **Principle 1** focuses on ensuring that **arrangements support efficient use and development of system capacity**. Arrangements should ensure consumers can get the access they need, to support the uptake of new products and services, and provide signals for where new capacity is needed. They also support decarbonisation, primarily by enabling the uptake of LCTs.
- **Principle 2** seeks to ensure that **arrangements reflect the needs of consumers as appropriate for an essential service**.
- **Principle 3** sets out that **any changes should be practical and proportionate**. Our Summer working paper identified a number of key aspects considered in our assessment, such as data requirements, system changes, customer engagement and commercial agreements.

1.27. Principle 2 is a key focus of the assessment of options for small users. We consider that the two key aspects of this are:

1. As electricity is an essential service, our priority is to ensure that consumers overall benefit from our reforms, while aiming to avoid inappropriate outcomes or unacceptable impacts for specific groups of small users, particularly those in vulnerable situations. This may be achieved in the access and charging arrangements themselves or through the wider policy and regulatory arrangements. This may involve considering which forms of customer demand cannot be readily shifted and are likely to be critical to consumers' wellbeing. It could also involve considering any potential for inappropriate adverse impacts – financial or of other types – and any adverse effects on particular groups.

²¹ Our guiding principles are set out in more detail in our Summer working paper "Context and our approach to this SCR" note: https://www.ofgem.gov.uk/system/files/docs/2019/09/111_-_working_paper_-_summer_2019_-_intro_note_final.pdf

Consideration of the needs and capabilities of consumers who may be vulnerable will form a key part of this assessment. We discuss these aspects further below.

2. Users, or suppliers/intermediaries on their behalf, need to be able to understand arrangements and have sufficient information to be able to reasonably predict their future access and charges. This may involve considering the inherent predictability of charges and what types of data and information are required to support this, in which form, and how this might differ between customer groups with different capabilities.

Electricity as an essential service

1.28. Energy is an essential service that is important for many parts of our economy and society, including for people's comfort and health.²² In launching our Access SCR, we recognised this significance, noting small users in particular may need protection where arrangements may result in detriment.

1.29. We recognise that there will be differences in how readily households and small businesses are able to be flexible around how and when they need to use electricity. Some may be flexible with their demand, but others will not readily be able to change their time or level of usage without some risk of detriment. This could include those living in poorly insulated homes who rely on traditional electric heating, for instance, or those households with young children who are unable to shift demand easily.

1.30. In this context, it is challenging to identify specific types of electricity demand which should be considered differently as "essential". Indeed, it may not be meaningful to try and do so for these purposes, particularly given consumers' varying and evolving needs.²³ In the future, as we decarbonise, electricity will increasingly be a source for new forms of demand, such as heating and transport, which consumers will be equally reliant on, though many of these new loads may often be more flexible, especially where enabled by smart technology.

²² Consumer Vulnerability Strategy 2025, published in October 2019. Further information is here: <https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025>

²³ For example, heating, lighting and medical needs are examples of basic needs today, while in future EVs may increasingly become the main form of transport for some consumers, and may be particularly critical for those living in remote areas with no public transport or with particular needs.

1.31. Rather, we intend to consider how readily consumers are able to be flexible with their usage, and any risks or potential detriment which may arise for them being so, as well as how they can best be supported to understand and engage with options. Consumers may need particular support when engaging with new tariffs and options. It will be important they can understand the requirements and potential implications of a tariff, and are comfortable with any level of ongoing engagement or behavioural change needed to benefit from the option, to ensure any choice of tariffs involve them taking on a suitable level of risk for their specific needs and capabilities.

1.32. We will also consider broader affordability concerns. More granular, cost-reflective charging signals can deliver benefits through incentivising suppliers to reduce the system costs associated with serving their customers, while meeting their needs to connect new products and services. This could result in suppliers targeting flexibility offers (such as to provide technology that would help manage a customer's electricity usage at different times) to those customers with higher costs to serve, by virtue of their location on the network or patterns of usage needs. But it could also mean that some suppliers increase tariffs for those consumers who have a higher cost to serve, by virtue of their location on the grid or consumption profile, which could lead to affordability pressures for them.

1.33. We will therefore consider any differences between the impacts for different types of consumer groups, including in different locations and with different usage patterns. As we indicated at the Access SCR launch, we give particular consideration to those who may be vulnerable. We discuss this further below.

Vulnerability considerations

1.34. In our recently published Consumer Vulnerability Strategy²⁴ (which builds on our previous strategy), we define vulnerability as when a consumer's personal circumstances or characteristics combine with aspects of the market to create situations where they are:

²⁴ Consumer Vulnerability Strategy 2025, published in October 2019. Further information is here: <https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025>

- significantly less able than a typical domestic consumer to protect or represent his or her interests; and/or
- significantly more likely than a typical domestic consumer to suffer detriment or that detriment is likely to be more substantial.

1.35. Vulnerability can be transitory, as circumstances change, or permanent. It can also be challenging to identify. Risk factors can stem from individual circumstances or characteristics or the market itself, and how they interact. Some factors may limit consumers' ability to understand and engage with options in the market, while others may mean they are less able to be flexible with their demand – eg if they rely on medical equipment or forms of electric heating – and so are less able to benefit from our options.

1.36. Vulnerability can also involve financial difficulties. Consumers with low income or in fuel poverty may be able or willing to provide behavioural response, and could save on their bills through doing so, but may not be able to manage uncertainty on their bill or be flexible with their usage as comfortably as other users. Technologies that might help consumers be flexible and benefit from these options, such as smart appliances, solar panels or home storage might also be out of reach for individuals, due to high initial investment costs. In some cases, suppliers may offer these options as part of a tariff, which could enable more consumers to benefit.

1.37. We would particularly consider whether additional protections or adaptations were needed if there could be significant impacts for vulnerable consumers through our reforms, or if consumers could be made vulnerable, as a result of them and the resulting tariffs offered in the market. For example, this could be through inappropriate choice of tariffs or access rights, or by facing higher costs given their location and profile of their usage. Vulnerable consumers may need additional, more explicit support or protections, which either enable them to participate and engage with the market, or protect them from adverse consequences if they are unable to do so. One of our key priorities is to protect vulnerable consumers and we will consider whether additional protections are needed to protect the most vulnerable consumers in the energy market, in line with our Consumer Vulnerability Strategy 2025, where we set out our vision of an energy market that delivers positive and fair outcomes for all consumers including those in vulnerable situations.

1.38. This may not mean explicit changes are needed to access and charging arrangements. There are a range of existing measures to protect and support those who may be vulnerable and fuel poor, and it may be that these types of provision are sufficient, or could be built on, offering more appropriate routes to mitigate any concerns. The joint BEIS-Ofgem Review has considered options for enabling new business models, while ensuring future consumers are protected. We are also looking at actions we can take within our own powers to better enable retail innovation. There are also some potential links with government's wider protections, such as the Warm Home Discount (WHD)²⁵ and the Energy Company Obligation (ECO).²⁶

1.39. In considering any adjustments to arrangements for small users, we will need to understand any impact they may have for efficiency of arrangements, relevant to our first guiding principle, which ultimately lead to consumer savings.

Section 4 – How would our existing options apply to small users

1.40. We have considered a range of access and charging reform options, as introduced here and in the Summer working paper. The options we are considering involve new and potentially stronger signals to consumers. Many of these changes could form part of the smart, flexible future energy system which smart metering and half-hourly settlement are designed to enable and our reforms can contribute to the overall consumer benefits which can be realised through this transition.

1.41. It may be that a number of our potential reform options would not be feasible for consumers without smart metering or who are not half-hourly settled, as there would not be the necessary information to allow their usage to be monitored to determine the level during high charge periods or whether they have kept within agreed capacity levels. We will consider further what options could be possible and appropriate for these users.

1.42. Some options involve consumers engaging with their energy usage in new and different ways, eg introducing the concept of capacity, which may be unfamiliar to many users. While

²⁵ About the WHD scheme: <https://www.ofgem.gov.uk/environmental-programmes/warm-home-discount-whd-scheme>

²⁶ About the ECO scheme: <https://www.ofgem.gov.uk/environmental-programmes/eco/about-eco-scheme>

we expect the reforms to benefit consumers overall, there may also be new types of risks which could emerge through this transition as consumers build their awareness and engage in new types of tariffs, including those where savings may depend on their ability to be flexible. These will not all be specific to access and charging reforms, and the joint BEIS-Ofgem Review has also considered how the existing regulatory framework may need to adapt to ensure consumers are appropriately protected no matter what energy related products and services they choose to sign up to.

1.43. We have identified three broad types of potential risk which could arise through access and charging reform options:

1. **Direct financial impacts**, such as the risk of unexpectedly high bills if consumers do not understand or are not able to meet the level of behavioural response needed to save under a tariff. This might be a risk, for instance, with more dynamic time-of-use tariffs, which some consumers may find harder to predict, or if their circumstances changed such that they became less able to engage with the signals.
2. **Non-financial impacts**, such as if consumers restricted their usage below a level which was sufficient to meet their basic needs, such as heating. This might be a potential risk, for instance, with access options, where consumers might choose an inappropriately low access level, to save on their bills. The risk of self-rationing may affect both credit and prepayment customers, as is the case today. However, prepayment meter customers, are more likely to be vulnerable, and may face additional risks where unexpectedly high charges may also affect their supply if they have insufficient credit on their meter.²⁷
3. **Broader affordability impacts**. We would want to understand potential distributional impacts, including the extent of any locational differences and implications for affordability for small users. Given the nature of electricity as an essential service, we would particularly want to understand any impacts for vulnerable consumers and fuel poor groups.

²⁷ We recently consulted on our policy proposals to improve outcomes for prepayment meter customers who are self-disconnecting, this includes formalising the provision of emergency credit.
<https://www.ofgem.gov.uk/publications-and-updates/proposals-improve-outcomes-consumers-who-experience-self-disconnection-and-self-rationing>

1.44. In this section, we describe how our options could apply for small users, the opportunities for benefits each presents and where they could potentially lead to different types of potential risks. We are particularly keen to understand any potential risks for vulnerable consumers. This will help form a basis for assessing whether any changes are needed to ensure consumers are appropriately protected.

1.45. We only expect to take forward reforms to improve access right definition and choice and forward-looking charging signals where these will bring benefits to consumers, by reducing future system costs.²⁸ But we recognise there may be distributional impacts which result from this, which we will also need to consider in our impact assessment, discussed further below.

1.46. We also want to understand how far similar considerations could apply for small business customers or where there might be differences. While we expect many types of risks may be less relevant or more manageable for commercial customers than households, we note the similarities the smallest business customers can have with domestic consumers and would still want to understand potential issues and any distributional impacts.

Access arrangements

Policy options

1.47. **Definition of access:** Applying the access right reforms we are considering, as set out in our access rights note, to small users could involve requiring them to nominate what level of access they need in terms of their maximum kW requirement averaged over a half hour period.²⁹ Those with higher requirements would need to nominate higher levels, with the charges their supplier faced being commensurately higher.

1.48. **Choice of access options:** Users could also choose more flexible access rights in exchange for a bill discount, for example:

²⁸ We have launched our Access SCR with the objective of ensuring 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.

²⁹ Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper. Options for reform of access rights for distribution and transmission – discussion note:

- **Time profiled access** – The consumer could choose to profile their level of access over time to better reflect when they want access to the network. For example, if a household uses less at peak times than off-peak times, they may choose to have lower peak access level.
- **Non-firm/curtailable access** – A small user could agree to the DNO being able to curtail their usage at certain times in exchange for a lower charge.

1.49. We have also considered the option of users being able to share access between them, such that they had to always keep their combined access within a shared limit. There are a number of challenges to overcome for users in general for this option which we are continuing to consider. For small users in particular, we think there are likely to be specific further challenges. At lower voltages the DNOs already assume a high degree of sharing through their use of diversity assumptions in planning the network. We have concerns that introducing explicit shared access rights may reduce natural wider network diversity. If this occurs, then there could be less incidental spare capacity through diversity. Consequently, users' costs would likely increase, as capacity on the network that was provided for via diversity assumptions would require new capacity on the wider network.

1.50. Shared access would also require access to be monitored at both an individual and aggregate level. The costs of monitoring and taking action to ensure access limits are not exceeded may be disproportionate. To ensure that users remain within their shared access right, it may require an individual (eg the network users themselves, a third party or the network/system operator) or technology, to monitor and manage cumulative usage. This could add complexity for small users. We are therefore thinking that there may be limited benefit in shortlisting shared access for reforms to be taken forward at this stage. Please let us know if you have views on this.

1.51. **Monitoring and rules for exceeding capacity:** As part of our general consideration of access options, we have considered what framework would be needed to monitor users' agreed access rights. This includes considering what should happen if users exceed their agreed level, with options including an excess capacity charge, and/or have their access requirement increased automatically, or curtailment of their access. In practice, this could be

[https://www.ofgem.gov.uk/system/files/docs/2019/09/111 - working paper - summer 2019 - intro note final.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/09/111_-_working_paper_-_summer_2019_-_intro_note_final.pdf)

applied as a basis for smart EV charging, or in a similar way to staggered charging of electric storage heaters as currently happens for households under dynamic tele-switched multi-rate tariffs, such as Economy 7. As discussed further below, we do not think the option of physical curtailment of a small users' entire usage (ie disconnection) would be acceptable. We do not intend to introduce new grounds for disconnection as part of these reforms.³⁰

1.52. **Standardisation of options:** We have also discussed the extent to which access rights choices would be standardised (ie with only a limited number of set choices offered), bespoke, or some hybrid of both. For small users, it is more likely that choices would need to be more standardised, given the cost of tailoring specific choices would be unlikely to be proportionate.

Benefits

1.53. Options requiring users to define and pay for their access requirements could incentivise them to take action to reduce their needs, for example by smoothing out their demand through use of smart appliances and to consider whether they are willing to be flexible with some of their usage – eg charging EVs only at off-peak times or curtailed under certain conditions through "smart charging". This could help reduce the need for network investment, while enabling new LCTs to be connected.

1.54. Currently, when planning the system, the DNOs need to make assumptions about the likely level of capacity which will be needed to accommodate small users' requirements. But as more customers seek to connect higher loads such as EVs and heat pumps, the current diversity assumptions are likely to break down. Different groups of small users may have different characteristic types of demand patterns.

1.55. Clearly defining small users' access rights could provide better information to network companies about where there is a need for new network capacity. Larger users have individual agreed capacities, which gives the network companies a more precise figure to base their network planning decisions on. Extending this approach to small users could similarly give DNOs greater certainty about the level of usage customers in different areas of the low voltage (LV) network require as a basis for planning.

³⁰ In this context, we are referring to the definition of disconnection as used in the supply licence, to stop supply to a domestic premise. We recognise that in some circumstances, load limiting may also be understood as equivalent disconnection, notably for consumers in debt.

1.56. But there may be challenges with translating individual access limits into planning requirements. The benefits of choosing a different type or level of access across the network would need to be reflected in charging, which may be challenging, particularly for lower voltage levels. And the level of an individual user's access alone is unlikely to drive the need for wider network investment – rather, it will typically be the aggregate, diversified impact of many small users. We are seeking to better understand the extent to which reforms to access rights for small users could realise benefits over and above other approaches.

Potential risks

1.57. We have also considered potential risks which introducing these options for small users could involve:

- To navigate new access right choices, consumers may need to build familiarity with new concepts, such as access or network capacity, and engage with their energy usage in new ways. Small users are likely to find the concept of their capacity requirement and the options for different types of access harder to understand than energy consumption which is more familiar, and may struggle to identify what their needs are.
- As a consequence of this, but also as a result of affordability pressures, there could be a risk that small users may not choose a sufficient level of access. This could mean they limited some types of basic usage that they could not readily flex, to stay within that level, or may face an additional charge if they exceeded it. They could alternatively opt for too high an access level, which may mean paying higher charges than necessary.
- This could be a particular concern if options did involve physical limits on access which is needed for these types of basic usage. Curtailable access is only likely to be acceptable where consumers have appliances with smart controls and a guaranteed minimum level of access may be appropriate – discussed further below.³¹

³¹ Since the introduction of load limiting functionality in the smart metering specification, we have recognised the potential for innovative uses, such as tariffs linked to different load levels which could benefit consumers by better recognising different consumption patterns and could contribute to carbon reduction. However, we have also recognised that load limiting can be equivalent to disconnection in

1.58. We intend to consider these risks further and evaluate whether mitigating actions would be warranted if we took forward these access policy options, as discussed in the next section.

Use of system charging

Policy options

1.59. Our potential reforms to distribution and transmission use of system charges (outlined in our distribution charging note³² published as part of our Summer working paper and the transmission charging note being published alongside this note) are aimed at providing better signals about how using the network in different ways and in different locations would confer costs or benefits on the network in future.

1.60. Our Summer working paper included an overview and initial assessment of charge design options, setting out five basic options for the structure of DUoS charges. It also outlined options for reform of how distribution locational charging signals are calculated, with options for network cost models and the locational granularity of charges.³³

1.61. **Agreed capacity charges:** The changes we are considering could mean that the charges that a supplier faces for its customers are based on its customers' agreed capacity level and type of access rights, with discounts where users chose more flexible access rights. If we decide to pursue options to require small users to have better defined access rights they could be incentivised to choose a level and type of access that meets their needs.

1.62. **Time varying charges:** Alternatively, charges could be based on consumers' usage at certain times, with higher charges during periods of network peaks. These peak periods could be set ahead of the start of a charging year, potentially with seasonal variation during the

some circumstances and introduced supply licence modifications to protect consumers from load limiting being used as an alternative to disconnection for consumers in debt. We made clear to suppliers that they should engage with us before using this functionality in their tariffs.

<https://www.ofgem.gov.uk/ofgem-publications/57325/ofgem-statement-17122012-pdf>

³² Charge design options for distribution and transmission charges – discussion note:

https://www.ofgem.gov.uk/system/files/docs/2019/09/summer_2019_working_paper_-_charge_design_note_final_nd.pdf

³³ Access and Forward-Looking Charges Significant Code Review – Summer 2019 working paper. Options for improving locational accuracy of distribution charges – discussion note:

https://www.ofgem.gov.uk/system/files/docs/2019/09/000_-_working_paper_-_summer_2019_-_locational_charges_note_final.pdf

year, or they could be set dynamically such that they were notified shortly in advance, based on forecasts suggesting it would be a peak network period. It is also possible that charges could vary within a year (as well as the periods when peak charges apply). There could also be rebates where users are able to reduce their planned usage during peak periods. However, we have noted more issues with these latter two options.

1.63. **Locational granularity of charges:** There could also be more locational variation in DUoS charges. Charges could vary within a DNO region to reflect areas where there were likely to be higher future network costs if action is not taken to mitigate the need for investment in new network capacity. Additionally, if charges are based on usage during different time periods then the timing of the peak charging periods could vary by location.

1.64. These charges would fall on to suppliers, as is the case today, so their approach would affect how these are passed through to their customers.

Benefits

1.65. These reform options aim to encourage better use of the existing network and so reduce the need for future network investment. By reflecting areas or times where usage could contribute to the need for new network capacity, users who are able to change their behaviour can reduce network costs overall. Any changes in usage in response to cost-reflective signals could translate into benefits in reduced network costs through avoiding the need for investment in new network capacity. We will need to understand how the savings from responses to charging signals compare to those which may be achieved through an access rights based approach. The certainty of response under each approach is likely to be an important factor.

1.66. In our Summer working paper we noted preliminary views on TNUoS demand charging options for small users. These included volumetric time-of-use and actual capacity charges. We acknowledged that because the transmission owners plan their networks based on year-round considerations, rather than just focusing on usage at peak, purely peak-based charging for the forward-looking element of TNUoS may not be the most cost-reflective option.

Potential risks

1.67. We have also considered potential risks which could arise in taking forward these options for small users:

- Time-varying or dynamic charging options could contribute to risks of unexpectedly high bills under time-of-use tariffs, if consumers had difficulty predicting their bill - particularly if the timing of any high charge periods is not well understood. We expect many suppliers are likely to offer a range of flatter and stronger, more static and potentially more dynamic tariffs.³⁴ There could be a risk of consumers being offered and/or opting for a tariff with strong signals which they are not prepared to readily respond to as needed to save, they don't understand terms of or where their circumstances may change. This could result in unexpectedly high bills or other financial detriment, for those in or at risk of fuel poverty, which maybe a particular concern for those with higher and less flexible usage, such as traditional electric heating. Retail principle-based rules require suppliers to ensure tariffs are appropriate, vulnerable consumers are protected, and they can make informed choices.³⁵ Our monitoring will continue to help us understand how well suppliers are supporting vulnerable consumers to engage in the market, and how they are being empowered and protected. We discuss how engagement approaches could help further under the section on retail-focused approaches in Section 5 below.
- They could create affordability pressures, particularly for those with high usage at peak times or in areas where network charges are higher.
- Linked to this, they could lead to some small users cutting their usage to save money in ways that could undermine their welfare (such as not adequately heating their house). As above, this may be of particular concern for those who may be vulnerable, and depend on electricity for less flexible, basic usage, such as some types of electric heating. We discuss how similar approaches could help further

³⁴ While there is some uncertainty in exactly how the market will develop, we are already seeing examples of different tariff offerings emerging, including time-of-use tariffs, that could become mainstream over time.

³⁵ SLC0, SLC0A and SLC25. Further details in the Standard conditions of electricity supply licence https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Supply%20Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm_source=ofgem&utm_medium=&utm_term=&utm_content=licencecondition&utm_campaign=epr

under the sections on retail-focused approaches and use of system charging adaptations in Section 5 below.

1.68. There may also be broader affordability/locational differences. Granular DUoS charging could involve potentially substantial differences in charges for users in adjacent areas of the network. There could be a risk that reforms could result in some consumers facing higher costs, either as a result of locational differences, or high peak usage requirements and an inability to be flexible.

1.69. There are already regional differences in charges, and we expect there to be benefits in reflecting the costs/benefits in a particular region, providing clearer signals about where costs can be avoided. But there may be concerns, given the essential service nature of electricity, particularly if those in vulnerable situations experience significantly different charges for their basic needs such that they impacted affordability. We would particularly want to understand any potential impacts for vulnerable consumers and fuel poor groups, including distributional impacts. We will be considering these in taking forward our assessment and considering any potential need for mitigations, discussed further in the next section.

Connection charging

Policy options

1.70. We are considering options for reform of distribution connection charging, as set out in our distribution connection charging note, which is being published as part of the working paper alongside this note.

1.71. One option would allow users to **pay connection charges over time** rather than all in a lump sum upfront.

1.72. Others could reduce the connection charge that a party would face towards the costs of any new capacity required on the wider network when they ask for a new or amended connection. This split of connection costs between connection charges and ongoing use of system charges is known as the **connection charging boundary**. The options for changing the boundary could involve the connecting user:

- still making some contribution to wider network capacity increases through their connection charge, but less than now (a “shallower” connection charge)
- no longer making any contribution to increasing wider network capacity through their connection charge (a “shallow” connection charge).³⁶

1.73. It is likely that users would still pay for any “extension assets” relating to their connection request, ie those assets only they use, from their meter to the existing network.

1.74. For small users specifically, we are considering whether to maintain our decision for some small users, made ahead of the current RIIO-ED1 price control, not to charge a connection charge where a user installs new electrical equipment but stays within their existing fuse size.

1.75. We are also considering whether there may need to be some form of **financial commitment**, in the form of financial securities or liabilities, if connection charges are changed so that they can be paid over time or do not recover costs upfront.

Benefits

1.76. As described above, most small users do not currently face connection charges, provided they are not installing new equipment that would mean they need an upgrade to their existing fuse size. Beyond this, or for new connections serving small users, shallowish connection charges apply as they do for larger distribution-connected users. The options we are considering in general are therefore most relevant for small users seeking to have a larger (eg three-phase) connection or new developments.

1.77. For small users, we are also considering specifically whether we should maintain the current approach of not charging a connection charge, providing they do not need to upgrade their existing fuse size. Our preliminary assessment is that it is unlikely to be practicable to seek to charge connection charges in such situations, for example given the difficulty in

³⁶ As indicated in our distribution connection charging note, we will consider the impact of moving to a “shallow” connection charge on existing users where they have connected under the previous, “legacy” arrangements.

identifying when a small user has installed new equipment (as opposed to changing use of existing electrical equipment), even with smart meter data.

1.78. In addition, significant upfront costs could pose a barrier to consumers' uptake of LCTs such as EVs and heat pumps. It is possible that small users may need to upgrade to a three phase connection in future if they are looking to install a heat pump and charge an EV at home/in a small business. This could mean a substantial upfront charge for the small user which could deter them from installing the heat pump or buying an EV. This would particularly be the case if their expanded connection is judged to trigger the need for new capacity on the wider network.

1.79. The option to pay over time could reduce the upfront financial burden, though this would be offset if users were required to provide a deposit in some form. The options to recover less costs of increasing wider network capacity through a connection charge would also reduce the charge where new capacity is needed.

1.80. Against this, there is a need to consider the signal that the user faces about how additional loads could increase network costs. If this is not signalled, there is a risk that the user will forego opportunities to reduce their impact on the network (for example, by installing more insulation and smart technologies that would allow them to heat their home and charge their EVs within their existing fuse size) and would increase costs for consumers as a whole. Connection charges currently send a strong signal, but only to the last user who is deemed to trigger the need for new capacity – even where many other users make use of the network and could also adjust their usage to help avoid the need for investment. We therefore said at the launch of the Access SCR that we would consider whether there might be a case for making the connection charging boundary shallower if we were satisfied that there would still be a sufficiently strong signal through the reforms to DUoS charges.

1.81. Introducing the requirement for financial commitment would be aimed at ensuring consumers in general do not bear an increased risk associated with investment that connection customers may trigger, particularly to protect against the risk that the connecting customer may not proceed and then any new assets would be under-utilised. However, financial commitment is likely to have significant practicality challenges for small users. This is particularly true if the desire is to have a longstanding financial commitment (eg if connection charges were to be paid over time) – the party requesting the connection, eg a developer, will

often not be the ongoing occupant of the premises. Additionally, it would be challenging for suppliers to provide a long-term user commitment on behalf of their customers as they could be exposed if their customers switched supplier. Collecting such financial securities from small users themselves could be very costly and administratively burdensome for both the users and DNOs, and may not have the same value as for larger projects.

Potential risks

1.82. We see the potential for risks for small users associated with these options as lower than other access and charging options, particularly for those in vulnerable situations, as the options are focused on those who are seeking new or enhanced connections. We have identified two potential risks:

- Options that retain a significant contribution towards the cost of new capacity on the wider network through connection charges could pose an affordability barrier to small users installing LCTs such as EVs and heat pumps. This would be particularly acute if we reversed the current position where connection charges do not apply providing that a small users stay within their existing fuse size(s).
- If there were user commitment requirements, this could create risks that small users were locked into long-term commitments, or faced expensive exit fees if they wanted to change supplier (if suppliers provided the user commitment). The extent of any risks here would depend on how arrangements were designed.

1.83. We intend to consider further whether these are material risks. We discuss possible mitigations in the next section.

Role of retail arrangements

1.84. Suppliers will draw on the range of charging signals and access options together with other costs (such as wholesale costs) which may apply and present them as tariff offerings, bringing these together as a package for consumers. For example, they may choose to provide offers that:

- reflect time-of-use network charges in an offer with different tariffs at different times of day

- have a “flat” tariff for usage at any time, but offer a discount to those customers who are willing to sign up to installing/using smart technologies to allow the supplier (or other intermediary) to optimise their usage within certain agreed parameters
- have tariffs that vary significantly according to where customers are located given locationally varying network charges
- have tariffs that do not vary significantly according to location, but target smart technology offers (as described above) more to those in areas who are more costly to serve.

Benefits

1.85. Suppliers or other intermediaries can help ensure consumers can benefit from new access and charging arrangements through understanding their consumers’ needs and capabilities, building consumers’ understanding and engagement with the options they offer, and tailoring recommendations and offerings to meet consumers’ requirements.

1.86. Retail market offerings can adapt to customers’ needs and evolving situations over time, and allow for ongoing innovation. These approaches may avoid the need to unnecessarily exclude any consumers from the opportunities to benefit from certain options by being more flexible, which could limit benefits overall.

1.87. In general, we expect competitive pressures should drive suppliers to seek to reduce their cost base by offering tariffs which enable and incentivise flexibility, potentially including innovative technologies or smart appliances. Less flexible customers may continue to be offered flat tariffs, potentially with some flexible response enabled by automated smart appliances provided as part of a package, enabling them to unlock benefits.

1.88. In some cases, suppliers may also offer flat tariffs without smart technology offers, choosing to absorb the different network charging costs of their customers, or reflect these in higher tariff costs. This may be appropriate for some consumers, where there is demand for flat tariffs, or if consumer demand can’t otherwise be enabled to be flexible. But if flat tariffs remained commonplace, without enabling smart technology, this could undermine delivery of benefits from our reforms.

1.89. Some consumers may choose not to engage with new options and some may opt for simpler, more traditional “flat” tariffs, even where these may be more expensive. Not all disengaged consumers will be vulnerable and in similar need of protection, though there is overlap between these groups.

Potential risks

1.90. **Understanding and comparing new options** – When introducing a new range of options, it will be important to ensure consumers engage with and understand the tariff options they are considering. If we introduce a greater range of consumer choice of access options and tariffs, we would expect consumers to benefit overall. But this could also increase complexity for consumers, which may increase the potential for confusion, if not clearly explained. This may particularly be the case with options which are less familiar, such as access rights.³⁷ Any resulting inappropriate choices could lead to both non-financial and financial risks and impacts.

1.91. With any novel offering, there may be risks that the customer has not been made clearly aware of requirements to benefit from a tariff, or savings are not presented in a comparable way with other options, which could lead to misunderstanding. This may also lead to concerns regarding mis-selling – for example of hardware that is intended to enable network users to respond to stronger price signals.

1.92. If consumers were offered or signed up to inappropriate products, they could experience financial impacts, such as unexpectedly high bills, or other non-financial impacts, eg if they reduce their demand to an inappropriately low level to save costs or self-disconnect from their prepayment meter due to lack of credit. We expect our existing supply licence principles to help ensure consumers understand new options, as discussed further below.

1.93. **Roles of multiple parties** – The nature of the options we are considering are likely to involve roles for multiple parties in developing, offering and enabling consumers to respond under flexible tariff offerings. Each may have varying degrees of contact and engagement with the consumer, or in coordinating with other parties and industry systems. This may include roles in relation to tariff offerings, comparison, provision of hardware or smart appliances, eg

³⁷ Our consumer panel work, published alongside this document, highlighted potential challenges for consumers in engaging with new forms of access choices.

in bundled offers, data processing and analysis, or load control under automated tariffs or access options.

1.94. Where multiple parties are engaging with the consumer, there may be greater potential for conflicting or inappropriate recommendations, or insufficient clarity about the requirements of an option. Any advice or recommendations they offer may be based on limited understanding of that consumer's capabilities, or a partial view of their circumstances. There may also be a risk that consumers are unclear which party is accountable or should be their point of contact for any issues or concerns. "Behind the scenes" processes may also be needed, to avoid the potential for conflicting signals with any automated or remote response.

1.95. **Higher cost to serve** – If we decide to implement stronger price signals in network charging, some consumers may have higher network charges as a result of their location on the network and/or higher peak demand. There could be a risk that these customers could be seen as less appealing by suppliers and offered more expensive tariffs, given the higher costs of meeting their demand. We expect suppliers to offer innovative solutions, which may include smart appliances, which would help reduce consumer bills. But we need to understand how likely it would be that specific consumer groups (eg those who are vulnerable or fuel poor and unable to engage with more flexible options) could pay more.

1.96. There may also be the risk that consumers who cannot have smart technology installed may find it extremely difficult to engage with dynamic pricing signals, for example those on low incomes, in rented accommodation or in social housing.

1.97. We will continue to explore how consumers may engage with these new technologies to ensure that they benefit from these offerings.

Section 5 – Options to mitigate potential risks

1.98. In this section we describe the key approaches we have considered which could mitigate potential risks which may relate to our access and charging reform options, to help us consider whether any adaptations are needed, for any options we do take forward. As noted above, not all potential risks may require mitigation – we intend to consider this further. We would be particularly concerned where significant potential impacts for vulnerable consumers could arise.

1.99. If mitigations were considered necessary, these may sit within or outside the access and charging framework. Existing provisions in relation to regulation of suppliers could play a key role. They could also involve an extension or adaptations to our principles-based approach to regulating supply companies, other more specific obligations, further provisions following the current price cap, or industry provisions such as technical standards. There are close links with our wider work on future retail market arrangements, and our Consumer Vulnerability Strategy.

1.100. First, we discuss these sorts of options and then consider what kind of adaptations could be made to the access and charging options we are considering.

Retail-focused approaches

1.101. Suppliers already act as consumers' interface to the electricity system and manage a number of risks on their behalf (such as volatile wholesale electricity prices). Our regulation of them aims to ensure they do so in a way that protects consumers' interests.

1.102. One option to deal with any potential risks associated with our access and charging reforms would be to rely on this framework for retail energy supply. The emphasis under these approaches would be on suppliers understanding their consumers' needs and capabilities, building consumers' understanding and engagement with the options they offer, and tailoring recommendations and offerings to meet their requirements. Many aspects of this approach are already a requirement for suppliers under the existing supply licence obligations.

1.103. If we are able to rely on this approach rather than reduce the extent of choice and signals through our access and charging options themselves, this could reduce the risk of unnecessarily excluding any consumers from the opportunities for them to benefit from certain options. Instead, there would be flexibility for suppliers to combine options and tailor offerings to customers' needs.

1.104. Retail regulation, including our principles-based supply licence framework is designed to protect consumers as we move to a smarter system, with new and innovative tariff offerings from suppliers and increasing consumer flexibility. In general, we expect this existing framework, combined with consumer protection legislation, such as mis-selling protections,

will provide protection from a range of potential impacts which could arise following our reforms.

1.105. There may be reasons to make changes or add new obligations, including considering approaches which apply for DNOs and non-licensed parties. Equally, there may be a need for specific measures where multiple parties are involved, or where parties may not have incentives to address consumer risks. We have considered a range of potential measures, which could help ensure arrangements are suitable for consumers – both existing provisions as part of the current consumer protection landscape, as well as further steps which might be taken. Below we describe specific provisions which may help ensure consumers benefit.

1.106. **Ensuring consumers make informed choices** – effective customer engagement, information provision and communication, will have a key role in ensuring consumers are on a suitable option. We note that many small users will benefit from a level of support in understanding and engaging with options to identify the most suitable tariff for them. There could otherwise be a risk that some consumers may sign up for choices or tariffs which they do not sufficiently understand, or are not prepared for the behavioural change required to benefit from the tariff.

1.107. Some vulnerable customers may require more support and guidance and we expect supply companies to provide that additional support where required. But in general, if they can be enabled to engage with an appropriate level of choice, and benefit from flexible options, rather than having options explicitly restricted, this should be in their interest as long as they are sold appropriate tariffs.

1.108. The small users subgroup identified the importance of ensuring simplicity and clarity in consumer engagement and offerings, particularly where presenting a large number of tariffs or unfamiliar choices. Access options in particular may require more coordinated approaches to ensure consumers had the right level of information and understanding as the basis for any reforms in this area to be effective. Additionally, communications and product offerings must recognise that not all vulnerable customers will self-identify or ask for help.

1.109. While individual approaches may need to evolve, eg to account for access options, in general, we expect existing supplier' obligations to apply here. We welcome views on the

extent to which any more specific requirements or guidance may be needed, such as in relation to access options, or understanding the conditions of newer flexible tariffs.

1.110. Offering suitable options – Assessing consumers’ needs and capabilities and tailoring offers to meet those, particularly identifying those who may be vulnerable, or need assistance to be flexible, will be an important part of ensuring consumers benefit from any new options. Where a customer doesn’t have the means to avoid usage during network peaks or be flexible in other ways, a supplier should consider how they may enable them to be flexible, and whether it is appropriate to promote dynamic or flexible tariffs, unless the offer includes suitable enablers.

1.111. In general, we expect existing supplier obligations and incentives to apply here. We welcome views on the extent to which any more specific requirements or guidance may be needed.

1.112. The small users subgroup identified the following measures which may be beneficial:

- Approaches to proactively identify consumers who may become vulnerable under new options, need support to be flexible, or may not be able to shift their load, will be important in ensuring options offered are and remain suitable for the customer. An assessment process to assess acceptable levels of cost and risk for a given customer may play a role in ensuring customers who may be at risk can be identified and appropriate options recommended.
- Proactive engagement or monitoring may help ensure that customers are receiving the service/price that they are happy with, recognising not all customers will self-declare any vulnerability. Engagement around key life events (eg a house move) could reveal new opportunities for the customer.

1.113. Notably, suppliers may need well developed processes to identify their prospective customers’ suitability and appetite for tariff options involving different levels of behavioural response, and degrees of cost uncertainty. These may be areas where there is merit in considering more specific regulatory guidance or requirements, eg to ensure all suppliers had

suitable processes in place to help identify consumers with relevant characteristics and navigate alternative options.³⁸

1.114. Standardisation of approaches – Some measures may require coordination or standardisation of approaches across parties, rather than being dependent on an individual party. The small users subgroup has identified a range of measures which could have a role in helping consumers engage with and benefit from the options, including:

- Ensuring tariffs involving novel options can be compared, including where intermediaries have a role.³⁹ A standardised, simple framework could potentially help enable costs, risks and any behavioural changes needed to benefit from a tariff to be readily understood and compared
- Tariff design features such as override functions or limits on offering of certain tariff types, eg dynamic options or curtailable access, for certain consumers or in general, or standardisation of options features around aspects of good practice.⁴⁰

1.115. These could be facilitated through codes of practice or other regulatory approaches.

1.116. Considering the role of third parties – Approaches may need to be developed to manage the potential for inappropriate or conflicting advice or recommendations on the suitability of tariffs where multiple parties are concerned, eg in conjunction with sales of smart or flexible appliances. For instance, illustrative potential savings could be presented out of context, or may risk consumers being locked into arrangements. The ability of the current arrangements to provide consistent and appropriate protections is already tested by the growing role of price comparison, auto-switching and brokering services. Through the joint BEIS-Ofgem Review we have been considering arrangements for protecting consumers in the retail market in the future. This includes considering any potential future measures which may

³⁸ As part of our work with the subgroup, Citizens Advice has led work to develop a view of some key characteristics which may be relevant to how consumers engage with or are impacted by these options.

³⁹ We note suppliers already need to set out the assumptions they make for behavioural change when estimating annual costs.

⁴⁰ BSI "Smart appliances for flexible energy - Upgrading our Energy System, Smart Systems and Flexibility Plan": <https://www.bsigroup.com/en-GB/smart-appliances-flexible-energy/>]

be needed to protect consumers in relation to new, non-regulated market participants, such as third party intermediaries.⁴¹

1.117. Clear roles and responsibilities and coordination processes among industry parties could help ensure clear routes of accountability and redress in the case of any issues or concerns, and avoid any conflicting messages or advice. We welcome views on how industry arrangements and processes could best be developed to ensure this.

1.118. Appropriate provisions for customer data may need particular consideration where third parties are involved, or consumers change supplier.⁴² It will be important to strike the balance between ensuring consumers' data is appropriately protected and customers retain control of their data, and ensuring consumers have access to high quality advice and recommendations on tariff options they might choose, based on a sufficient understanding of their usage requirements to mitigate risks of inappropriate choices.

1.119. **Affordability and charging differentials** – We will consider the potential risks that certain customer groups who may be higher cost to serve under new charging arrangements may be offered less attractive tariffs, and could face higher costs.

1.120. We note that suppliers have obligations towards vulnerable consumers, and a role in helping mitigate affordability concerns for those in vulnerable situations through their operation of the WHD and the ECO, which are government-led obligations. Measures such as these can be more targeted ways to address affordability concerns for those in vulnerable situation than adaptations to charging and access arrangements. We set out our view in our Consumer Vulnerability Strategy 2025 that substantial redistribution of costs was a matter for the government and intend to engage with the government to ensure a common understanding of the issues.

⁴¹ The Government has explored the regulation of intermediaries in the Smart Data consultation and set out an option for a cross-sectoral authorisation regime for intermediaries in the energy and telecoms markets to provide a common set of rules across markets

⁴² For example, the Midata in energy project will put domestic energy customers in control of their data, so they can quickly, securely and easily share their energy data with trusted third parties. This will enable services including, but not limited to, faster, more accurate tariff comparisons. This could be with Price Comparison Websites or competitor suppliers providing a tariff quotation. Further information: <https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/midata-energy-project>

1.121. While we have not considered them in any detail at this stage, there could be further potential retail-focused measures, for example limits on tariff design to ensure more demanding options are only offered in appropriate circumstances, eg with suitable technical enablers.

Access and charging adaptations

1.122. As outlined above, in many cases measures in the retail framework could provide suitable protections for a range of future options. There may be circumstances where we may need to consider specific access and charging adaptations. This may include situations where any risks are specific to access/charging options, a change to the design could improve how well it works for small consumers, if there is less confidence suppliers would be able to protect consumers adequately in a particular area, or if the potential severity of a risk is excessive.

1.123. This section considers the potential adaptations to access and charging arrangements and explores what effects these adaptations could have, considering the relative merits of different approaches across the range of access and charging reform options for small users.

Access adaptations

1.124. We have considered a number of potential adaptations to the options we have identified to define and give choice over access rights, which could help ensure they are appropriate for small users. These could include the options discussed below.

1.125. **Defining a minimum guaranteed access level**, which could involve establishing a minimum level of full, firm access. Were we to decide to adopt more clearly defined access for small users, coupled with stronger price signals, this adaptation could prevent consumers reducing their access level to an inappropriately low level that was not sufficient to meet their basic needs. This could be through either agreeing too low an overall level of access, or agreeing to have options where their access could be low at peak times or if they are curtailed.

1.126. However, it may be challenging to identify an appropriate level or levels suitable for all consumers – a low threshold may not provide sufficient protection for higher using consumers, eg with electric heating, while a high threshold could unduly limit the benefits of reform for all

consumers as it would mean that any usage possible within the minimum guaranteed access level would not be exposed to additional signals. Research commissioned by Citizens Advice has suggested a threshold of around 3 kW could be appropriate for many households, but some consumers have significantly greater usage. Follow on research is being undertaken to explore the drivers for these differences.⁴³

1.127. Limiting choices of access options or approach to setting access limits, could involve not allowing certain access choices, such as non-firm/curtailable access, for some types of small user demand which may not be readily flexible. Similarly, we do not envisage applying rules in relation to situations where a small user exceeded their agreed access right, which would see their entire access to the network being curtailed. Instead, there could potentially be a technology-specific approach – such as only allowing for access to be curtailable in relation to loads that can be individually identified and managed – such as an EV or a heat pump. Further consideration would be needed of the technical viability of these changes. Alternatively, ensuring consumers had an override option for any curtailment on access could help reduce any associated risk. It would be important to understand what impacts these arrangements may have for network planning benefits, if they reduced the certainty associated with a defined access level. As with setting a minimum threshold, this approach could dilute the benefits of reform. In this case, it would dilute signals for usage that may be able to be flexible, but is not practicable or proportionate to individually monitor and control.

1.128. Standardised access options and automated increases – establishing standardised access levels could reduce the potential complexity of choice for consumers and help ensure any limits were appropriate. If standardised access choices corresponded to different typical usage levels, perhaps associated with given technology types (eg flexible EVs, electric heating or energy efficient gas heated properties), they could also help consumers readily understand and identify the appropriate options while allowing some tailoring to their needs. A similar approach is followed elsewhere, eg in Italy.⁴⁴ A minimum guaranteed access level, as

⁴³ Citizens Advice, Energy policy research: Core Network Access - Core Capacity
<https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/core-network-access-core-capacity/>

⁴⁴ In Italy, the capacity limit is the power level indicated in contracts and made available by the retailer. It is set when a customer contracts for supply and is based on the customer's needs – the type and number of electrical appliances normally used and, for domestic customers, this takes into account historical monthly maximum demand. Further information is available here:
<https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/core-network-access-core-capacity/>

discussed above, could effectively be the first tier in a standardised set of available access levels.

1.129. Automated increases in access levels, eg after a certain number of instances of a customer exceeding their agreed level, would avoid the risk for consumers that they face an unexpectedly large bill due to excess capacity charges. It would still provide a signal to stay within their access level, and encourage them to consider a suitable level, though would provide less certainty to network operators about users' maximum demand so could impact on the level of network savings that could be achieved. A similar approach is a feature for some mobile phone contracts, for instance, and may be combined with notifications.

1.130. Standardised planning assumptions for different types of property, with default access levels associated with different property/technology types, could help address the risks of inappropriate choices, or inconsistency in requirements between property developers and the ultimate occupants, to ensure consumers in new properties also have appropriate access.

1.131. There may also be a need to consider default access and charging arrangements for small users in some specific circumstances that may limit choice for suppliers or other intermediaries, and customers. There may need to be a process for change of ownership or tenancy – this would need to consider whether consumers moving into a new house would automatically have the same access rights as the previous resident, or if there could be some alternative default arrangements in this case.

1.132. **Opt-in only access definition** – We are considering other options for small users that would not require them to define their level of access, such as relying on time varying network charges for flexibility signals. Those options could be more attractive if we deem the costs or risks of requiring all half-hourly settled customers to define their required access right to be too high, relative to the potential system saving benefits of requiring them to do so. A potential hybrid option could be to allow small users to opt-in to choosing their required access level. This may be attractive for users (or suppliers on their behalf) who are seeking more certainty on annual charges, or who are more engaged and able to be flexible and are attracted to the discounts available for agreeing a flexible form of access. It could also potentially be targeted more at users in more constrained areas of the network. We note that we have not undertaken detailed consideration of this option at this stage, and will need to do so to have a fuller understanding of its merits. This will include considering whether this option

would offer much difference from a small user opting into a flexibility procurement contract with a DNO and/or the Electricity System Operator.

1.133. One approach across these options would be to try to identify consumers in vulnerable situations and tailor the approach to them specifically. We consider this would likely be challenging, given vulnerability can be hard to measure precisely and can be transient in nature. In addition, some vulnerable consumers may benefit from being able to offer flexibility, and so it would be expected that many could be enabled to benefit in a similar way to other domestic consumers. This may therefore mean limiting certain options (eg curtailable access) for all small consumers.

1.134. Wider measures could also help ensure arrangements were suitable. Suppliers and/or intermediaries will be able to help build consumers' understanding, or may "translate" access options into more familiar or readily understandable equivalent usage levels or patterns, but some risk may remain. Smart appliance standards, which may consider override functionality, interoperability and lock-in risk could be an alternative route to protections, though as with access right limits, the impact on the extent to of network savings benefits would need to be considered.

Use of system charging adaptations

1.135. This section outlines our initial thinking on potential adaptations within the charging framework for use of system charging options for small users.

1.136. The starting point for our work is that cost-reflective charges ensure that all users pay a fair share and support efficient decisions around use of the electricity network. In general, we would anticipate that there will be opportunities for many consumers to benefit from engaging with reforms to the design of network charges, and will share in the overall benefits of a more efficient system. However, the benefits and costs for individual small users will vary, and for some users, less socialisation of the costs may mean that they lose out.

1.137. In our recently updated Consumer Vulnerability Strategy we confirmed that substantial redistribution of costs is a matter for the government. We will engage further regarding affordability impacts. We will also want to consider implications for the uptake of LCTs, and how this may differ across locations. While we recognise that most small users will be unable

to move their location in response to locational charges, they may contribute to decisions about the value of investing in LCTs and using them in different ways (eg off-peak charging of EVs) in different locations. This needs to be balanced against undue barriers to LCT uptake in general – it will be important that consumers have the access they need across regions and overly complex arrangements may act as a disincentive to users to invest in LCTs. This will be factored into our impact assessment.

1.138. We think there are challenges with providing targeted support for vulnerable consumers through the charging framework, given the transient nature of vulnerability and difficulties in identifying those in vulnerable situations in a fixed framework. It is likely therefore that any mitigations within the charging framework would need to apply generally, eg to all domestic consumers.

1.139. We will consider carefully the distributional impacts and potential risks for consumers, particularly the vulnerable, following our reforms. We will ensure our assessment is based on realistic assumptions about consumer behaviour, and that we understand and are transparent about the impact of the reforms on different customer groups. This will inform decision making including around cost models and charge design. It will also be factored in to assessment of implementation options.

1.140. We have considered a number of options to address risks from reform to charging arrangements:

- **A basic usage tier for small users**, with usage within that tier being charged on a more averaged basis – eg with less differentiation of charges for usage in different time periods, and with less locational differences in charges between different areas. This could mitigate risks of sharp signals and limit locational variation for consumers' basic usage.

Similar to a minimum access level, there could be challenges associated with identifying the most appropriate level to set any threshold to ensure it covered consumers' common usage needs, while maximising benefits of reform.

- **General limits on locational granularity for small users or at LV**, ie choosing options for DUoS charging that would see charges for small users varying less by

location than they do for larger users. This could reduce locational differences which may mitigate affordability / acceptability concerns.

- **Restricting certain charge design options for small users**, eg not taking forward options that would set high charge periods dynamically (with little or no notice). This could reduce risks of consumers facing unexpectedly high bills.

1.141. Each of these approaches could reduce system benefits from our reforms, if they reduced the extent to which beneficial signals were sent to small users of the network. More granular or dynamic options, for instance, may be better able to reflect actual network conditions, subject to the underlying network model. If these options were restricted for some or all consumers, this could potentially reduce their ability to benefit and contribute to overall system benefits, and hence savings for consumers in general.

1.142. In practice, we note practical considerations may limit the extent to which small users face very granular signals at LV. If this were the case, the potential risks discussed here would be less likely to be a material concern. Through our modelling work which we will undertake as part of our impact assessment process, we will gain a clearer idea of materiality and relative efficiency benefits of specific options, as well as the scale of any distributional impacts for consumers across consumer groups, or locations.

1.143. While dynamic options may be more challenging for users to respond to manually, smart technology and automation may well enable more dynamic response, particularly with newer, flexible loads such as EVs, which means the consumers need not engage directly with the signal. Where consumers can be supported to respond, this could enable them to benefit, but this may not be possible in all circumstances.

1.144. We are carefully considering the implications of these options for households and will carefully consider the appropriateness of options, in view of any potential impacts.

Connection charging adaptations

1.145. We have considered how different approaches to the connection charging boundary could apply to small users.

1.146. In general, we do not currently envisage fundamental changes to the approach adopted under RIIO-ED1, whereby costs of increasing network capacity associated with connecting new technologies within a small user's existing fuse size are socialised. We do not see it would be practical to aim to charge connection charges in these situations, and think access arrangements and DUoS charges may be a more appropriate way to send signals in such scenarios to encourage users to change the way they use the network at different times to alleviate constraints on the system. We will continue to consider whether refinements to this approach may be merited.

1.147. Our initial assessment of alternatives to the current connection charging boundary found that while simplified alternatives such as averaged or standardised connection charges are unlikely to be desirable for larger users, they may have advantages for small users as they are simpler and may be seen as fairer. We think these may merit further consideration. We also think other alternatives such as reducing the voltage threshold above which connection customers contribute to wider network capacity increases, and changes to timing such as payments over time, eg annualised connection charges, could also potentially offer simpler alternatives for small users, where connection charges were applicable.

1.148. If we consider requiring financial commitments from users as part of the changes to connection charges, there may be a need to consider different approaches for small users than for larger users. This would need to take into account the difficulties in collecting financial deposits from such users and to address the risks of users being locked in to commitments inappropriately. Alternatively, there may be a case for not requiring financial commitments from smaller users for proportionality reasons.

1.149. In considering the options for small users we will take into account that new connection requests are generally most applicable to housing or commercial developers (be it large-scale ones or individuals), rather than small users directly. We do not expect adaptations to be directly relevant for them, but there is a need to consider interactions between arrangements and requirements for the developer, and any small users who ultimately occupy the premises. In contrast, requests for upgrades to existing connections (such as to increase a fuse size or move to a three phase connection) are more likely to come from existing small users directly. We intend to consider whether there could be a case for differential approaches to these different types of request.

Section 6 – Conclusions and next steps

1.150. While more work is needed to fully assess the scale of benefits and strength of signals, in general, we expect more cost-reflective charges or access options could have benefits for consumers overall and individually, if they can be enabled to respond. But it will be important that consumers have options which meet their needs and abilities, including their ability to manage any changes in their bill and be flexible with their usage.

1.151. We would expect suppliers to respond to these changes (and wider changes, such as half-hourly settlement) by providing innovative offerings to their customers that meet their needs while helping reduce their bills. More cost-reflective charges, enabled through half-hourly settlement, should incentivise suppliers to develop offerings to encourage their customers who can be flexible to do so to help reduce costs. This may not be passing network charge signals directly through to tariffs – for example, they might offer packages which include smart appliances to enable consumers to be flexible while still providing them with a flat tariff. Although there could be risks that this does not happen for all consumers – particularly those who are less engaged.

1.152. We will carefully consider the potential distributional impacts of the reforms, particularly to assess whether they may result in strong differences in costs between consumers, including between locations, and especially if they could disproportionately impact those who may be vulnerable or fuel poor. We also need to consider the implications for particular user groups, such as those in remote areas.

1.153. We are considering potential options for reform against our three guiding principles. We intend to develop a clearer view of which options would have most merit from an efficiency and practicality point of view, and assess what distributional impacts or potential risks the reforms we pursue could present, and so whether adaptations are needed.

Suitability of access and charging options

1.154. There may be merits in better defining access rights for small users, and offering them greater choice, but this risks being complex and difficult for small users to understand.

1.155. If we do pursue reforms to access options for small users, we expect some degree of standardisation of access levels, potentially with an “opt-in” approach, could strike a balance between protecting consumers and delivering benefits. Measures such as automated increases or overrides may be more appealing for consumers, though we would need to understand the scale of benefits associated with these variants.

1.156. Time-varying charges options may be a simpler and more readily understood approach which can provide small users with signals to provide flexibility. Static time-of-use charges are likely to be the simplest and predictable options, whereas dynamic time-of-use options could more accurately reflect network cost drivers.

1.157. Options to enable small users to pay connection charges over time or reduce how much they need to pay towards new capacity needed on the wider network could improve the affordability of new or upgraded connections and potentially support the adoption of LCTs, such as EVs and heat pumps. We will need to weigh this against the potential for higher network costs if small users do not get other signals to try to reduce their impact on the network. The extent to which this is an issue will depend on the outcome of our reforms to improve locational signals through DUoS charges.

1.158. We do not currently envisage changing the current approach where connection charges do not apply where a small user installs new electricity equipment but does not need to upgrade their existing fuse size.

1.159. Approaches based on contracted flexibility could also offer alternatives to access or charging options for small users, similar to rebate charging options. Automation enabled by smart appliances could also have a role.

1.160. Further work is needed to understand how the benefits which may be achieved under the different access and charging options compare, and the role that enablers including smart appliances and automation could play.

Potential adaptations or protection measures

1.161. We recognise that price signals have an important role in delivering a flexible, zero carbon energy system at lowest cost to customers. Equally we recognise that not all small

users – certainly not all domestic customers – are well placed to change the way they use energy in response to price signals. We will ensure that our modelling of the impact of these reforms is based on realistic assumptions about consumer behaviour, and that we understand and are transparent about the impact of the reforms on different customer groups.

1.162. Following this analysis, we may decide no further provisions are needed. If we do consider action is warranted, we will consider how best to mitigate any adverse consequences for particular customer groups, including vulnerable customers, either within our access and charging options or more broadly through other measures in the retail market, noting the challenges identified in providing targeted support for vulnerable consumers through the charging framework.

Retail options

1.163. In general, we think retail-based measures could have an important role in managing the potential risks we have identified with these reforms. Suppliers already manage a lot of price volatility risk for consumers and are beginning to develop ways that enable consumers to respond to these signals without necessarily being exposed to price volatility themselves.

1.164. Existing obligations – such as our supply licence principles - potentially with some further more specific guidance or additions, could address a range of potential concerns. In particular, some aspects which rely on consistency, standardisation or coordination across or among parties may require more specific regulation or provisions.

Access

1.165. If we decide to further define access rights for small users, we think standardised, tiered access options with automatic increases in access on exceedance appear most likely to have potential for small users, balancing potential for efficiency benefits with simplicity. A “basic” minimum access level could form part of this, essentially forming the first tier in any set of access level options.

1.166. We may alternatively not to further define access rights for small users, or introduce greater definition and choice of access options as an “opt-in” variants. This is likely to depend

on an assessment of the potential network efficient benefits relative to other approaches, such as charging signals.

Charging

1.167. As noted above, we think that suppliers and our and government's wider retail and vulnerability policy will play a key role in managing potential risks for small users. We will consider further the potential distributional effects of the changes to charges. Should these suggest significant risk of adverse outcomes for some small users (especially the vulnerable) then this could support the case for a basic charging tier in addition to these wider measures.

1.168. One approach across both access and charging options would be to try to identify consumers in vulnerable situations and tailor the approach to them specifically. We consider this would be challenging, given vulnerability can be hard to measure precisely and can be transient in nature. In addition, some vulnerable consumers may benefit from being able to offer flexibility.

Connection charging boundary

1.169. We think that, in general, the risks for small users associated with the options we are considering for connection charges are less significant. There may be a stronger case for considering simpler, standardised charges for small users than there is for larger users. There could also be a case for an amended approach to any requirement for financial commitment for small users, or for not extending such a requirement to them for proportionality reasons.

Next steps

1.170. We intend to undertake further analysis as we progress through the shortlisting of options and our impact assessment to better understand:

- Any distributional impacts of our proposed options
- The relative benefits of different option variants, particularly of defining access vs charging-based approaches, and how any potential risks may be mitigated through adaptations to those options or through future retail market provisions

- The level of behavioural response which might be anticipated under different approaches
- The extent to which the current level of connection charging boundary for small users could impact the uptake of anticipated levels of LCTs
- The ease with which the options can be implemented, considering any need for legislative changes or transitional arrangements as well as complexity.

1.171. We welcome views from stakeholders on initial thinking presented here – in particular on the scale of potential benefits for consumers under different approaches, and how they can be enabled to respond, the extent and nature of potential risks identified, suitability of alternative options we have considered, and how they could be made to work better for small users. We also seek views on any particular aspects of arrangements where further adaptations or additional protection measures may be needed.