Data Communications Company

DP218 'Review of the SEC Charging Methodology'

Request for Information (RFI)

Date: 30 April 2024
Respond by: 17:00 on 25 June 2024

Introduction

This Request for Information (RFI) has been prepared by the Data Communications Company (DCC) and the Smart Energy Code Administrator and Secretariat (SECAS), alongside Frontier Economics (Frontier), to assess the case for changing the way the DCC charges for the use of the smart metering network.

The RFI represents the first step in a public consultation exercise which will run over the course of 2024 to understand the impacts of changes to DCC's charging approach. The information gathered will be shared with respondents as part of the continuing consultation exercise. It will also be shared with DCC's regulator, Ofgem, and sponsor Government Department, the Department for Energy Security and Net Zero (DESNZ), to support decision making around potential change.

The DCC is required by its Licence to keep its charging policy under review. There are currently a range of drivers prompting a re-examination of DCC's Charging Methodology, including increasing divergence between use of the DCC Network and DCC's own charging objectives set out in SEC Section C 'Governance' of the Smart Energy Code (SEC), as well as industry demand for change. These drivers are explored further in Chapter 1.

Any change to DCC's charging methodology could impact all SEC Party categories. Potential changes to charging will also be of interest to prospective DCC Users as well as organisations who use a third-party provider to access DCC services. Therefore, this RFI is open to all organisations and individuals who wish to respond.

This RFI represents the next stage of the SEC modification DP218, 'Review of the SEC Charging Methodology'[1] which industry has initiated to examine reforms to DCC charging. It is issued in line with the established SEC process for industry code modifications. Production of the content has been supported by Frontier Economics – a specialist economic consultancy with expertise in the energy sector and other regulated utilities. Frontier's work is focused on:

- drawing on its expertise as a leading energy market consultancy to support the development of charging options informed by, but not limited to, precedents from other regulated sectors;
- advising on regulatory considerations such as cost recovery and competition law;
- analysing the impact of different charging models, including distributional impacts of any changes to approach (ongoing analysis which will be published at a later stage); and
- helping DCC understand industry feedback on the different models proposed, providing independence of thought.

Navigating this Document

This RFI is comprised of 4 chapters:

Chapter 1: Context and Case for Change. This chapter provides insight around the case to change DCC's existing charging arrangements. It includes questions for respondents soliciting further insights around the changing use of the DCC network.

Chapter 2: Cross Cutting Issues. This chapter introduces concepts which are common across any new DCC charging model, including the scope of charges under review and general design considerations.

[1] DP218 'Review of the SEC Charging Methodology'

Chapter 3: Overview of Charging Models Under Consideration. This chapter outlines five charging model options. Each option is presented in turn, setting out:

- A description of the option.
- Design considerations specific to the option.
- An initial impact assessment of the option, accounting for DCC User impacts and DCC system impacts.

A series of questions are then posed in relation to each of the options to elicit insight on the relative merits/demerits of the option. The end of Chapter 3 contains four overarching questions, including a question on which option respondents believe is the most viable, and whether there are any other options which could be considered.

Chapter 4: Next Steps. This chapter provides a timetable outlining the next steps in the consultation process and the interaction with the SEC modification process.

Responding

DCC and Frontier will be using information received through this RFI and subsequent consultation to inform any decision on the case for change, which will be guided by the SEC Change Sub-Committee (CSC), Ofgem and DESNZ.

Written responses are requested, by email, to be sent to: consultations@smartdcc.co.uk by 25 June 2024.

If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Following the conclusion of this RFI, we will publish a response and present the modification to the CSC for progression to the next stage of the Modification Process. Following this we will work with SECAS to prepare a Refinement Consultation. We anticipate that the Refinement consultation will be published in August 2024. Our intention is to develop a well evidenced, minded-to position by the end of 2024. This will be shared with Ofgem and DESNZ to consider the policy and regulatory implications around introducing change. It will also align with the SEC Modification Process which is also currently underway.

Table of Contents

1. Chapter 1: Context

1. This chapter provides background context explaining the approach DCC has taken to charging to date. It also sets out the drivers which have prompted DCC, and a number of industry participants, to reconsider the way DCC charges and recovers its costs from DCC Users.

1.1. DCC's Current Charging Model

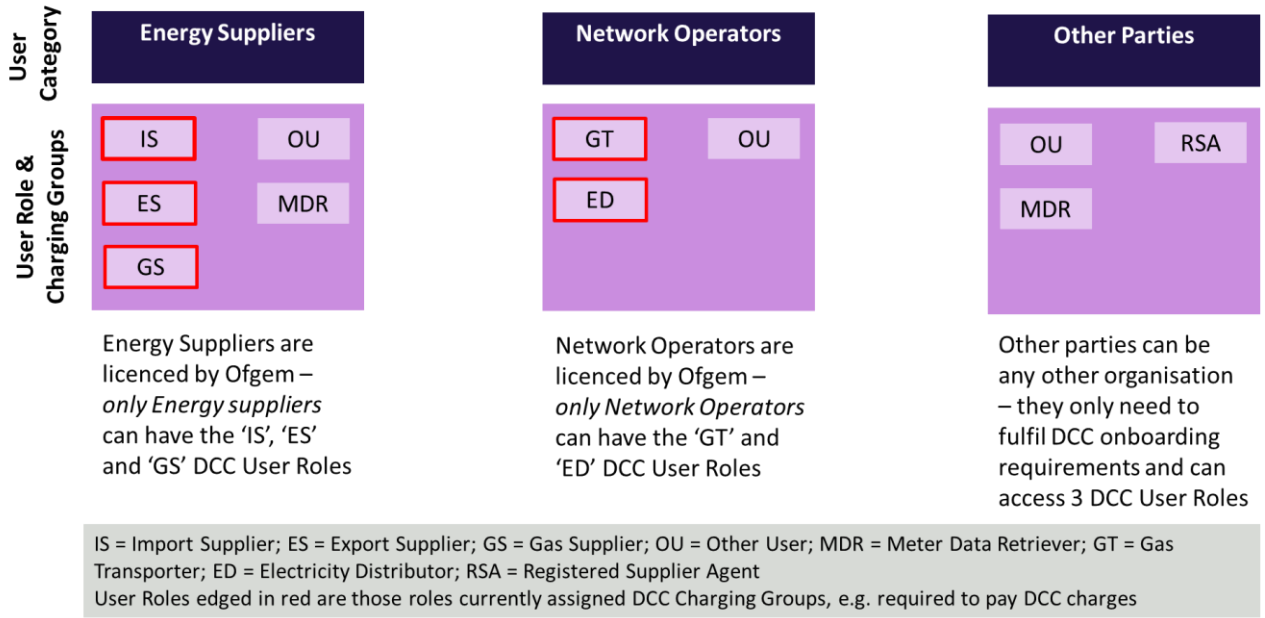
2. The DCC's charging regime was developed by Government before DCC Licence award in September 2013. A key objective of the initial regime was to provide potential DCC Licence applicants with confidence in relation to income.

3. Charging objectives are set out in the DCC Licence (Condition 18 "Charging Methodology for Service Charges") and replicated in SEC Section C, and require that DCC:

- Facilitates effective competition in the supply of energy (or its use) (i.e. DCC cannot charge different energy suppliers differently for the same service).
- Does not distort competition in the sector more broadly (i.e. DCC cannot charge different DCC Users differently for the same service).
- Does not adversely impact the smart meter roll-out.
- Does not unduly discriminate and must be reflective of costs incurred by the Licensee (insofar as is reasonably practicable).

4. The resulting charging regime was designed to ensure the recovery of revenue allowable under price control licence conditions. Under this regime, DCC allocates all costs to five Charging Groups (see figure 1 below), with some DCC User Roles not required to meet DCC charges.

Figure 1: DCC User Categories, User Roles and Charging Groups



5. The current charging methodology allocates DCC's costs to five Charging Groups based on selected User Roles in the Energy Supplier and Network Operator User Categories (see figure 1 above). Weighting factors (based on envisaged usage levels at the time the charging methodology was established) are assigned to these different Charging Groups based on the expected demand each Charging Group would place on the system. Charging is also executed on a 'postage stamp'

basis (i.e. there is no locational variation in charges) to recover both DCC's own costs and receive payments for some discrete services.

6. Current charges are broken out across:

   - fixed charges – on a per meter basis (domestic and non-domestic) across Charging Groups; and
   - explicit charges – related to service usage based on DCC's variable costs (which as currently constituted represents c.1% of total costs).[2]

7. DCC has not, to date, elected to price an explicit charge for communication services (i.e. charging for use of the DCC network), although it has the power to do so. This approach was based on use of the DCC network being predictable across a set range of DCC User Roles – although this is no longer the case (see "Changes in network use" below).

8. This decision to set a nil charge was taken in 2014 because it was considered to be the most economic and efficient approach at the time[3]. The rationale for this approach is as follows:

   - the total cost of Service Requests is approximately 0.2% of total External Costs;
   - it would be less costly and complex for the billing system to recover this cost through Fixed Charges;
   - invoices would be simpler with less reconciliation activity for DCC's customers; and
   - there would be greater cost certainty in advance of each Regulatory Year.

9. Based on current arrangements more than c.94% of DCC fixed costs are recovered from Charging Group User Roles relating to Energy Suppliers (via the IS, ES and GS User Roles) with the remainder principally met by Electricity Distributor Charging Group, under the Network Operator User Category.[4]

1.2. Changes in network use

10. Now, over a decade into the smart meter roll-out there are some 30m meters installed across England, Scotland and Wales representing coverage in over 60% of homes and small businesses. Since the governance framework for the smart metering network was established more than ten years ago, significant progress has been made in meeting national Carbon Budgets, accompanied by wider market developments, such as digitisation and a strong focus on delivering domestic decarbonisation and flexibility (a requirement of the current Fourth Carbon Budget).[5]

11. The Government Impact Assessment for smart metering implementation, reports from the Energy Digitisation Taskforce and the 2023 National Audit Office (NAO) report into Smart Metering[6] have all identified the need for the smart metering network to be able to support a broad range of evolving objectives:

> *"helping consumers to understand their energy consumption and make savings, reducing supplier costs, enabling new services, facilitating demand-side management which will help reduce security of supply risks and help with sustainability and affordability objectives. Smart metering is a key enabler of the future Smart Grid, as well as facilitating the deployment of renewables and electric vehicles."*[7]

[2] See table 6 in the Charging Statement for regulatory year 2023/24.
[3] See paragraph 42 of DCC's latest charging statement: https://www.smartdcc.co.uk/media/u31la12l/cs-ry2425-issue-10.pdf
[4] Based on the DCC charging statement for regulatory year 2023/24.
[5] A key requirement of Great Britain's legally binding fourth carbon budget (which runs from 2023-2027)
[6] Update on the rollout of smart meters - National Audit Office (NAO) report
[7] HMG Smart Metering Impact Assessment. Also reflected in the 2023 NAO report in the Smart Metering programme

12. In addition, Section K3.13 of the SEC requires DCC to review demand (within the current Charging Groups) once rollout is complete. Despite this requirement, together with industry, we have decided it is time to look at this now and to look at wider usage i.e. beyond the existing Charging Groups.

13. Having reached significant scale nationally, and with an increasing focus on the decarbonisation of buildings and transport, the smart metering network now faces rising demand to service new customers who have requirements which typically sit outside of the governance structures established c.13 years ago.

14. Over the past two years DCC has seen a significant rise in traffic from both the Other User and Electricity Distributor roles (see figure 2 below), as well as increasing interest from organisations seeking to use the DCC network.[8]

Figure 2: Rise in Other User and Electricity Distributor network use (Jan 2022 - present)

Source: DCC network demand data

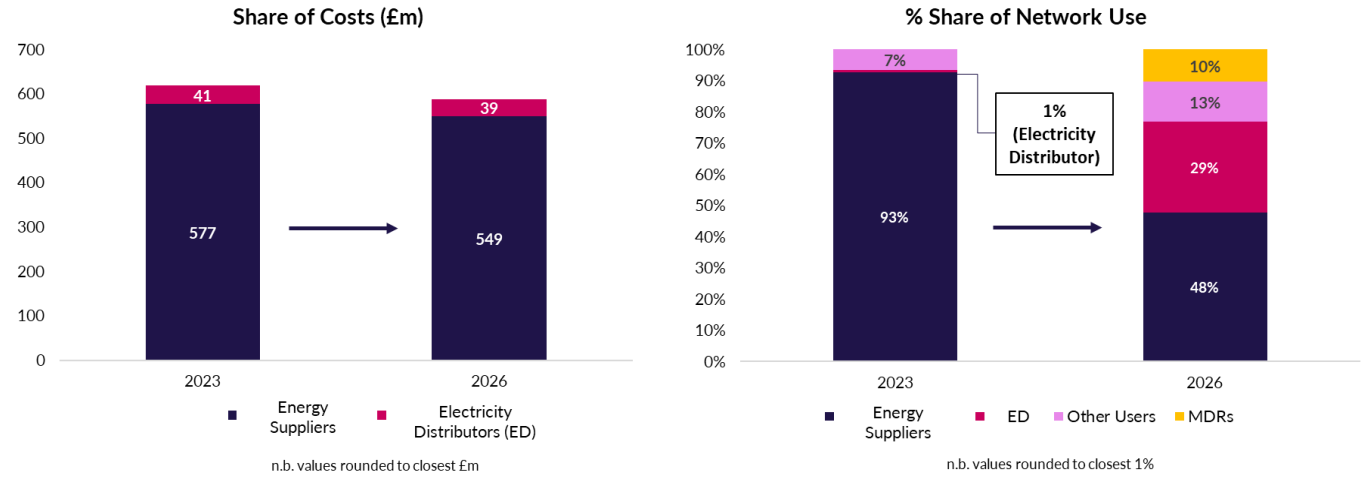
15. Other User and electricity distributor traffic combined represented 15% of all DCC network traffic in February and March 2024.[9] Based on current network usage patterns some actors in the Electricity Distributor and Other User Roles are also using the network more extensively than larger energy Suppliers. Equally, current charging does not correlate directly to usage, either within or across User categories.[10]

16. Based on current trends, DCC has projected that there will be a continued evolution in who will be driving future DCC network traffic. The DCC shared its initial analysis of how this could look with industry earlier this year and as part of DCC's annual Business Development Plan consultation process. Figure 3 below sets out the projected evolution in usage contrasted with DCC's current charging approach. We do, however, recognise the limitations in seeking to project

[8] 80 organisations contacted DCC direct over 2023 with a view to becoming Users of the DCC network (principally via the Other User role) representing a wide range of sectors across a range of SMEs and FTSE 100 organisations.
[9] Electricity Distributors currently meet c.6% of DCC costs Other Users do not meet any DCC costs.
[10] Based on an analysis of network usage over 2023 and DCC charging information. Intensity of usage is based on an analysis of volumes of messages (SRVs) sent per communications hub.

forward network usage with certainty. We will be using the information gathered as part of this RFI to continue to inform and refine our core assumptions.

Figure 3: Current Cost Structure v. Charging Utilisation of the DCC Network



Source: DCC network demand and charging statement data

17. Taken together, User Roles that are not currently Charging Groups (or who pay only a small % of DCC charges, e.g. Electricity Distributors) are projected to represent the majority of DCC Network demand by 2026 (see figure 3 above) for the first time).[11]

18. Over the course of this consultation exercise, we will explore the likely evolution of network utilisation further across DCC User Roles, based on a range of possible demand scenarios – informed by the evidence gathered through this RFI. This in turn will be used to refine the distributional impacts arising from the different charging models under consideration.

1.3. DCC Licence Renewal

19. The DCC's current Licence is due to expire in 2025. Ofgem is responsible for designing and awarding a new licence but has said it will need to extend the current licence by 12-36 months as it considers the timeframe for appointing a successor licensee. As part of the licence renewal process Ofgem has already signalled that it will transition DCC's existing price control arrangements from ex post to ex-ante, with DCC needing to transition towards an ex-ante regime from April 2025.

20. As part of this wider licence renewal activity, it is appropriate that DCC now also considers the adequacy of all existing operational approaches, including DCC's charging methodology. It will be potentially limiting for DCC and Ofgem to consider the introduction of licence renewal changes and the wider ex-ante transition outside of any potential considerations surrounding the need to deliver a sustainable approach to DCC charging (i.e. the ability to implement different charging approaches may be foreclosed by decisions taken on DCC's licence).

[11] It is worth noting that some Energy Suppliers are expected to also adopt the MDR User Role.

1.4. Delivering a Sustainable Charging Model

21. The DCC must account for multiple drivers when considering a sustainable approach to charging:

    a. **A rebalancing of network use across its User Categories and User Roles that has resulted in increasing mis-alignment with DCC's legacy charging framework as well as SEC Charging objectives (e.g. cost reflectivity).** This has manifested in concerns being raised by some DCC Users around how representative legacy charging arrangements are and has already prompted an industry code modification to address charging reform – DP218 (see the Introduction and Chapter 4 "Next Steps").

    b. **Limited means to manage changing network traffic beyond "good practice" guidance, which has proven to be ineffective to date.** Over the past two years there have been network traffic management incidents prompted by spikes in on-demand traffic from a range of User groups. DCC envisages the incidence of such events will increase without the introduction of new pricing signals which will prompt Users to modify their behaviour at critical times (aligned with best practice in other sectors).

    c. **A clear need to support GB's efficient transition to net zero, in line with the financial case for the smart metering network**, enabling a wide use of the network by all User categories at an important time in GB's Fourth Carbon Budget. Depending on the changes to charging methodology introduced, this could also enable the overall costs of the DCC network charged to households and small businesses to be reduced.[12]

    d. **The need to align any reform to charging with the wider move for DCC to recover costs on an ex-ante regulatory model** which will be phased in ahead of DCC licence renewal. It is important for DCC to begin preparation for the changes licence renewal will bring now including accommodating potential changes to charging methodology.

22. DCC must navigate each of the above challenges in good time – maintaining User confidence in the network is critical as is the need to avoid scenarios where User demand is throttled or not served – which undermines point (c) above.

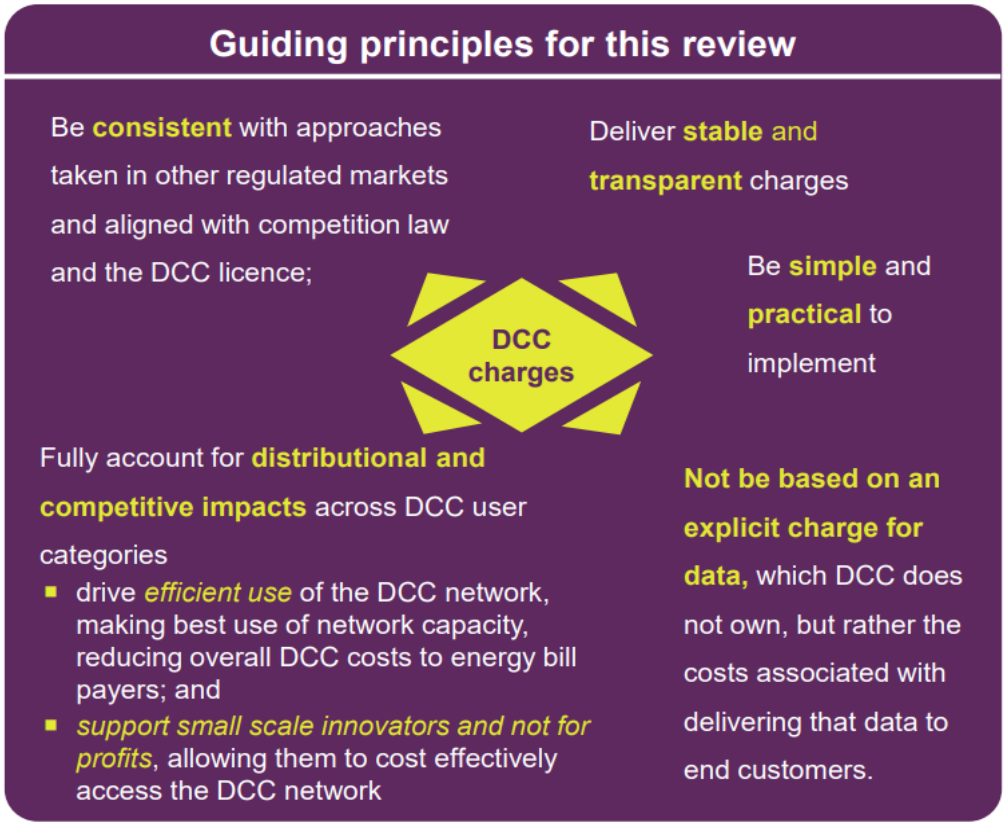
23. In working through the challenges detailed above DCC will have regard to its licence as well as the SEC.

24. DCC has established guiding principles for this RFI and subsequent consultations which will inform how changes to charging are assessed – see figure 4 below.

25. Respondents to this RFI document should consider these guiding principles as they frame their input.

[12] DCC costs are re-charged by Charging Groups to energy bill payers (households and small businesses).

Figure 4: Guiding principles for change



1.4.1. Questions

Questions on key drivers for change and guiding principles	
1.	Do you have any comments and/or insights on the drivers of change identified in this chapter 1?
2.	Do you have any comments on the guiding principles detailed at figure 4?

2. Chapter 2: Cross Cutting Issues

26. Ahead of examining different charging options, this Chapter sets out the common issues which need to be considered that impact the approach taken to any change in charging policy. This includes:

- the scope of charges under consideration;
- design considerations;
- approach to revenue recovery;
- support for innovators; and
- wider market developments (such as Read and Store).

27. Each of these issues is addressed in turn below.

2.1. Scope of charges under review

28. As set out in Chapter 1, a large share of DCC's allowed revenue is currently recovered through a set of fixed charges. These fixed charges are described in section A of DCC's Charging Statement[13] and include:

a. 'Fixed Charges' – payable by all five SEC Party categories (each a Charging Group) to recover the sum of DCC's National and Regional Fixed Revenue[14] (£533.2m in RY2023/24) and Communication Hub Fixed Revenue (£24.3m in RY 2023/24) on a per meter basis;

b. 'Fixed Alternative Home Area Network (Alt HAN) Charges' – payable by Import Suppliers and Gas Suppliers to recover Alt Han Pass-through costs incurred by Alt HAN Co. (£18.3m in RY 2023/24) on a per meter basis; and

c. 'Fixed Communications Hub (CH) Charges' – payable by all Energy Suppliers (including Export Suppliers) to recover CH (Communications Hub) Device Revenue (£78.7m in Regulatory Year 2023/24).

29. This review focuses only on potential changes to the charging arrangements in relation to Fixed Charges, as costs recovered through these charges make up the vast majority (91%[15]) of DCC's cost base and are most affected by changes in the way that Users make use of DCC's network.

30. Fixed Alt HAN Charges and Fixed CH Charges on the other hand more directly recover the costs of discrete activities undertaken by energy suppliers. We consider that these charges remain consistent with DCC's charging objectives and therefore do not need to be reviewed at this stage.

31. Similarly, we do not consider making any changes to the existing set of explicit charges set out in section D of DCC's Charging Statement. However, some of the charging models described in the following Chapter explore to what extent the overall scope of explicit charges could be extended and/or revised by introducing variable charges based on the number of Service Requests sent by Users.[16] As noted in Chapter 1, DCC has historically recovered its costs through Fixed Charges as it was considered more economic and efficient to do so following a proposal consulted upon in May 2014. Some of the charging options presented in this RFI involve introducing an explicit

[13] https://www.smartdcc.co.uk/media/yk2bifqy/charging-statement-ry2324-issue-30.pdf
[14] As per Table 9 of DCC's charging statement, National and Regional Fixed Revenue comprise: internal costs, external costs, pass-through costs (including Smart Energy Code Company (SECCo) Ltd costs), Baseline margin, External Contract share, Prudent estimate, and correction factor.
[15] Based on DCC's charging statement for RY 2023/24, Table 6: https://www.smartdcc.co.uk/media/yk2bifqy/charging-statement-ry2324-issue-30.pdf
[16] See paragraph 42 of DCC's latest charging statement: https://www.smartdcc.co.uk/media/u31la12l/cs-ry2425-issue-10.pdf

charge for Service Requests/transaction messages. We consider that this is a material departure from how DCC captures and categorises cost information today (including how data for Transaction Messages has been captured to date). More work will be needed to identify all the costs that should be captured.

2.1.1. Questions

Questions on scope of charges under review	
3.	Do you agree with the scope of this review given the proportion of costs recovered through Fixed Charges in DCC's cost structure, including the need to better understand and categorise costs (e.g. transaction costs). If not, please explain why.

2.2. General design considerations

2.2.1. Uniform pricing

32. DCC's Licence and the SEC currently prescribe that DCC's charges for the provision of Core Communication Services (excluding elective and value-added services)[17] are uniform across Great-Britain[18]. In other words, DCC's charges must follow a "postage stamp" principle whereby charges do not vary by location. Another provision of the SEC is that charges for Smart Metering Equipment Technical Specifications (SMETS) 1 meters should, as far as reasonably practicable (i.e. having regards to the cost of implementation) be the same as charges for SMETS2 meters.

33. DCC has therefore constructed charging options for review that are consistent and compliant with the existing SEC and Licence obligations. The charging models presented in this document would be set at the national level and would not differ according to the generation of smart meter to which they relate.

2.2.2. Questions

Questions on uniform charging	
4.	Do you agree that future DCC's charges for the provision of mandated services should continue to be uniform across the country and across SMETS1 and SMETS2 meters?

2.2.3. The basis for fixed charges

34. DCC Users across the five existing DCC Charging Groups currently pay a fixed charge on a per meter basis. This is relatively straightforward to implement as, at any given point in time, every smart meter is associated with a single Energy Supplier and a single Electricity Distributor, and these relationships are enduring (other than when customers switch supplier).

35. However, some of the alternative charging models under consideration may introduce fixed charges to a wider set of User Roles, including Other Users (OUs), Meter Data Retrievers (MDRs) and Registered Service Agents (RSAs).

36. The OU, MDR and RSA User Roles represent a wide range of discretionary end organisations. The Other User Role, in particular, differs to wider DCC User Roles as it does not usually have an

[17] Mandatory Business Services comprise the Mandatory Business operated or provided by DCC, namely (a) Core Communication Services, (b) Elective Communication Services, and (c) Enabling Services pursuant to Licence Condition 1.4.
[18] In line with section 18, Part C of DCC's licence: https://www.smartdcc.co.uk/media/dbylgejz/smart-meter-communication-licence-2023.pdf

enduring relationship with smart meter Devices. For example, while Other Users are required to get consent from end customers to read and retrieve data, the number of meters an Other User is in contact with as well as the frequency and intensity of interactions are likely to vary greatly over a given period. DCC also does not currently have the ability to track the number of consents granted.

37. If fixed charges were to be introduced for a wider set of DCC User Roles, it would therefore be necessary to develop a different basis on which to do so[19]. Options could include (but are not limited to) the following:

    a. Charging on a per-User basis: fixed charges are determined by dividing allocated allowed revenue[20] by the number of Users in each Charging Group.

    b. Charging on a volumetric basis, for example applying a fixed charge for every 5,000 Service Requests sent.

    c. Developing an approach to track the number of meters associated with Other Parties, which will allow DCC to charge all User Roles on a per-meter basis, noting that such an approach will need to be aligned with SEC provisions and regulations on data security and privacy.

38. We recognise that some of these alternative metrics are likely to be less stable over time than the number of meter points, and that careful considerations would need to be given so that the level of charges does not create barriers to entry or deter the use of the network from existing DCC Users if charges are set too high (for instance if the number of Users associated with each Charging Group is small relative to the amount of allocated revenue associated with a Charging Group).

39. Using any of these alternative charging bases would also come with some technical considerations and require DCC to develop additional monitoring capabilities to:

    a. link an entity to their User Role(s) (as a single entity could be onboarded with DCC through different User Roles, as described in Chapter 1); and

    b. track the relationship between individual meter points and Other SEC Parties so these User Roles are charged in the way that Energy Suppliers and Network Operators are currently charged.[21]

40. Stakeholder views on these and other potential approaches to allocating fixed charges to a wider set of Users will be particularly valuable.

2.2.4. Questions

Questions on the charging basis	
5.	In your view, what would be a suitable metric to set charges for different User Categories (e.g. Energy Suppliers, Network Operators, Other SEC Parties)?
6.	Do you identify any risks or barriers in respect of the potential changes in DCC's monitoring capabilities that might be required to set the basis on which Users are charged?

[19] Fundamentally, charges in other regulated sectors are determined by dividing Allowed Revenue by Forecast volumes. Fixed charges are in most cases set on a per-User or 'access-point' basis (e.g. the number of subscribers or lines with respect to connection costs in the telecom sector).
[20] That is, the portion of DCC's allowed revenue attributed to a User Category
[21] DCC currently monitors traffic at a User level. Therefore, charging Users on the basis of usage through a variable charge would, in comparison, be easier to implement. We discuss this in more detail in the following Chapter, particularly in relation to charging options 4 and 5.

2.2.5. Revenue recovery

41. As discussed above, fixed charges are currently paid by User Roles in the Energy Supplier and Network Operator User Categories on a per meter basis. This approach ensures fairness in that it reflects the market share. It also ensures stable revenue recovery for DCC, as the number of meters is a relatively stable and predictable measure. As a result of this stability and predictability, there is only relatively small scope for forecasting errors to lead to over/under recovery of revenues. There is also little to no meaningful capacity for Energy Suppliers and Network Operators to reduce the overall level of their charges by changing their use of DCC's network.

42. Under some of the charging models under consideration in the following Chapter, Users would obtain the capability to change the sums they would be charged by changing the way they use the DCC network. For example, DCC Users that were able to lower the volume and/or size of the Service Requests they send/receive may pay less, while Users who request/receive a higher volume of Service Requests may pay more.[22]

43. The current charging arrangements have not been designed to provide such price signals to Users. Moving to a charging regime that is more directly linked to how Users use the network would inevitably lead to more difficulty in forecasting short-term network use for the purpose of setting charges, and hence would expose DCC to more revenue volatility than under the status quo, as actual volumes might differ from the forecasts on which charges would have been determined.

44. DCC already produces a range of demand forecasts based on historical trends and wider market intelligence on key policies expected to drive network demand. However, forecasting is a complex exercise and there is still material uncertainty around the shape of future traffic.

45. Our proposals for future charging arrangements may therefore require DCC to obtain further input from all DCC Users on their expected use of the network (e.g. up to a five-year horizon) to calibrate charges more accurately[23]. This will help limit the risk of any under- or over-recovery, which could affect the predictability and stability of charges over time.

2.2.6. Questions

Questions on data capture requirements on future demand	
7.	Do you have views on the process through which DCC should collect information on future demand across DCC Users?
8.	Are there any barriers to providing DCC with such information?

2.2.7. Materiality threshold

46. In line with the guiding principles set out in Chapter 1 (figure 4), in order to provide economical access to DCC's network for small innovators or certain categories of organisations serving public interest use cases, a materiality threshold under which Users would not be subject to charges,

[22] Such arrangements are common in other regulated sectors. For instance in the electricity sector, Users can reduce the sums of charges they pay by optimising the size of their connection (e.g. typically a fixed charge calibrated based on fuse size or voltage level in the case electricity) and/or reduce their consumption level.

[23] Network companies operating under an ex-ante regulation regime are typically required to produce multi-annual plans to provide an outlook of future infrastructure needs according to a range of demand scenarios (e.g. Ten Year Network Development Plan in the energy sector, or business plans submitted by electricity and gas network companies as part of Ofgem's RIIO price control). These plans are subject to regulatory scrutiny and involve iterative processes between the regulated company and its Users to understand the drivers of future demand and estimate targeted allowed revenue to recover on an annual basis.

could be set. It is envisaged that this threshold would apply to organisations looking to access the DCC's Other User role.

47. This materiality threshold could be based on:

    a. the level of usage (e.g. the User represents less than 0.1% of total traffic in a given month or year); and/or

    b. the nature of the organisation and the intended use of the smart metering network (e.g. exempting charitable organisations from paying charges).

48. We recognise that the approach to setting any materiality thresholds, as well as the circumstances they might apply, would need to be consistent with competition law and provisions of the SEC.

2.2.8. Questions

Questions on setting a materiality threshold	
9.	Do you agree that a materiality threshold would need to be set to continue to enable innovation on the DCC Network, particularly under the DCC Other User role?
10.	In your view, how low should a threshold based on usage be set to avoid market distortions?
11.	In your view, which type of organisations should be exempt from paying charges for their intended use of the network?

2.2.9. The impact of 'Read and store' capabilities on DCC's charges

49. Recent market and policy initiatives such as the Smart Meter Energy Data Repository Programme (SMEDR)[24] support and provide funding for the development of smart meter data repositories that would provide a range of energy-related data stored in one place and accessible by a wide range of stakeholders.

50. The ability to access smart meter data via large-scale caches may represent an economical alternative for some DCC Users and organisations. This may lead to a shift in the way DCC's network is used, by potentially reducing the amount of Service Requests and corresponding messages sent and received by Users to retrieve the same data. In principle, such a development could reduce congestion on the live network and help manage future capacity needs.

51. These initiatives are in very early stages of development and are currently focusing on investigating technical and commercial feasibility, alongside any privacy and data protection concerns. Their implementation would require specific appraisal and approval from DESNZ and Ofgem. While both the timing and scale at which such cache systems may become fully operational are still uncertain, we recognise that it is a relevant matter to consider as part of this review.

52. DCC is working closely with Ofgem, DESNZ and industry on these initiatives and will carefully consider the extent to which any of the proposed charging models should be adapted as secure, cloud-based repositories potentially become approved for use.

[24] https://www.gov.uk/government/publications/smart-meter-energy-data-repository-programme

2.2.10. Questions

Questions on read and store capabilities	
12.	Do you have any insights on how smart meter data repositories could impact your use of DCC's network?

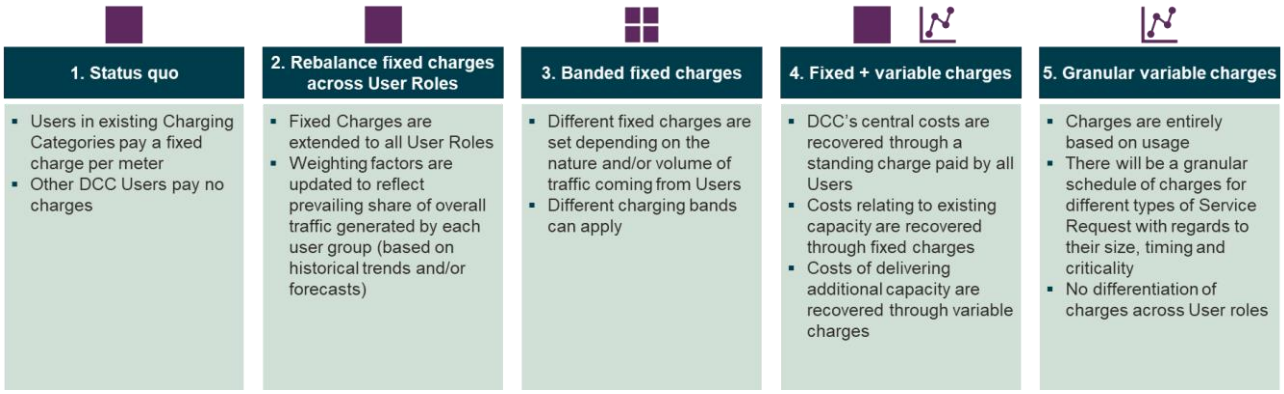
3. Chapter 3: Overview of Charging Models Under Consideration

53. In this chapter we present a high-level view of the potential charging models and set out important design options. We recognise that a full assessment of the charging models will require additional detail on how each might be calibrated, as well as more detailed analysis of the impact of the proposed changes. Further work will be undertaken on these options over the rest of this year. This will be informed by stakeholder views, which will be considered carefully to fully calibrate the preferred options and assess the costs, benefits and the distributional impacts across Users. This further calibration and analysis will be consulted on later in the year. Based on any decision agreed by Ofgem and DESNZ, an assessment will then be made in respect of changes to the DCC charging methodology and/or changes to the SEC (see the following Chapter for more detail).

54. We are inviting stakeholder views to build out the evidence base required to support potential changes to DCC's charging arrangements. When considering your answers to the questions in this Chapter, please provide reasons for your response, and include evidence to support these where possible.

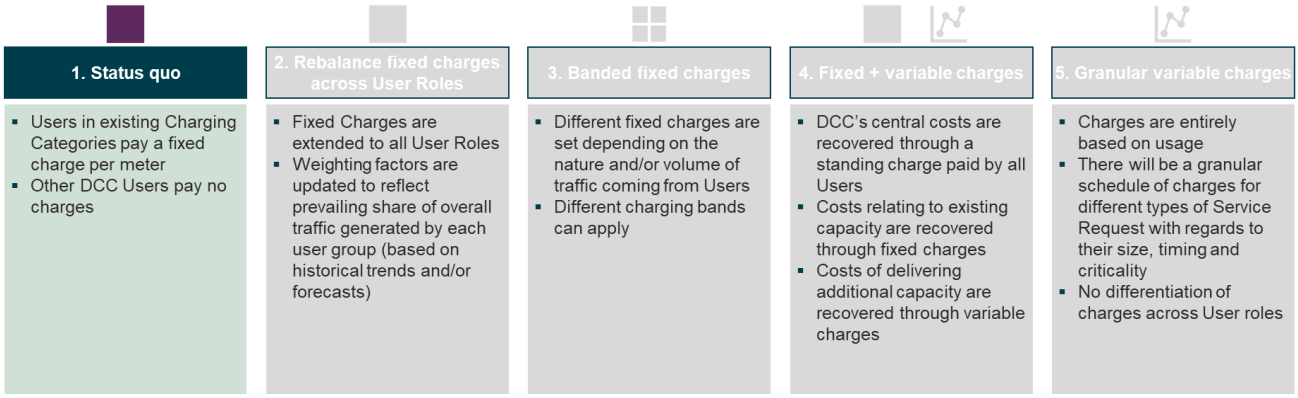
55. In this section we provide a description of the five proposed charging models (four of which are new) that we have developed so far. This description includes their key features and, where appropriate, design considerations. At the end of this Chapter we also invite views on further charging models beyond the five that are set out here.

56. The options we consider are:



57. At this stage a full impact assessment of each candidate charging model cannot be prepared. Before this can be done, the detailed design of each candidate will need to be completed, and more information will need to be gathered from stakeholders on their potential costs and benefits as part of this RFI consultation. We do, however, present an initial high-level assessment of the potential trade-offs associated with each option and how these could impact Users and DCC.

3.1. Option 1 – Status quo



3.1.1. Description

58. Under this option DCC's charging arrangements would remain unchanged, with fixed per meter charges applied to existing DCC User Roles in eligible Charging Groups (see para 60 below) who currently recover DCC's internal and external costs. DCC Users in the Other Parties Category – who already have or will get access to the DCC Network – can continue to use the DCC Network thereafter free of charge.

59. The SEC identifies five Charging Groups based on DCC User Roles. Under the Energy Supplier User Category, these Charging Groups include: Import Suppliers (IS - g1), Export Suppliers (ES - g2), Gas Suppliers (GS - g3). Under the Network Operator User Category this includes Electricity Distributor (g4) and Gas Transporter (g5) User Roles (see Chapter 1, figure 1).

60. At a high-level, DCC's allowed revenue is allocated to the different Charging Groups according to a set of 'weighting factors' specifying the contribution of each Charging Group to revenue recovery[25]. The Fixed Charges are then determined by dividing the allocated revenue for each Charging Group by the number of meters associated with each Charging Group. Table 1 below sets out the weighting factors for each Charging Group and the implications in terms of revenue recovery allocation for RY23/24.

Table 1: Overview of existing charging arrangements for Regulatory Year 2023/24

Charging Group	Weighting factors	Monthly allocated allowed revenue (£m)	Number of Mandated Smart Meter Systems including domestic and non-domestic SMS (millions)	Monthly Fixed Charge (£/Mandated Smart Meter System)
g1 – Import Electricity Suppliers	0.49	24.0	31	0.771
g2 – Export Electricity Suppliers	0.08	-	-	0.126
g3 – Gas Suppliers	0.37	14.2	24	0.582
g4 – Electricity Distributors	0.06	2.8	31	0.089

[25] See Table 12 of DCC's charging statement. Weighting factors were initially set in 2013.

g5 – Gas Transporters	0.00	-	25	n/a

Source: DCC's charging statement for RY23/24, issue 3.0

Note: for g2, DCC's charges model derive a Fixed Charge despite the number of meters associated with this group being equal to nil. This is because the model includes additional calculation steps to 'rescale' the weighting factors based on the actual distribution of meters across Charging Groups, which we have not reproduced here for simplicity.

61. Under this approach all costs (the existing cost base and costs relating to network expansion over time) are recovered through the same common, flat charge for each Charging Group. Charges also do not vary according to how the network is used, i.e. the level or the type of traffic generated by individual Users is irrelevant to their charge.

62. The level of fixed charges will evolve over time as the smart meter roll-out continues and additional capacity is added to manage growing volumes of Service Requests, with any cost increase being deterministically apportioned to existing Charging Groups via existing weighting factors.

3.1.2. Key design considerations

63. As this approach rolls forward existing charging arrangements, there are no particular design questions or implementation challenges to consider.

3.1.3. Initial impact assessment

64. Below we consider first the impact of this charging option (Option 1) on DCC Users, and then on DCC.

Impact for Users

65. We anticipate that the current charging arrangements are well understood by DCC Users. They give existing Charging Groups transparency on the way costs are allocated and how these costs lead to the charges they face.

66. The current Charging Methodology may be considered to have the effect of encouraging innovation in the use of smart meter data, and the provision of associated services, given Users pay a fixed amount irrespective of the actual load they place on the network. Also, Other SEC Parties (e.g. those not part of existing Charging Groups) that may seek to leverage smart meter data to provide services are able to use the network for free (once they have taken the necessary steps to gain access).

67. These arrangements have proven to be fit-for-purpose during the period where smart meters were being rolled out, and over a period where the use of the network has been principally driven by Energy Suppliers, with much lower demand from Electricity Distributors and User Roles within the DCC Other Parties category. However, this context is now different, as the smart meter roll-out is well progressed, and use of the smart meter network has grown more diversified and differentiated across User Roles (see Chapter 1).

68. Demand on the DCC network has also now reached the stage where further investment in additional capacity may be needed to serve rising demand. For example, demand from Electricity Distributors and Other Parties combined has grown significantly and now accounts for 15% of total traffic (see Chapter 1, figure 2).

69. Fixed charges under the current arrangements are therefore not cost reflective, do not send any signal for efficient use of the DCC network and do not closely reflect capacity scarcity or the future cost of network expansion/enhancement.

Impact for DCC

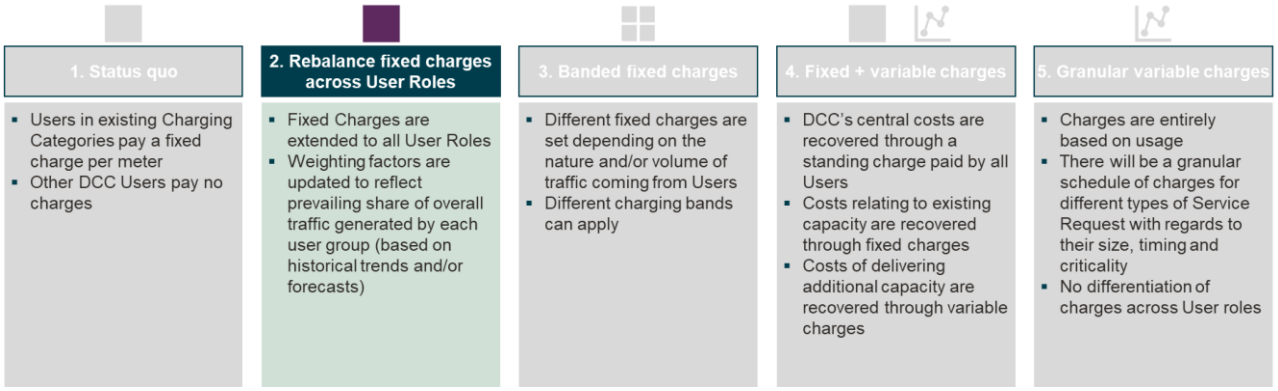
70. The current charging methodology is simple and ensures that DCC effectively recovers its allowed revenue. A correction factor is used to return or recover any difference between allowed revenue and actual allowed revenue (driven by the difference between actual and forecasted number of meter points) over the following regulatory period. This correction factor is typically small in size, and charges relatively stable and predictable over time.

71. As demand has increased, and is expected to increase in the future, DCC will continue to endeavour to adopt industry-level measures to manage peaks in traffic, as and when required, and contract additional capacity with Service Providers to facilitate future demand. However, the current charging model does not provide any signal to encourage efficient use of the network and DCC must simply accommodate demand as it arises on the network to the best of is ability. This charging model therefore puts a particular onus on network management measures to manage peaks in demand (for example by shifting traffic throughout the day or reducing the number of duplicated Service Requests).

3.1.4. Questions

Questions on option 1	
13.	Do you agree with our initial assessment of the impact of charging option 1?
14.	Do you think that the current charging arrangements should be retained or replaced, and why?

3.2. Option 2 – Rebalancing Fixed Charges across Users



3.2.1. Description

72. Option 2 builds on Option 1 by updating the weighting factors such that they more closely reflect the prevailing share of overall demand coming from each DCC User Category. As part of this, Charging Groups could be revised, and additional Charging Groups defined, to extend the payment of fixed charges to all DCC Users.

73. As in Option 1, weighting factors – broadly proportional to the Charging Group's network use – specify the contribution to cost recovery. The weighting factors are applied to DCC's total allowed revenue to identify the portion of allowed revenues that will be recovered from each Charging Group.

3.2.2. Key design considerations

74. There are three main design considerations for this option: the approach to calculating the Charging Group weighting factors, the choice of the charging basis for Other SEC Parties and the treatment of any deviations between forecast and actual volumes (through a correction factor, or ex-post revenue reconciliation mechanism).

Weighting factors

75. The weighting factors could be derived using historical data from each Charging Group, or by using forecast data, or reflecting some combination of the two. A choice would need to be made regarding the time period relied on to determine weighting factors, and the frequency with which updates would be made. Table 2 below illustrates some potential options.

Table 2: Potential options for changes to weighting factors

	Historical data approach	Forecast data approach	Hybrid approach
Short-term (<1 year)	Reflect recent demand patterns observed in the previous Regulatory Year (RY) Updated annually or within period	Reflect expected demand for the upcoming RY Updated annually or within period	Different weights assigned to historical and forecast data to reflect uncertainty on future demand and avoid large year-on-year swings in charge levels across Charging Groups Updated annually using a trailing average[26] or within period

[26] For example, trailing averages (taking into account both historical and forecast data) are used by Ofgem to determine network companies' cost of debt allowance.

Longer-term (>1 year)	Reflect actual demand patterns over a longer time period (e.g. 5 years) Updated at defined intervals using a trailing average	Reflect future demand over a longer horizon (e.g. 5 years) Updated at defined intervals using a trailing average	Different weights assigned to longer term historical and forecast data to reflect uncertainty on future demand and avoid large year-on-year swings in charge levels Updated at defined intervals using a trailing average

76. Relying on shorter and more recent time periods to derive weighting factors may lead to those weights better reflecting very recent usage but may also have the effect of introducing more volatility into weights. Longer time periods would likely lead to more stable weights, but weights may then lag prevailing User behaviour. Reliance on forecasts to set charges will likely only be viewed as legitimate if those forecasts are regarded as robust and reliable.

Charging basis

77. As discussed in Chapter 2, we recognise that a challenge for this option would be the choice of the charging basis, particularly for DCC User Roles in the Other Parties Category. The charging basis could either be the same across all Charging Groups or be different across Charging Groups if one metric is more suitable for one Charging Group.

Ex-post revenue reconciliation

78. If a per-meter charge is maintained for existing Charging Groups, we do not expect the share of allowed revenue recovered from these Charging Groups to be subject to more volatility than under the status quo, unless this option was combined with more frequent updates using shorter run evidence.[27] However, the actual amount of revenue recovered from Other SEC Parties could be subject to more volatility if the basis on which they are charged is not likely to remain stable over time[28], particularly within a regulatory year. Any under or over-recovered amount would need to be rolled over to the following regulatory year and re-apportioned across (some of) DCC's Charging Groups.

3.2.3. Initial impact assessment

79. Below we consider first the impact of this charging option (Option 2) on DCC Users, and then on DCC.

Impact for Users

80. Under this charging model, charges will more closely reflect each Charging Group's aggregate network usage. In particular, Other SEC Parties will start paying charges, which could be used to offset charges borne by existing Charging Groups (potentially reducing costs to consumers).

81. However, charges will not be entirely usage-reflective within a Charging Group. Individual Users' network usage will not directly influence the charges they pay but will do so only indirectly by modifying aggregate usage for the entire Charging Group. For Charging Groups with pronounced differences in usage across Users, this may lead to cases where charges do not match individual User volumes well. We also note that this model does not provide any incentive for Users to shift traffic to periods when aggregate demand on the network is low.

[27] The current charging arrangements already include a correction factor so any differences in allowed revenue and actual revenue are returned to (or recovered from) Users in the following regulatory year.
[28] For instance, if the number of Other SEC Parties significantly increase (or decrease) within a regulatory year and fixed charges are set on a per User basis.

82. Subject to how any materiality threshold is set, fixed charges for Other SEC Parties could act as an impediment to such parties, and hence may deter innovative uses of smart meter data and hinder competition in the provision of smart energy services relative to the status quo.

Impact for DCC

83. This approach has limited data capture requirements and would therefore be relatively straightforward to implement without the need for significant DCC billing changes (subject to what basis Other Parties are charged on). However, we note that it could have reporting impacts, with multiple correction factors across different charging groups.

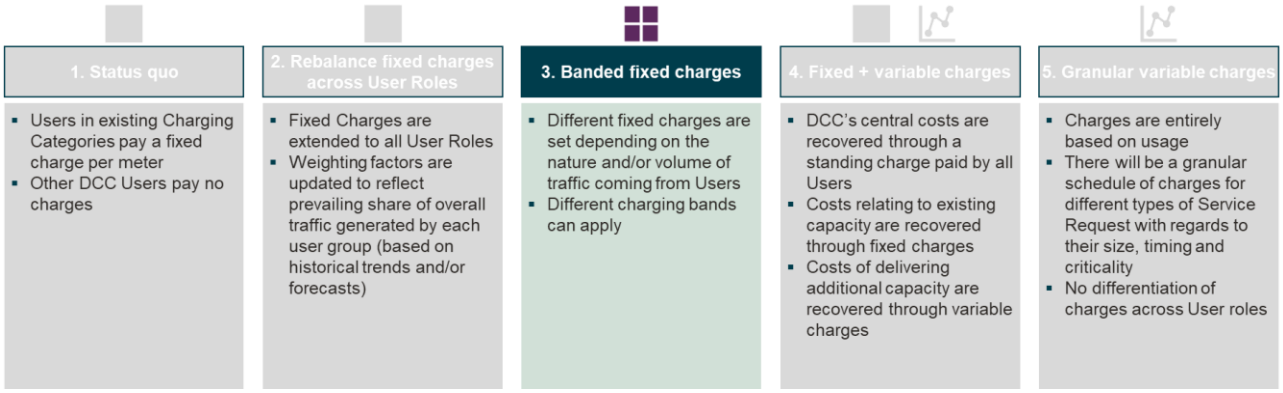
84. This approach is likely to lead in an increase in revenue volatility relative to Option 1 as Users in the Other SEC Party category are discretionary Users of the DCC network (unlike mandated Users, e.g. Energy Suppliers and Network Operator User Roles)[29]. The extent to which this could be partially addressed by setting a materiality threshold needs to be carefully considered.

3.2.4. Questions

Questions on option 2	
15.	Do you agree with our initial assessment of the impact of charging option 2?
16.	How should weighting factors be calculated and updated?
17.	Are there any other impacts or design considerations that should be captured under charging option 2?
18.	How should the risk of under/over recovery be addressed under charging option 2?

[29] As the number of Other SEC Parties is likely to vary over time (even within a regulatory year)

3.3. Option 3 – Banded Fixed Charges



3.3.1. Description

85. Option 3 would introduce banded fixed charges whereby DCC Users making more intensive use of the DCC network would face a higher fixed charge. Usage bands would be defined such that all Users within the same band face the same level of fixed charge.[30]

86. Unlike Option 1 and Option 2, this approach would no longer rely on pre-determined weighting factors reflecting the aggregate share of traffic from each User category. Instead, banded fixed charges would be determined with regards to the distribution of traffic across Users (and potentially the nature of traffic).

3.3.2. Specific design considerations on banding

87. There are a variety of ways in which bands could be defined and applied. As this aspect is essential in the overall design and assessment of this charging model, we invite stakeholders' views on the approach to designing bands at the end of this section before moving to other design considerations and the initial impact assessment.

Approach to setting banded fixed charges for DCC's services

88. In what follows, we first present how bands could be designed to reflect the nature of traffic imposed on the DCC network and how the level of these charges could be set. We then present three stylised examples to illustrate further the approaches that could be adopted.

Banding based on level or intensity of traffic

89. As discussed above, bands could be designed by looking at the traffic distribution across DCC Users and reflect the level of traffic generated by different User Categories over a given time period. For instance, DCC could consider the monthly average number of Service Requests sent by Users based on historical and/or forecast data.[31]

90. Alternatively, and subject to the charging basis considerations set out in Chapter 2, bands could reflect the intensity of usage, that is to say the average number of messages sent by Users per meter (such an approach would likely only apply to Energy Supplier and Network Operator User Categories, given the challenges around allocating meters to Other SEC Parties, as set out in section 2.2.2).

[30] This approach is similar to the methodology employed in the electricity transmission sector in the UK where bands have been designed to recover residual charges (referring to fixed costs to build and reinforce the network). Following a Significant Code Review, Ofgem assessed different residual charging options based on three principles (reducing distortions, proportionality and practicality, and fairness). Banded fixed charges emerged as the preferred solution in Ofgem's impact assessment (see Target Charging Review: Decision and Impact assessment).

[31] As per Table 3 above

Banding based on the nature of traffic

91. Some types of Service Requests are more consequential in their impact on the DCC network. For example, because they have a larger size and/or because of the time at which they are sent. This charging model could help better reflect how different Users affect the network, for example, by creating the ability to avoid or reduce charges by being 'flexible' as to when traffic is sent (giving discretion for DCC to process the Service Requests throughout the day to avoid congestion) while charging more for 'non-flexible' traffic that Users require DCC to process on response. Generally speaking:

    a. Core traffic would correspond to scheduled messages and critical Service Requests.

        i. Scheduled Service Requests would go in a queue that DCC would manage at its discretion to reduce peaks in traffic and make best use of existing capacity.[32]

        ii. Critical Service Requests will be part of "core traffic" as these messages can affect supply, pricing or compromise security. The SEC currently defines a critical Service Request as a "Service Request which is identified as critical in the DCC User Interface Specification (or, in the case of Elective Communication Services, the relevant Bilateral Agreement)".

    b. Non-core traffic would correspond to on-demand messages. On-demand Service Requests will be prioritised and processed on response (typically within 30 seconds).

92. Alternative forms of this banded charges proposal would have a similar intent, i.e. to encourage Users to manage the size/volume of their Service Requests, and/or to commit to a given level of service provision in exchange for a given level of charges.

Setting the charge level differential between bands

93. The level of charge associated with each band could be entirely cost-reflective and informed by a detailed analysis of traffic patterns (as outlined in the stylised examples below). However, such an analysis may not necessarily reveal distinct band boundaries to provide a sufficiently differentiated price signal to Users to efficiently manage the size/volume of their service within these boundaries.

94. Therefore, a more qualitative approach could be taken by scaling the charge differential between bands in a more deterministic way to ensure that the level of charge is sufficiently 'stepped' between each band to avoid any threshold effect, but this would necessarily have to incorporate an element of judgment. We would particularly welcome stakeholders' views on the number of bands and how the charge level differential should be set.

Stylised examples

95. We set out below three stylised examples to illustrate the approaches that could be adopted.

Stylised example 1: Bands designed based on distribution of messages sent per User

96. In order to form a view on the number of bands and determine the cut-off usage levels between them, DCC would consider the distribution of network usage across Users. Usage could be measured as the number of Service Requests sent per User, as illustrated in figure 5 below. In this stylised example, Users might be segmented into three bands:

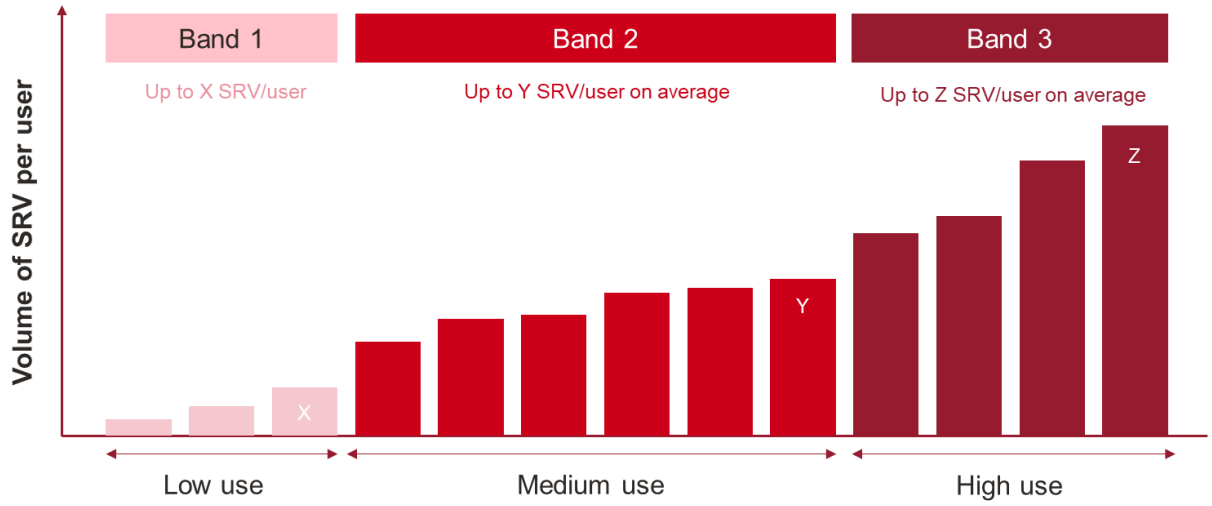
    a. Band 1 for 'low intensity' Users, comprising Users sending up to X Service Requests per month (on average across their meter portfolio);

[32] This aspect could however be re-assessed in the long-run as network expansion costs might also be driven by the growth of scheduled traffic.

b. Band 2 for 'medium intensity' Users, comprising Users sending between X and Y Service Requests per month (on average across their meter portfolio);

c. Band 3 for a 'high intensity' Users, comprising Users sending more than Y Service Requests per month (on average across their meter portfolio).

Figure 5: Illustrative banding based on distribution of number of messages per User



Source: DCC based on Frontier analysis

97. On that basis, DCC's allowed revenue would be allocated to the different bands according to the proportion of Service Requests associated with all Users in each band. The fixed charges could then be calculated by dividing the allocated allowed revenue by the number of meter points in that band (subject to the considerations set out in Chapter 2 regarding the charging basis). Table 3 below provides an illustrative example of these calculation steps.

Table 3: Illustrative example of a per-meter charge calibration

Allocated allowed revenue (monthly)					**£45m**
Bands	**Total SRV[33] volumes (millions)**	**Volume share (%)**	**Allocated revenue (£millions)**	**Number of meters (millions)**	**Charge per meter**
Band 1	15	17%	7.5	15	0.5
Band 2	30	33%	15.0	10	1.5
Band 3	45	50%	22.5	5	4.5

Source: DCC based on Frontier analysis

Note: We have used a per-meter charge calibration for simplicity. Numbers are for illustrative purposes only and do not reflect reality

[33] Service Reference Variant

98. This example is highly simplified and we note that certain refinements could be added, in particular:

a. Bands could be defined separately for each Charging Group instead of having a single set of bands applicable to all Users.

b. Rather than allocating a DCC User to a single band based on their average number of Service Requests across all of their meter points, each meter point could be treated separately, meaning that a User could pay different fixed charges across different meters in their portfolio (e.g. with end energy consumers on tariffs that encourage a high degree of real time flexibility and require more real time messaging potentially leading to a higher charge than energy consumers on more traditional fixed tariffs, even if served by the same Energy Supplier). While this approach would introduce considerable additional complexity around data collection and implementation, it would result in overall charges that are more reflective of usage and avoid behavioural distortions arising as a result of where the boundaries between bands are drawn.

c. Bands could be adapted over time to reflect changes in traffic patterns and avoid large swings in Users' bills as demand evolves.

Stylised example 2: Bands designed based on volume and nature of traffic

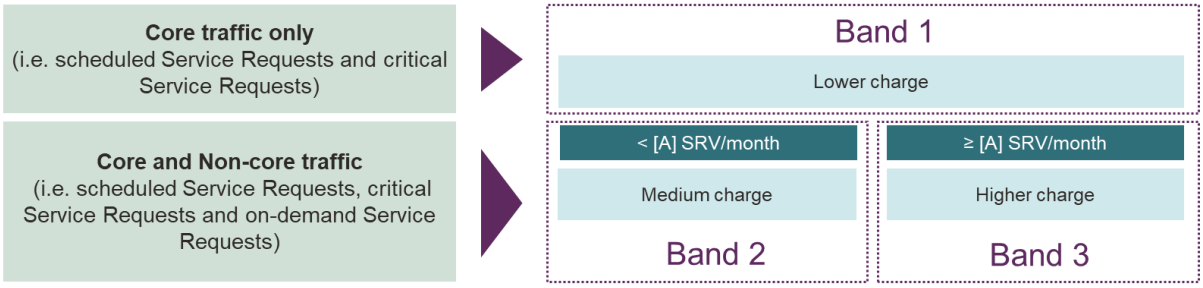
99. The bands could be determined by looking at volume of Service Requests sent by Users, but with a further differentiation applied to reflect the nature of traffic. Specifically, Users sending on-demand Service Requests would face a higher charge, whose level would be estimated based on the average level of traffic coming from Users in the relevant band. Figure 6 below shows how a three-band regime could look, where:

a. Band 1 includes Users sending only scheduled Service Requests, and pay a lower charge;

b. Band 2 includes Users sending up to [A] Service Requests per month (including on demand SRVs) and pay a 'medium' charge (i.e. higher charge than Band 1 but a lower charge than Band 3); and

c. Band 3 includes Users sending more than [A] Service Requests per month (including on demand SRVs) and pay a higher charge.

Figure 6: Illustrative bands based on level and nature of traffic



Source: DCC based on Frontier analysis. For the avoidance of doubt, Device alerts and DCC alerts won't attract any charge (these terms are defined in section 2.6 of the DCC User Interface Specification)

100. By creating the ability for Users to reduce the charges they pay by not sending on-demand Service Requests, Users would now have an incentive to allow DCC to schedule a greater volume of Service Requests to be served at times when there is surplus capacity on the DCC network. If a sufficient number of Users responded to this signal, this would allow DCC to avoid some level of network expansion that would otherwise need to be incurred, lowering future cost to the eventual benefit of all Users.

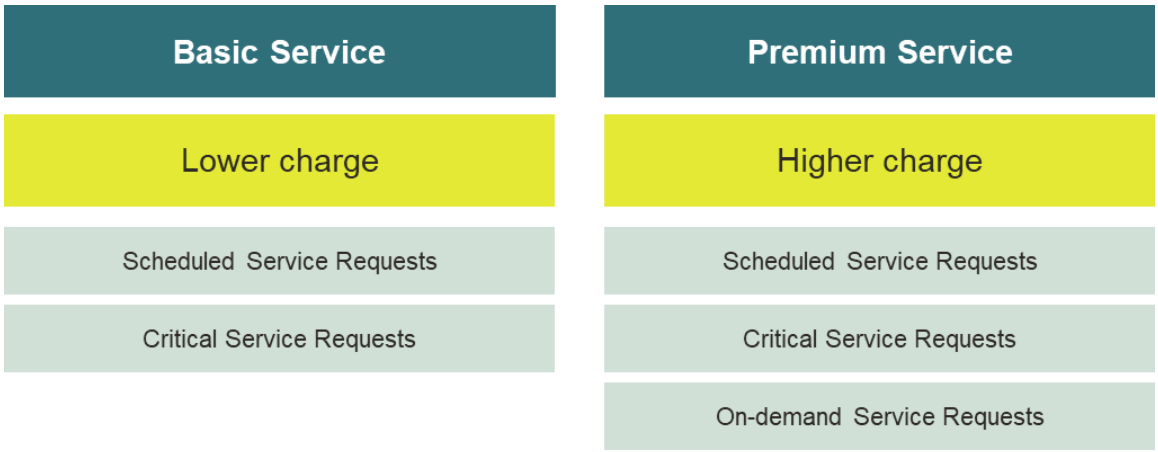
Stylised example 3: Simple bands for a basic and premium levels of service

101. Figure 6 presents a case where bands are defined differently based on the intensity of usage per User (i.e. number of Service Requests sent per User) and a case where bands are defined based on both the type and level of traffic per User.

102. An alternative approach would be to define a range of service packages that Users would opt into regardless of their level of usage. Figure 7 below provides an example where "basic" and "premium" service levels are offered. Users would opt for a more expensive "premium" service if they intend to generate on-demand traffic rather than (or in addition to) scheduled traffic.

103. Under this model Users that are willing and able to accept a more basic level of service (but one that still provides complete coverage of all critical functionality) would incur lower charges, while Users that desire a higher level of service could opt to receive this by paying a higher charge. It may also be necessary to consider a wider set of process reforms to put in place agreed service levels, and for Users to opt to switch to another service level from time to time. Some form of enforcement process for Users that opt for a given level of service but in practice make use of a greater level of service provision, would also need to be considered.

Figure 7: Simplified banding for Option 3



Source: DCC based on Frontier analysis

3.3.3. Questions

Questions on the approach to banding under charging option 3	
19.	In your view, how should DCC design bands of fixed charges and should they be the same across all User Categories? You can refer to any of the stylised examples described above to answer this question or propose alternative approaches that you would like DCC to consider.
20.	What would be a reasonable number of bands to set charges (at least initially)?
21.	How should the differential of charges between bands be determined?

3.3.4. Other key design considerations

104. Other design considerations are relevant for this charging model, which we set out below.

Managing potential movements between bands

105. Users may move between bands within a given regulatory year. For example, as an Energy Supplier rolls out different tariff options that require different levels of interaction with real time meter information, and as its customers switch between tariff options. In other words, if a User is assigned to a lower band but generates more traffic during the regulatory year (and vice versa), the charges this User pays would not reflect its actual usage.

106. To manage potential deviations between expected and actual demand in each band, a mechanism could be set to ensure that the way Users are charged is sufficiently transparent and predictable for Users, while providing a stable revenue recovery. Options could include the following:

    a. Bands are fixed for the entire regulatory year, with no reconciliation. Users are assigned to bands ex ante for the entire regulatory year based on their expected needs (potentially based on recent historical data), but there is no 'true up' (reconciliation) mechanisms to reflect their ex-post position. some Users might pay more, and some Users might pay less relative to their actual level of traffic. Users' bands would then be updated at the next regulatory year.

    b. Bands are fixed for the entire regulatory year, with an ex-post true-up. Again, bands are fixed for the entire regulatory year. However, Users' bills would be corrected at the end of the regulatory year in case of deviations between expected and actual demand, such that the User should have been in a different band. Alternatively, Users could incur an additional 'overrun' charge when actual demand exceeds the notional usage associated with each band. We note that this mechanism could be symmetric: if Users generate less traffic than the notional usage level in their band, a discount on their charges could apply.

    c. Bands are reviewed within the regulatory year. Band assignments can be updated during the regulatory year. These re-openers could occur at defined intervals (e.g. monthly or quarterly)

Charging basis

107. We recognise that the basis on which Users are charged under this option will be an important part of the overall design.

3.3.5. Initial impact assessment

108. Below we consider first the impact of this charging option (Option 3) on Users, and then on DCC.

Impact for Users

109. The amount of charges paid by Users would be largely predictable, although there may be a risk of some Users finding themselves just above/below a threshold between bands, and experiencing some volatility between periods as a result. This approach provides optionality to Users who will be able to adapt their behaviours to pay less if they don't expect to have a large footprint on the network.

110. Multiple calibrations are possible and bands could be flexibly adapted on a regular basis to reflect recent trends in traffic or avoid large increases in bills over time for certain categories of Users. With appropriate attention, this approach could be made resilient to future changes in demand and behaviours.

111. We do not expect this approach to hinder innovation to the extent Users can adapt their demand in a way that is more efficient for the network and pay a lower charge. As a complementary measure, a materiality threshold could be set to protect certain categories of Users. Similarly, we do not expect this approach to distort or restrict competition in the supply of energy metering and energy efficiency services.

112. Some of the approaches to setting banded charges may require more fundamental changes to aspects of smart meter governance, for example if Users are charged on the basis of accepted service levels or if, for Energy Supplier and Network Operator roles, banded charges are

introduced at an individual meter level of granularity. Thoughts would be particularly welcome on the potential costs and benefits of such wider reforms.

Impact for DCC

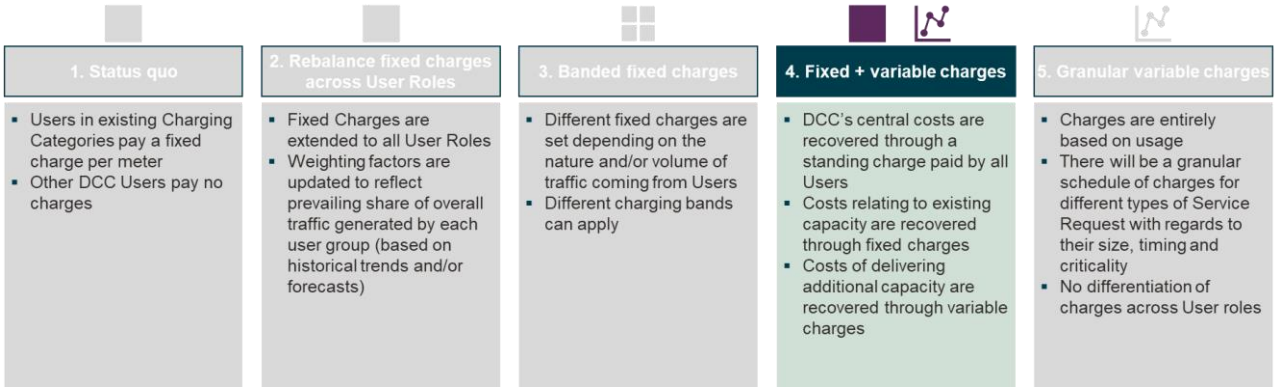
113. In contrast with Options 1 and 2, this charging model has the potential to promote a more efficient use of the network (e.g. by favouring scheduled Service Requests over on-demand Service Requests or reducing avoidable traffic) and be more cost reflective.

114. While it would represent a material change relative to the current charging arrangements, bands would be informed by data that DCC already monitors on a regular basis. This approach would therefore require changes in DCC's billing system, but we do not expect this implementation challenge to be too complex to overcome, subject to further consideration of some of the points of detail flagged above.

3.3.6. Questions

Questions on option 3	
22.	Do you agree with our initial assessment of the impact of charging option 3?
23.	Are there any other impacts or design considerations that should be captured under charging option 3?
24.	Do you have any comments on the costs your organisation may incur in implementing charging option 3?

3.4. Option 4 – Fixed and Variable charges



3.4.1. Description

115. Option 4 would introduce a suite of fixed and variable charges, with the split between these based on the nature of costs incurred by DCC. One way in which these charges could be designed would be:

a. A **standing charge** would aim to recover DCC's central costs[34]. The standing charge could be fixed and potentially differentiated across User Categories and Charging Groups.

b. A **fixed charge** would continue to be levied to recover costs relating to existing capacity. This charge could be calibrated in the same way as under Option 1 (status quo) or Option 3 (banded fixed charges) and levied on existing Charging Groups on a per-meter basis. However, we note that subject to considerations on the charging basis discussed previously this charge could also be extended to Other Parties.

c. A **variable charge** would be introduced to signal the costs of delivering additional capacity, that is all costs relating to network expansion needed to serve a higher level of demand placed on the network. This charge would be paid by all Users for a defined set of Service Requests that are deemed to have a significant footprint on the network with regards to their volume, nature and/or size.

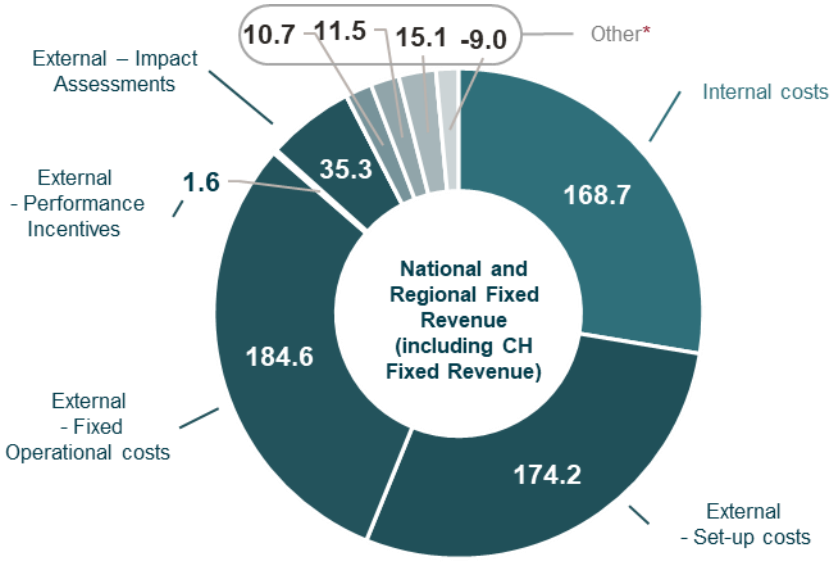
116. As a complementary measure, a materiality threshold could be set to protect certain categories of Users and apply to all or only some of the charging components described above.

3.4.2. Key design considerations

117. There are a number of design considerations relevant to this charging model. To calibrate each charge, this charging model would require a breakdown of DCC's cost base to develop an understanding of which activities performed by DCC drive which costs. DCC currently segments its cost base into two main categories for reporting and charging purposes, i.e. internal costs and external costs, as shown in figure 8 below.

[34] For example, this could include all or part of the costs that are currently reported as 'internal costs" in DCC's charging statement, such as resource costs (for operation and testing, commercial and programme activities), and non-resource costs (contract costs with external providers, legal, audit, consulting and accommodation fees, etc.)

Figure 8: Breakdown of costs recovered through Fixed Charges for RY 2023/24



Source: DCC's charging statement, RY23/24

Note: (*): from left to right, pass-through costs, baseline margin, gain share, prudent estimate and correction factor

118. To develop a set of charges under Option 4 the costs of existing capacity and network expansion would need to be estimated for defined levels of demand for a given regulatory year and informed by the pricing conditions embedded in DCC's contracts, which differ by location, Service Provider and technology (e.g. SMETS1, SMETS2). Careful attention would therefore be given to developing a clear and transparent methodology to determine the aggregated level of these costs at the national level. Over time, as legacy contracts expire and are renegotiated, and as services evolve requiring new contracts to be added, this cost allocation methodology would need to be adapted to follow underlying changes in DCC capacity costs.

119. We note however that more costs could be recovered from the fixed components (at least initially) to smooth the transition away from the current charging methodology.

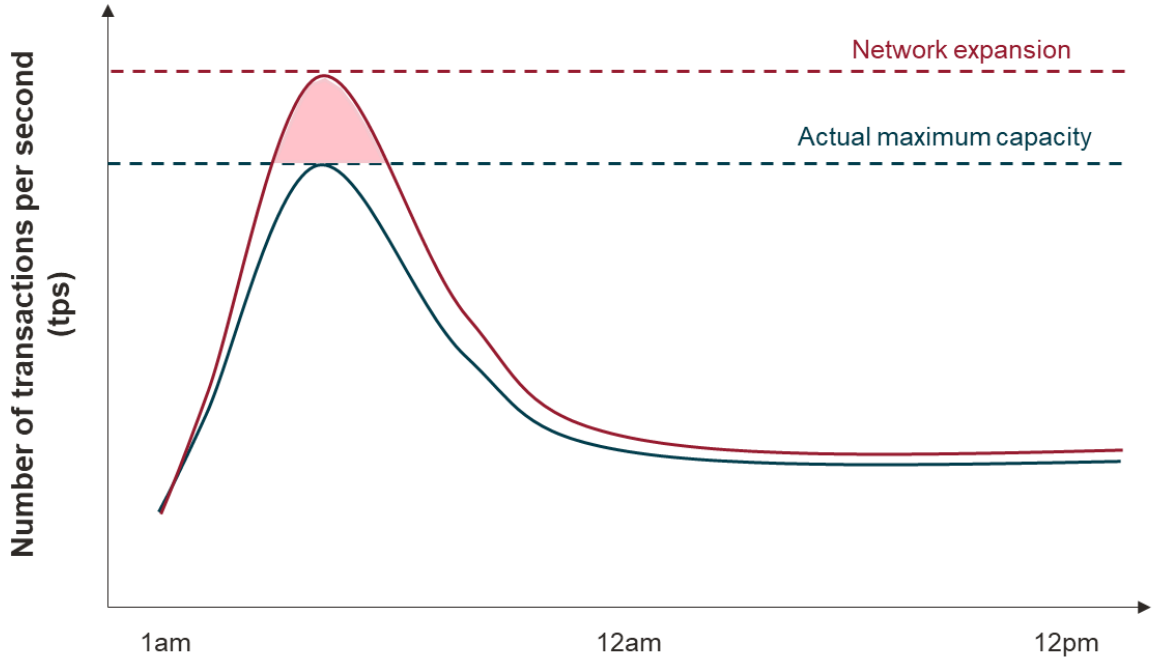
Charging basis

120. As discussed in section 2.2.2, the basis on which Users are charged should be carefully considered to make this charging model fully operational.

Variable charge calibration

121. Costs relating to network expansion would be recovered through a variable charge (or explicit charge) and reflect foreseeable investments needed in capacity to serve demand. These charges would be derived based on a relevant measure of capacity (for instance, the number of transactions per second) and the volume of Service Requests that the next increment of capacity would permit, as illustrated in figure 9 below.

Figure 9: Illustrative traffic daily profile and capacity requirements



Source: Frontier

122. There are multiple ways this explicit charge could be set and take into account the characteristics of the Service Requests that are sent. This could include (but not be limited to):

a. Type of Service Requests: scheduled Service Requests would attract a lower charge relative to on-demand Service Requests.

b. Message size: larger Service Requests would attract a higher charge (all other things being equal). For meter reads, this could be proportional to the number of stamped values processed in each Service Request.[35]

c. Time of use: Service Requests sent at peak times would attract a higher charge (all other things being equal). We note that using a time of use approach could be difficult to implement and might not lead to the desired outcome from a network management perspective, as this may have the effect of 'moving the peak' or creating new peaks throughout the day without reducing the need for additional capacity. The definition of the peak/off-peak periods would require careful consideration and may need to have the flexibility to be updated periodically to reflect changes in traffic patterns.

123. This variable charge may only apply to certain Service Requests (e.g. charging for the most frequently used Service Requests only, while less frequent Service Requests remain free of charge). The variable charge could be set on a per Service Request basis (i.e. reflecting the unit cost of sending one message) or calibrated as a "semi-fixed charge" for a defined pack of Service Requests (i.e. a single charge for, say, 100,000 messages). Figure 10 below presents the top 15 Service Requests across all DCC Users during RY 2023/24.

[35] A daily read at hourly granularity would correspond to 24 stamped values ; a daily read at half hourly granularity would correspond to 48 stamped values, etc.

Figure 10: Top 15 Service Requests in RY2023/24

Message Code	Message Description	Mode of Operation	Message Criticality	Proportion of traffic (%)
4.6.1	Retrieve Import Daily Read Log	DSP Scheduled	Not Critical	44.2%
4.8.1	Read Active Import Profile Data	DSP Scheduled	Not Critical	29.6%
4.8.1	Read Active Import Profile Data	On Demand	Not Critical	6.0%
4.14	Read Prepayment Daily Read Log	DSP Scheduled	Not Critical	2.5%
8.2	Read Inventory	DCC Only	Not Critical	2.1%
4.3	Read Instantaneous Prepay Values	On Demand	Not Critical	1.8%
206.24.1	Provide Device Security Credentials	On Demand	Not Critical	0.9%
4.1	Read Network Data	DSP Scheduled	Not Critical	0.9%
4.8.2	Read Reactive Import Profile Data	DSP Scheduled	Not Critical	0.8%
6.24.1	Retrieve Device Security Credentials (KRP)	On Demand	Not Critical	0.8%
6.11	Synchronise Clock	On Demand	Critical	0.7%
8.9	Read Device Log	On Demand	Not Critical	0.7%
4.6.1	Retrieve Import Daily Read Log	On Demand	Not Critical	0.6%
2.2	Top Up Device	On Demand	Not Critical	0.5%
4.3	Read Instantaneous Prepay Values	DSP Future Dated	Not Critical	0.5%

Source: DCC data

Note: The SEC currently defines critical Service Requests as "Service Request which is identified as critical in the DCC User Interface Specification (or, in the case of Elective Communication Services, the relevant Bilateral Agreement)". Critical Service Requests are typically those that can affect supply, pricing or compromise security

Ex-post reconciliation mechanism

124. We expect this charging model to require changes to the correction factor to manage any under/over revenue recovery that could materialise during a regulatory year, particularly as a result of deviations between forecast and actual volumes of demand.

Initial impact assessment

125. Below we consider first the impact of this charging option (Option 4) on Users, and then on DCC.

Impact for Users

126. Under this model, charges are further disaggregated to better reflect underlying costs by activity, and to allow clearer price signals to encourage more efficient use of the network. In the short-term, it could also be adapted to smooth the transition from the status quo, for example by:

a. not making Other SEC Parties subject to the fixed charge relating to the cost of existing capacity; and/or

b. introducing a variable charge at a later stage and recover more costs from fixed components in the interim.

127. In addition, a materiality threshold could be set to ensure that certain categories of Users do not face charges that would deter access to the network and the emergence of new, innovative use cases.

128. However, this charging model is materially more complex than the current model. It may lead to changes in the total amount of charges each User faces, as these would directly depend on the mix and volume of Service Requests they process. Charges may fluctuate more under this model depending on use than under other candidate charging options presented above. This model may also require Users to incur costs to adapt their systems, in order to track network usage and monitor their expected charges over time.

Impact for DCC

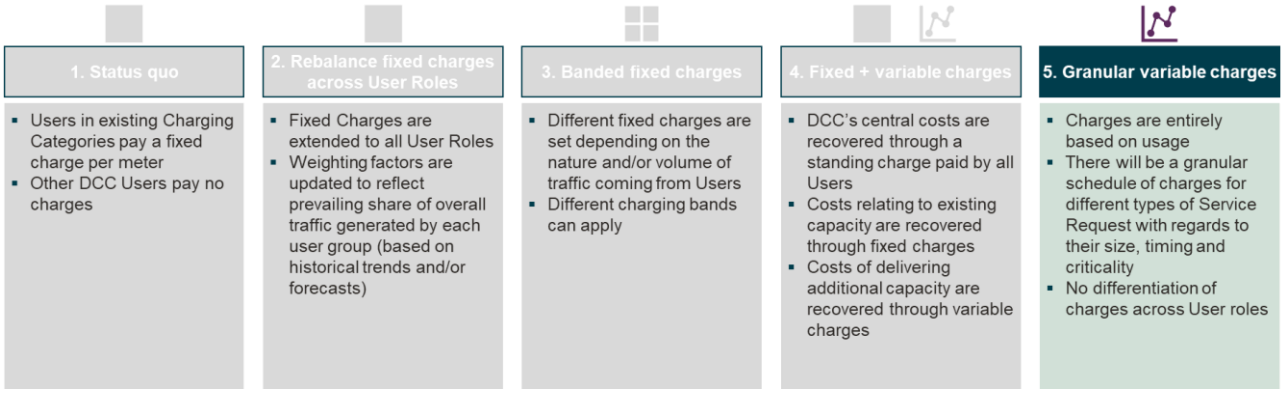
129. This approach would be a material further step up in complexity compared to the other charging models described above. It is more reliant on the right cut of data and robust forecasts being available and would involve DCC monitoring and reporting costs differently to what is done currently. More specifically, the approach to segmenting DCC's cost base would need to be carefully documented and consulted upon, to ensure that the signal sent via the different charges is cost-reflective and does not prohibit the emergence of new, innovative use cases.

130. This charging model would likely be more costly and take longer to fully implement than Options 1, 2 and 3. The implementation costs would need to be carefully assessed against those of other options which may lead to the same desirable outcomes and comply with the guiding principles set out in Chapter 1.

3.4.3. Questions

Questions on option 4	
25.	Do you agree with our initial assessment of the impact of charging option 4?
26.	What type of costs do you think should be recovered through the standing charge?
27.	Are there any other impacts or design considerations that should be captured under charging option 4?
28.	Do you have any comments on the costs your organisation may incur in implementing charging option 4?

3.5. Option 5 – Granular Variable Charges



3.5.1. Description

131. Under Option 5, DCC's costs would be recovered entirely through variable charges based on the volume of Service Requests made by each User, with different message types attracting different charges based on their impact on DCC's network (e.g. in terms of capacity use). While certain Users could in principle be excluded from some/all of these charges, a model of this kind is more logically based on the assumption that variable charges would be extended to all types of Users. This option represents the most material departure from prevailing charging practices but delivers highest against the cost reflectivity objective.

3.5.2. Key design considerations

132. The main design consideration for this model is how to set the schedule of variable charges. Below we consider the key dimensions of this question.

Granularity of variable charges

133. There are 130 different Service Requests that can be sent over the DCC network. Service Requests can further differ based on characteristics such as message size and timing.

134. The most granular implementation of a variable charging model would set a different charge for each combination of Service Request and other characteristics. However, this would result in hundreds if not thousands of different charges, leading to significant data collection burden, considerable implementation complexity and lack of transparency for Users.

135. A more moderate approach to implementing a system of variable charges would put in place charges for different categories of Service Request, where there is a material difference in the effect each group of requests has on the DCC network. Higher charges should be attached to types of network use that use more capacity and/or use capacity less efficiently (e.g. at peak times). For example, charges could vary based on only the key features: message flexibility, size and timing. Even this approach may still lead to relatively granular charges.

Calibration of variable charges

136. There are different ways to calibrate the level of variable charges such that DCC can expect to recover its allowed costs. One possible approach is the following:

- Define the categories of Service Requests across which variable charges will be set.
- Select one category to be the 'baseline category'. This could for example be a [1MB] Service Request sent off-peak and scheduled.
- For each of the other Service Request categories, define a percentage uplift/reduction in cost relative to the baseline category, based on how much more/less it impacts DCC's network. For example, a [2MB] Service Request sent off-peak and scheduled could cost 100% more than a

baseline message, as it will use twice the capacity. This will give a schedule of charges in relative terms.

- Collect historical data on the number of each Service Request type sent and use this data to forecast Service Request numbers for the next Regulatory Year.
- Using the forecast of Service Request numbers and the schedule of charges in relative terms, solve for the level of charge to apply to the baseline category to derive an overall schedule that will recover DCC's allowed revenue in expectation.

137. While other approaches could be adopted to calibrate charges, this approach, or one like it, can be expected to yield charges that are broadly cost reflective and likely to deliver the target level of revenue recovery.

138. However, considerable further work might be needed to confirm precisely how cost reflective a set of fully variable charges may prove to be. It is often the case that cost reflective incremental/marginal charges fail to recover the full quantum of allowed revenue, i.e. there is often residual revenue that still needs to be recovered somehow.

139. The method of deriving charges we have set out above assumes full cost recovery, and therefore may lead to unit charges on Service Requests that do not reflect incremental cost, but more than incremental cost. Analysis would need to be developed to assess whether fully variable tariffs were less economically justifiable than the fixed/variable charges that might be developed under Option 4.

140. Of the five charging models set out in this RFI, this model is the one that would be likely to see the most challenge in forecasting future revenues and most likely to result in more material under/over forecasting, and subsequent use of regulatory correction factors. This is because charges are based entirely on usage levels which could vary significantly within period (and which in fact should vary if the charging model has its intended effect). This risk of inaccurate forecasting would likely be greatest at the time when variable charges were first introduced, as initially there would not be concrete evidence on which to estimate how User behaviour may change in response to variable charging. It would be reasonable to expect forecasting of demand to improve in accuracy over time with experience, albeit highly accurate forecasting of demand would likely remain challenging.

141. The existing revenue recovery mechanism already contained within the DCC regulatory framework should be able to correct any over/under-recovery of revenues in subsequent regulatory periods. This mechanism would, however, almost certainly be used more and initial charges may prove volatile.

3.5.3. Initial impact assessment

142. Below we consider first the impact of this charging option (Option 5) on Users, and then on DCC.

Impact for Users

143. Under this charging model, the cost to Users will vary significantly based on individual usage. For Users who have lower usage, or who are able to respond to price signals to lower their usage, charges will be lower, while the opposite will be true for Users with higher usage.

144. This model could create complexity for Users in understanding and forecasting their charges. This can be limited but not avoided entirely through simplifying the granularity and design of the charges. Users may have to materially adapt their own data systems to track more closely a range of information and may need to consider their tariff/service offerings in light of variable charges.

145. Relative to charging models that include fixed charges, this model may help to encourage innovation because small innovators with low usage levels will pay low charges, but only to the extent that such innovations depend on relatively sparse use of data. Innovations that depend on

access to larger volumes of data would face higher charges under this model than under some others.

Impact for DCC

146. This charging model is likely to provide the most effective traffic management outcomes for DCC, by sending strong cost signals to Users about the impact their usage has on the network. However, the lack of any fixed charge could mean that this model provides a variable price signal that is too strong, overly discouraging use of the existing DCC network.

147. Depending on how variable charges are calibrated, the data collection and implementation of this model could be highly complex and require additional systems and resource to be expended by system Users. The avoided capacity costs that could be delivered by this approach will therefore need to be weighed against these additional ongoing costs.

148. This charging model creates the most uncertainty for DCC around cost recovery, with knock-on uncertainty for Users if charges become volatile year-on-year as a result.

3.5.4. Questions

Questions on option 5	
29.	Do you agree with our initial assessment of the impact of charging option 5?
30.	Do you agree with our views on the granularity of variable charges? Are there any other characteristics that are important differentiate variable charges on?
31.	Do you agree with our proposed approach to calibrating variable charges?
32.	Are there any other impacts or design considerations that should be captured under charging option 5?
33.	Do you have any comments on the costs your organisation may incur in implementing charging option 5?

3.6. Overarching questions (all charging options)

149. We set out below additional questions on which we would value stakeholders' views to inform this review.

Questions on option 5	
34.	Which charging model do you think is most viable? Please provide reasons for your response and include evidence to support this where possible.
35.	Are there any other charging models that you think should be considered?
36.	In your view, how does uncertainty about future demand affect the attractiveness of the proposed charging models?
37.	Do you have any comments on the timing for reform implementation?

4. Chapter 4: Next Steps

4.1. The Consultation Process

150. DCC has worked closely with SECAS to ensure industry remains updated on assessments of the current charging framework and network usage. This has culminated in several industry meetings being held to date in which DCC has presented findings and sought industry feedback as part of the DP218 process. We will also hold webinars during the RFI to give respondents an opportunity to ask any questions about the options or questions set out in this RFI, before responding.

151. Following the conclusion of this RFI we will publish a response and present the modification to the CSC for progression to the next stage of the Modification Process. Following this we will work with SECAS to prepare a Refinement Consultation. We anticipate that the Refinement consultation will be published in August 2024. Our intention is to develop a well evidenced, minded-to position by the end of 2024. This will be shared with Ofgem and DESNZ to consider the policy and regulatory implications around introducing change. It will also align with the SEC Modification Process which is also currently underway (see section "Interaction with the SEC Modification Process" below).

152. Responses to the questions in this RFI are due by 25 June 2024. A full list of the questions detailed in this RFI is set out in Appendix 1 this RFI document. Please provide rationale to support your responses. Responses should be submitted in electronic format and emailed to consultations@smartdcc.co.uk. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

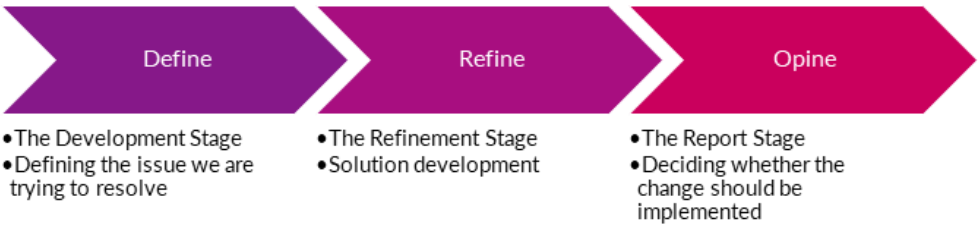
153. Please do not hesitate to contact regulation@smartdcc.onmicrosoft.com **mailto:**if you have any questions about the content of this RFI.

4.2. Interaction with the SEC Modification Process

154. As referenced in the earlier sections of this RFI, a SEC Modification Proposal, DP218 'Review of the SEC Charging Methodology' has been raised to seek changes to DCC charging. This section provides detail on the SEC Modification Process and how it interacts with this RFI document, and the wider consultation process.

155. A SEC modification is a change that is raised by a SEC Party to propose and progress changes to the SEC. These changes begin as a Draft Proposal ("DP") where the underlying issue is identified. Once the scope of the issue is agreed and the impact on the SEC understood, the Draft Proposal will be converted to a Modification Proposal ("MP") where a solution will be developed and undergo industry consultation.

Figure 11: Three Core Stages of the SEC Modification Process



156. These stages are broadly described as:

- The Development Stage: Used to assess the issue and to understand how it impacts the SEC as well as industry participants. Modifications in this stage are referred to as Draft Proposals. Once

the scope of the issue is fully defined and understood, the CSC will approve the proposal to proceed to the Refinement Stage and become a Modification Proposal.

- The Refinement Stage: Used to develop the solution to the issue with input from the Working Group and relevant Sub-Committees. During this stage, a Refinement Consultation will take place seeking views on the proposed solution, legal drafting and several questions around industry and consumer impacts. After which the CSC will approve the Modification Report and proceeds to the Report Stage.
- The Report Stage: This is the final stage of the process where the industry is consulted via a Modification Report Consultation on whether the modification should be implemented, before the Change Board votes to approve or reject the change. DP218 is expected to be an Authority (Ofgem) Determined modification. In this instance the Change Board vote would form a recommendation to the Authority who will ultimately decide if the modification is approved or rejected.

157. DP218 is currently in the Development Stage, as we work to confirm the scope and scale of the issue. This proposal has remained at this stage longer than most modifications, due to the issue having complex and wide-ranging impacts across all SEC Party categories. Several potential options have been identified and articulated in this RFI, some of which may not require changes to the SEC to deliver. DCC and SECAS have therefore agreed to keep the modification in this stage until it can be determined if a modification is the best mechanism for resolving this issue and whether there would be a positive business case for taking that forward.

158. Following this RFI, DCC will assess the responses and work with SECAS to update the Modification Report. If there is support for options requiring a modification, DCC will seek approval of the CSC to convert this Draft Proposal into a Modification Proposal and proceed to the Refinement Stage, which will also be subject to consultation.

Appendix 1: Full list of RFI Questions

Chapter 1: Context and Case for Change

1. Do you have any comments and/or insights on the drivers of change identified in this chapter 1?

2. Do you have any comments on the guiding principles detailed at figure 4?

Chapter 2: Cross Cutting Issues

Question on scope of charges under review

3. Do you agree with the scope of this review given the proportion of costs recovered through Fixed Charges in DCC's cost structure, including the need to better understand and categorise costs (e.g. transaction costs). If not, please explain why.

Question on uniform charging

4. Do you agree that future DCC's charges for the provision of mandated services should continue to be uniform across the country and across SMETS1 and SMETS2 meters?

Question on basis for charging

5. In your view, what would be a suitable metric to set charges for different User categories (e.g. Energy Suppliers, Network Operators, Other Parties)?

6. Do you identify any risks or barriers in respect of the potential changes in DCC's monitoring capabilities that might be required to set the basis on which Users are charged?

Questions on data capture requirements on future demand

7. Do you have views on the process through which DCC should collect information on future demand across DCC Users?

8. Are there any barriers to providing DCC with such information?

Questions on setting a materiality threshold

9. Do you agree that a materiality threshold would need to be set to continue to enable innovation on the DCC Network, particularly under the DCC Other User role?

10. In your view, how low should a threshold based on usage be set to avoid market distortions?

11. In your view, which type of organisations should be exempt from paying charges for their intended use of the network?

Question on Read and Store capabilities

12. Do you have any insights on how smart meter data repositories could impact your use of DCC's network?

Chapter 3: Overview of Charging Models Under Consideration

Questions on Option 1 (Status Quo)

13. Do you agree with our initial assessment of the impact of charging option 1?

14. Do you think that the current charging arrangements should be retained or replaced, and why?

Questions on Option 2 (Rebalancing Fixed Charges across Users)

15. Do you agree with our initial assessment of the impact of charging option 2?

16. How should weighting factors be calculated and updated?

17. Are there any other impacts or design considerations that should be captured under charging option 2?

18. How should the risk of under/over recovery be addressed under charging option 2?

Questions on Option 3 (Banded Fixed Charges)

19. In your view, how should DCC design bands of fixed charges and should they be the same across all User Categories? You can refer to any of the stylised examples described above to answer this question or propose alternative approaches that you would like DCC to consider.

20. What would be a reasonable number of bands to set charges (at least initially)?

21. How should the differential of charges between bands be determined?

22. Do you agree with our initial assessment of the impact of charging option 3?

23. Are there any other impacts or design considerations that should be captured under charging option 3?

24. Do you have any comments regarding the costs of implementing charging option 3?

Questions on Option 4 (Fixed and Variable Charges)

25. Do you agree with our initial assessment of the impact of charging option 4?

26. What type of costs do you think should be recovered through the standing charge?

27. Are there any other impacts or design considerations that should be captured under charging option 4?

28. Do you have any comments regarding the costs of implementing charging option 4?

Questions on Option 5 (Granular Variable Charges)

29. Do you agree with our initial assessment of the impact of charging option 5?

30. Do you agree with our views on the granularity of variable charges? Are there any other characteristics that are important differentiate variable charges on?

31. Do you agree with our proposed approach to calibrating variable charges?

32. Are there any other impacts or design considerations that should be captured under charging option 5?

33. Do you have any comments regarding the costs of implementing charging option 5?

Overarching Questions (all charging options)

34. Which charging model do you think is most viable? Please provide reasons for your response and include evidence to support this where possible.

35. Are there any other charging models that you think should be considered?

36. In your view, how does uncertainty about future demand affect the attractiveness of the proposed charging models?

37. Do you have any comments on the timing for reform implementation?

Appendix 2: Glossary

Acronym/Term	Full Term
Alt HAN	Alternative Home Area Network
Authority	This is Ofgem, the regulatory Authority
CH	Communications Hub
CSC	Change Sub-Committee
Charging Group	A category assigned by DCC to certain DCC User Roles that are eligible to recover DCC costs
DCC	The Data Communications Company
DESNZ	The Department for Energy Security and Net Zero
DP	Draft Proposal – the initial form of a modification under the SEC Section D Modification Process
Energy Supplier	A DCC User Category including the ES, GS and IS DCC User Roles
ES	Electricity Supplier. A DCC User Role
GS	Gas Supplier. A DCC User Role.
IS	Import Supplier. A DCC User Role.
ED	Electricity Distributor. A DCC User Role.
GT	Gas Transporter. A DCC User Role.
MDR	Meter Data Retriever. A DCC User Role.
MP	Modification Proposal – a modification under the SEC Section D Modification Process
MPAN	Meter Point Administration Number. A number used to uniquely identify electricity supply points in Great Britain
NAO	National Audit Office
Network Operator	A DCC User Category including the ED and GT DCC User Roles.
Other Parties	Refers to DCC User Roles (MDR, OU, RSA) sitting outside of the Energy Supplier and Network Operator User Categories.
OU	Other User. A DCC User Role.

RSA	Registered Supplier Agent. A DCC User Role.
RY	Regulatory Year. The year used in DCC's Charging Statement and Charging Methodology.
SEC	Smart Energy Code. A dual fuel energy code governing the relationship between the DCC and DCC Users.
SECAS	Smart Energy Code Administrator and Secretariat
SECCo	Smart Energy Code Company
SMEDR	Smart Meter Energy Data Repository. An innovation programme run by DESNZ.
SMETS	Smart Metering Equipment Technical Specifications. The standard to which meters must conform to be eligible to be installed on the smart meter network.
SR	Service Request. A command issued by a DCC User to a device or the DCC.
SRV	Service Reference Variant.
User Category	A grouping of DCC Users based on common characteristics, e.g. supply of energy or distribution of energy.
User Roles	A SEC Party that has on-boarded to use the DCC network for a specific purpose, e.g. one of the ES, GS, IS, ED, GT, MDR, RSA or OU roles.